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File ID Number	22-1479
Introduction Date	6/29/2022
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OAKLAND UNIFIED SCHOOL DISTRICT
Community Schools, Thriving Students

Board Cover Memorandum

To Board of Education

From Kyla Johnson-Trammell, Superintendent
Tadashi Nakadegawa, Deputy Chief of Facilities Planning & Management

Meeting Date June 29, 2022

Subject Resolution No. 2122-0237 - Adopting a Mitigated Negative Declaration for the Cole Administrative/Education Center Project

---

Ask of the Board Hold a public hearing and approve Resolution No. 2122-0237 - Adopting a Mitigated Negative Declaration for the Cole Administrative/Education Center Project

Background The Board previously approved Resolution No. 1819-0211 (Authorization to Move Forward with the permanent housing at a rehabilitated Cole as the Administrative Center of the District. And, authorization to approve the interim housing location at 1000 Broadway. Finally to authorize the revision of the Measure J spending plan to show how the current bond will fund the initial planning phase of the permanent housing and the updated rent costs for interim housing.), which rescinded prior resolutions and approved a proposal to rehabilitate the Cole Campus (1011 Union St, Oakland, CA 94607) as the District's Administrative Center ("Cole Project"). The Cole Project has advanced to the stage where an Initial Study is required under CEQA and the Initial Study (including the Mitigated Negative Declaration) in now complete.

Discussion Under the proposed Resolution, the Board would make a number of findings:

- The required public hearing was duly noticed and properly held.
- The Initial Study/Mitigated Negative Declaration was presented to the Board.
- The Initial Study/Mitigated Negative Declaration has been completed in compliance with CEQA.
- The Board has reviewed and considered the information contained in the Initial Study/Mitigated Negative Declaration and the comments received before and during the public review process.

Additionally, under the proposed Resolution the Board officially would adopt the Initial Study/Mitigated Negative Declaration, approve the Cole Project, and authorize the Superintendent to take all steps necessary to proceed with the Cole Project.

Fiscal Impact This Resolution does not directly have a fiscal impact as the cost of the Cole Project was already approved by the Board and incorporated into the Measure Y Spending Plan. However, by proceeding with the Cole Project, the District will continue to incurr

the budgeted costs and may be asked to incur additional costs due to inflation costs or if the Cole Project is delayed.

Attachment

- Resolution No. 2122-0237 - Adopting a Mitigated Negative Declaration for the Cole Administrative/Education Center Project

RESOLUTION OF THE
BOARD OF EDUCATION OF THE
OAKLAND UNIFIED SCHOOL DISTRICT

Resolution No. 2122-0237

Adopting a Mitigated Negative Declaration for the Cole Administrative/Education Center Project

WHEREAS, on or about June 5, 2019, the Board approved Resolution No. 1819-0211 (Authorization to Move Forward with the permanent housing at a rehabilitated Cole as the Administrative Center of the District. And, authorization to approve the interim housing location at 1000 Broadway. Finally to authorize the revision of the Measure J spending plan to show how the current bond will fund the initial planning phase of the permanent housing and the updated rent costs for interim housing.), which rescinded prior resolutions and approved a proposal to rehabilitate the Cole Campus (1011 Union St, Oakland, CA 94607) as the District's Administrative Center ("Cole Project") and to remain at 1000 Broadway as interim administrative housing until the Cole Project is complete;

WHEREAS, on April 14, 2021, the Board approved the initial Measure Y spending plan, which included allocated $50 million for the Cole Project;

WHEREAS, on June 23, 2021, the Board approved Resolution No. 2021-0168 (Resolution No. 2021-0168 - Identifying Baby Cole as the Plan for Permanent Central Office Housing and Restarting All Associated Planning, Bidding, and Construction Activities), which "reaffirm[ed] its intent to build permanent Central Office housing at the Cole campus" and "direct[ed] the Superintendent to restart—as quickly as possible—all planning, bidding, and construction activities related to Resolution No. 1819-0221";

WHEREAS, the Cole Project has advanced to the stage where an Initial Study is required under CEQA; and

WHEREAS, the Initial Study (including the Mitigated Negative Declaration) has been completed, is attached hereto, and is incorporated herein by referenced.

NOW, THEREFORE, BE IT RESOLVED, the Board finds that the required public hearing was duly noticed and properly held, the Initial Study/Mitigated Negative Declaration was presented to the Board, the Initial Study/Mitigated Negative Declaration has been completed in compliance with CEQA, and the Board has reviewed and considered the information contained in the Initial Study/Mitigated Negative Declaration and the comments received before and during the public review process;

BE IT FURTHER RESOLVED, the Board hereby adopts the Initial Study/Mitigated Negative Declaration for the Cole Project; and

BE IT FURTHER RESOLVED, the Board hereby approves the Cole Project as identified and evaluated in the Mitigated Negative Declaration and authorizes the Superintendent, or her designee, to take all steps necessary to proceed with the Cole Project, except any further actions by law, rule, or regulation that are the province of the Board, and that such steps include but are not limited to filing any notices permitted or required under CEQA for the Cole Project to move forward.

PASSED AND ADOPTED by the Board of Education of the Oakland Unified School District this 29th day of June, 2022, by the following vote:

PREFERENTIAL AYE: None

PREFERENTIAL NOE: None

PREFERENTIAL ABSTENTION: None

PREFERENTIAL RECUSE: None

AYES: Aimee Eng, VanCedric Williams, Clifford Thompson, Vice President Benjamin "Sam" Davis, President Gary Yee

NOES: None

ABSTAINED: None

RECUSED: None

ABSENT: (Vacancy), Samantha Pal (Student Director), Natalie Gallegos Chavez (Student Director)

CERTIFICATION

We hereby certify that the foregoing is a full, true and correct copy of a Resolution passed at the Meeting of the Board of Education of the Oakland Unified School District held on June 29, 2022.

Legislative File	
File ID Number:	22- 1479
Introduction Date:	6/29/2022
Enactment Number:	22-1262
Enactment Date:	6/29/2022
By:	er

OAKLAND UNIFIED SCHOOL DISTRICT

Gary Yee
President, Board of Education

Kyla Johnson-Trammell
Superintendent and Secretary, Board of Education

Initial Study / Mitigated Negative Declaration
Cole Administrative/Education Center Project
1011 Union Street, Oakland



Prepared for:

Oakland Unified School District

Prepared By:

Lamphier-Gregory

1944 Embarcadero

Oakland, CA 94606

May 2022

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Appendix B: Page & Turnbull, *Cole Middle School 1011 Union Street, Historic Resource Evaluation (HRE)*, December 23, 2019

Appendix C: PaleoWest Archaeology, "*Archaeological Review in Support of the Central Administration Center at Cole Campus, Alameda County*, *California*", March 9, 2020

Appendix D: Shah Kawasaki Architects, "*CA-CHPS 2014 Editions, Annotated Worksheet prepared for the Administrative Building at Cole Project"*, February 19, 2021

Appendix E: Consolidated Engineering Laboratories, "*Geotechnical Engineering and Geologic Hazards Study for the Cole Campus Central Administrative Center*", as revised September 25, 2020

Appendix F: California Geological Survey, "*Second Engineering Geology and Seismology Review for Central Administrative Center at Cole Campus – New Buildings"*, October 2, 2020

Appendix G: Ninyo & Moore, *Phase I Environmental Site Assessment Report for the OUSD Central Administrative Center at 1011 Union Street*, prepared for Oakland Unified School District, December 17, 2019

Appendix H: Ninyo & Moore, *Preliminary Endangerment Assessment for the Cole Administration Center at Cole Campus*, prepared for Oakland Unified School District and DTSC, December 30, 2021

Appendix I: Siegfried, *Stormwater Management Memo for Cole Administration Building*, February 9, 2022

Appendix J: Illingworth & Rodkin, *OUSD Central Administrative Center at Cole Campus Project Noise Study*, April 7, 2022

Appendix K: Fehr & Peers, *Cole Administrative Center/Education Project – Transportation Assessment*, April 25, 2022

Introduction

This document serves as the Initial Study for the Oakland Unified School District Central Administrative/Education Center at Cole Campus Project (Project). Per CEQA Guidelines Section 15063, following preliminary review, the Lead Agency shall conduct an Initial Study to determine if the project may have a significant impact on the environment. The purposes of an Initial Study are to provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration. The Initial Study is also used to enable the project applicant or the Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration. An Initial Study can also serve to focus the EIR on the effects determined to be significant, identifying the effects determined not to be significant and for other reasons.

This document is organized in three sections as follows:

- **Introduction and Project Description:** This section introduces the document and discusses the project description including location, setting, and specifics of the lead agency and contacts.
- **Initial Study:** This section discusses the CEQA environmental topics and checklist questions and identifies the potential for impacts and proposed mitigation measures to avoid these impacts.
- **Mitigated Negative Declaration**: This section includes the CEQA Findings, which conclude that although the Project could have a significant effect on the environment, there will not be a significant effect in this case because mitigation measures to reduce these impacts will be required of the project. Pursuant to CEQA Guidelines Section 15071 (e), this section also includes a list of all mitigation measures required of the Project to avoid potentially significant effects. These measures have been agreed to by the District (as both applicant and lead agency), and would avoid or mitigate the effects of the Project to a point where clearly no significant effects (as defined by CEQA) would occur.

Project Information

1. Project Title: Cole Administrative / Education Center Project
Oakland Unified School District Project # 19119

2. Lead Agency Name and Address: Oakland Unified School District
955 High Street
Oakland, CA 94601

3. Contact Person and Phone Number: Kenya Chatman, Executive Director of Facilities
510.535.7050
kenya.chatman@ousd.org

4. Project Location: 1011 Union Street
Oakland, CA
Assessor's Parcel No. 004-0053-007

5. Project Sponsor's Name and Address: Oakland Unified School District
Facilities Planning and Management Department
955 High Street
Oakland, CA 94601

6. Existing General Plan Designations: Urban Residential

7. Existing Zoning: Urban Residential-2 (RU-2)

8. Approvals needed from Public Agencies

The Division of the State Architect (DSA) within the California Department of General Services has jurisdiction over and regulation of construction activities by public school districts in California. Therefore, development of the Project would require demolition, grading and building permits issued by the Division of the State Architect.

Land use and zoning jurisdiction rests with the City of Oakland. As a partially non-educational building (i.e., OUSD administrative staff occupancy), the Project would require Design Review approval and potentially a Conditional Use Permit from the City of Oakland.

The Brownfields Restoration and School Evaluation Branch of the California Department of Substances Control (DTSC) has established protocols for site evaluation and cleanup. Pursuant to this process, remaining steps include, but are not limited to approval and acceptance of a final Preliminary Environmental Assessment, entering into a subsequent Voluntary Cleanup Agreement or School Cleanup Agreement, and preparation of a Removal Action Work Plan or Remedial Action Plan, including providing additional opportunities for public comment. Following that approval, the District will be responsible for conducting all necessary cleanup activities pursuant to an approved Removal Action Work Plan or Remedial Action Plan and obtaining a "No Further Action" letter from DTSC, once all cleanup activities are satisfactorily completed under DTSC oversight,

9. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code §21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Pursuant to Public Resources Code §21080.3.1, the California Native American tribes traditionally and culturally affiliated with the project area have been contacted to inform them of the project, and to provide an opportunity to request further consultation. To date, no tribes have requested consultation pursuant to Public Resources Code §21083.3.2.

Project Description

Background

The Oakland Unified School District's (OUSD, or District) primary administrative functions were formerly located at the District's Administration Building at 1025 2nd Avenue in Oakland, along the Estuary channel south of Lake Merritt and north of Laney College. In 2013, a substantial water leak occurred on the top floor of this building, causing excessive damage to the entire structure. As a result, the Administrative Building was vacated, and District staff members were relocated to numerous other locations including the Cole Middle School, Lakeview Elementary School, Tilden Elementary, and 2111 International Boulevard, while the District assessed its long-term options for permanent replacement space for these administrative functions. Currently, the majority of the District's core administrative functions and staff have been consolidated in leased space at 1000 Broadway in downtown Oakland, and the OUSD Board of Education meets in Chamber at the Great Room of La Escuelita K-8 community school at 1050 2nd Avenue, adjacent to the former Administration Building.

The District Board of Education directed the District's Facilities Department to analyze various long-term options to accommodate these core administrative functions, other than under a continued lease at 1000 Broadway. The Facilities Department identified a number of potential locations for a new, permanent location for these core administrative functions, and four primary options were seen as most viable as a permanent location:

- using other existing but underutilized District facilities throughout Oakland, as a non-centralized administrative approach
- leasing an alternative, less expensive building near the Oakland Airport
- rehabilitating the District's prior building space at 1025 2nd Avenue, and
- building a new Administrative Center by redeveloping the Cole Middle School Campus in West Oakland

Ultimately, the Facilities Department recommended rebuilding the Cole Campus as a permanent home for the District's core administrative functions. The three primary advantages of rebuilding the Cole property are:

- rebuilding at Cole was found to be less expense than rehabilitating the former building at 1025 2nd Avenue,
- the Cole property is currently in OUSD ownership and would not require leasing from a third party, and
- the Cole property is large enough to reunify the District's core administrative functions in a centralized location, allowing for more efficient operations

The District's Board of Education agreed with the Facilities Department's recommendation, and selected the Districts' Cole Campus property at 10th Street and Union Street in West Oakland as the preferred permanent site for the District's core administrative functions. With voter approval of the November 2020 School Bond Measure, the District now has funds to begin implementation of this Project, known as the Cole Administrative/Education Center (i.e., the Project).

Project Location

The Project site is located at the former Cole Middle School campus in the Acorn neighborhood of West Oakland (see **Figure 1**). This site occupies the entire block bounded by Union Street to the east, 10th Street to the south, and Poplar Street to the west, and has a street address of 1011 Union Street. At this location, 12th Street is discontinued for the 1-block segment north of the site, such that the Project site is immediately adjacent to Wade Johnson Park to the north. The Project site is approximately midway between Mandela Parkway (two blocks to the west) and Adeline Street (two blocks to the east).

Surrounding the Project site is a mix of land use types include Wade Johnson Park to the immediate north, the Oakland Housing Authority's West District offices to the immediate south, single-family residential homes to the east, and attached low-rise apartments of the Peralta Villa public housing community (owned and operated by the Oakland Housing Authority) to the west. Lowell Park and the adjoining West Oakland Middle School are several blocks to the east between Adeline Street and Market Street, and industrial and light-industrial land uses line 14th Street from Mandela Parkway to Union Street (a full block to the north).

Regional access to the site is provided by the I-880 and I-980 freeways, the Bay Area Rapid Transit District's (BART) West Oakland station, which is less than one-half mile walk to the southwest, and AC Transit bus lines that run along Adeline Street, 10th Street and 14th Street. Vehicles can access the site from multiple routes from I-880, via Union Street from the south or West Grand Avenue to Adeline from the north. Vehicles can access the site from I-980 to the east via either 14th Street or 12th Street. Mandela Parkway is a regional connector road only 2 blocks to the east, connecting between the West Oakland BART station and the City of Emeryville. The primary AC Transit routes serving the site include:[1]

- Route 29, providing service between Emeryville and Lakeshore Avenue, with stops at the West Oakland BART station and the City Center BART station, and a stop at the Project site's corner of 10th and Union Streets, generally running with headways of every 30 minutes throughout the day
- Route 14, providing service between the West Oakland BART station and the Fruitvale BART station, with a stop just one block to the north of the Project site at 14th Street and Poplar, generally running on 15 to 20-minute headways throughout the day, and
- Route 36, providing service between downtown Berkeley and the West Oakland BART station, with a stop 2 blocks to the east of the Project site at 10th and Adeline, generally running with headways of every 30 minutes throughout the day

Dedicated bike lanes exist on Mandela Parkway to the west, on 8th Street to the south, and 14th Street from Kirkham Street to Market Street to the north. Buffered bike lanes exist on Adeline Street from 10th to 19th Street to the east.[2]

[1] Alameda – Contra Costs Transit District, Map and Schedules, accessed at: https://www.actransit.org/maps-schedules

[2] City of Oakland, Bicycle Facilities and Projects, Accessed at: https://oakgis.maps.arcgis.com/apps/MapSeries/index.html?appid=e778c7f232c8400182a7f11e7449b9b2

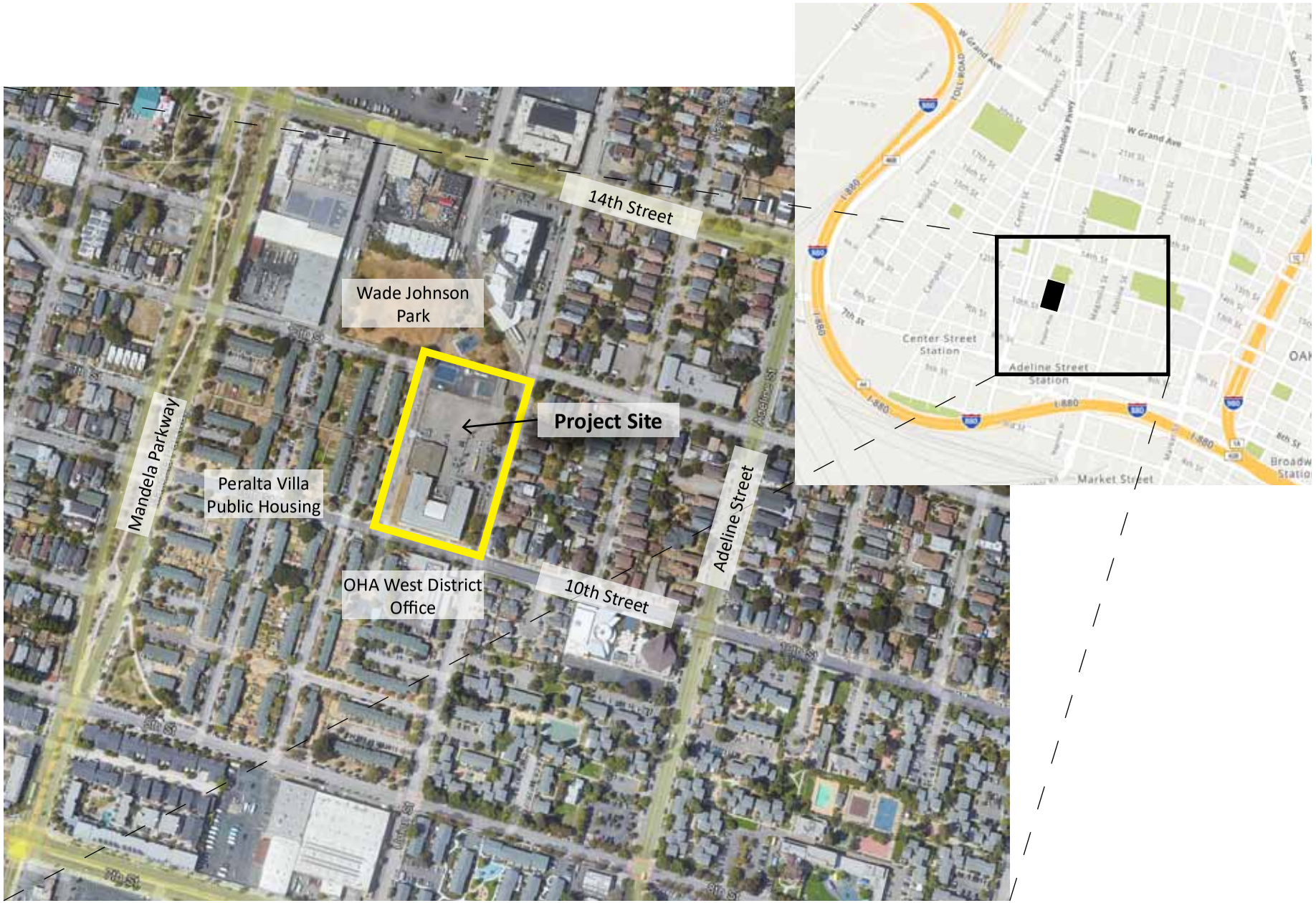


Figure 1
Project Site Location

Existing Conditions at the Site

The Project site consists of a 2.6-acre property located at 1011 Union Street in West Oakland, (Assessor's Parcel No. 004-0053-007). Three buildings formerly occupied the site (see **Figure 2**). The Cole Middle School classroom building, located at the south end of the site with its primary façade fronting Union Street remains. The Cafeteria building, which was located northwest of the Cole Middle Schools' west wing, with its west façade fronting Poplar Street; and a wood-frame modular building that was located at the far northeast corner of the site, have recently been removed (as of early 2022).

- The Cole Middle School building is a two-story, U-plan building of approximately 44,000 square feet. The Cole building was originally constructed in 1925 and designed in the Gothic Revival style, but was later renovated and restyled in 1936, resulting in its current Moderne aesthetic,[3] (see **Figure 3**). The building was originally used as an elementary or grammar school, and was converted to a middle school in 1980. Traditional middle school academic activities at the Cole Middle School ended in 2009 due to declining enrollment, and students were reassigned to other middle schools in the District. Since 2009, the Cole building had been used (until recently) for several different OUSD staff and functional groups, including the OUSD Police Department (which has since been defunded at the end of 2020), the OUSD Special Education staff and Special Education classes (which has been relocated to another OUSD school site in 2021). The OUSD Data Center (the Data Center houses computer servers, electronic data storage, and related devices for the District) will remain operational until its relocation to the new Administrative /Education Center building pursuant to the Project).
- The Cafeteria building was built in 1949 and was situated immediately north of the west wing of the Cole Middle School building. This one-story building had a rectangular footprint of approximately 6,400 square feet and a moderately pitched gabled roof (see also **Figure 3**). The Cafeteria building was originally designed to house a student cafeteria and the school's music program, and had one additional classroom. The Cafeteria building was demolished in early 2022.
- The small modular building at the northeast corner of the site was erected in 2011, and previously served as a small storage area for the District. The modular building was removed in early 2022.

The remainder of the Project site was originally used as hard-surfaced outdoor play space when the campus was functioning as a middle school, and had (until recently) been used as vehicle parking for District staff (parking lots that were used by OUSD and the OUSD's Police Unit are divided by a chain-link fence). The frontage of the Cole building to the southeast, south, and west is planted with grass. A fenced enclosure surrounds HVAC equipment at the southeast corner of the Cole School. To the north, several raised planting beds and movable planters occupy the portion of the site immediately east of the Cole building. Currently, the Cole Middle School building is essentially unused, other than on-going operation of the Data Center.

[3] Page & Turnbull, *Cole Middle School at 1011 Union Street, Historic Resource Evaluation*, December 2019 (see Appendix B)

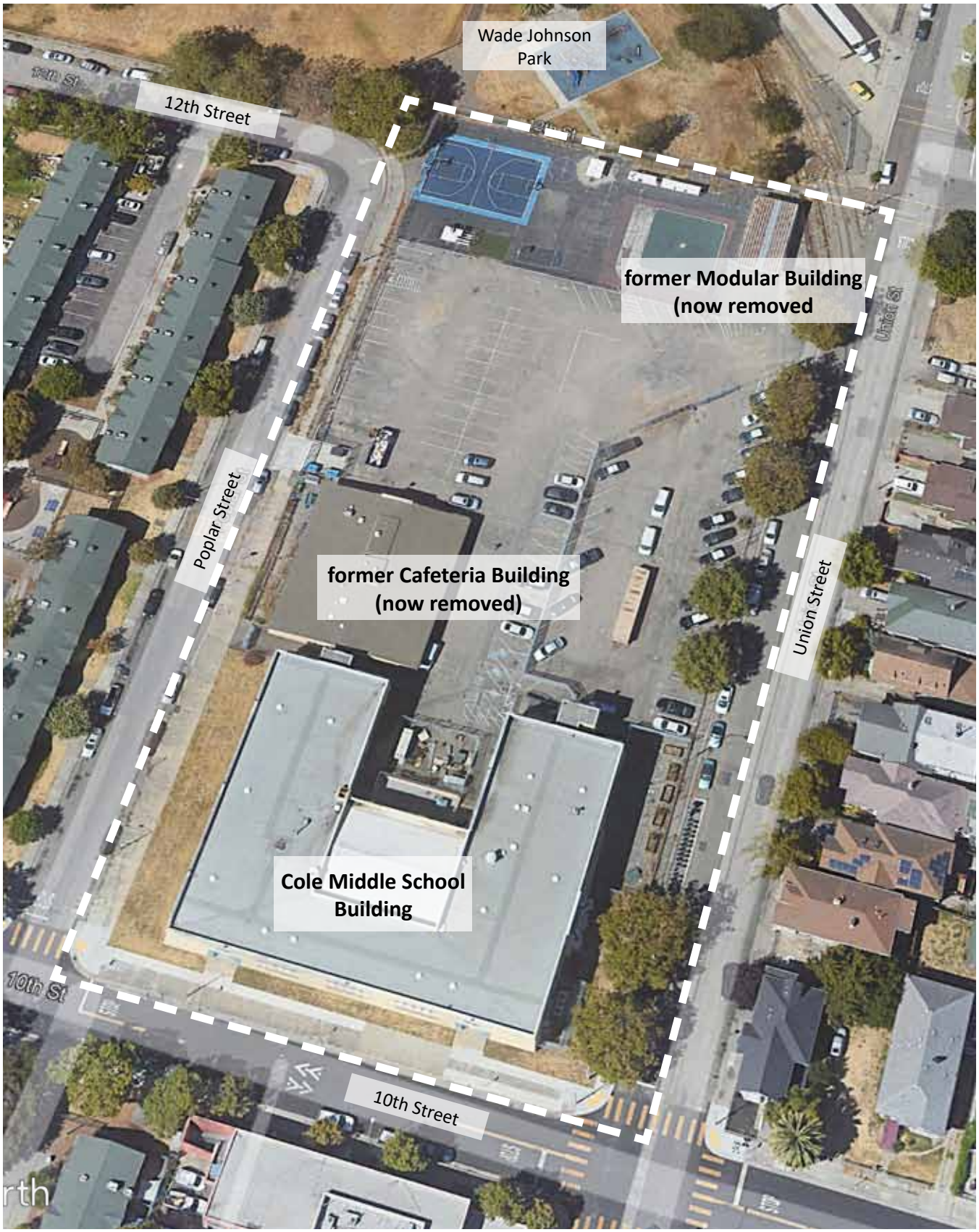


Figure 2
Project Site - Existing



Existing Cole Middle School Building



Former Cafeteria Building

Figure 3
Existing and Former Buildings on the Project Site

Source: Page & Turnbull, 2020

General Plan and Zoning Designations

General Plan Land Use Designation

The City of Oakland's General Plan Land Use and Transportation Element (LUTE) and Land Use Diagram (see **Figure 4**) classifies the Project site and surrounding blocks to the west and south as Urban Residential. The intent of the Urban Residential classification is to, "create, maintain and enhance areas of the City that are appropriate for multi-unit, mid-rise or high-rise residential structures in locations with good access to transportation and other services. The primary future use in this classification is residential, but mixed-use buildings that house ground floor commercial uses, and public facilities of compatible character, are also encouraged." The Project would be considered a public facility, as referred to in this land use classification.[4]

The neighborhood immediately to the east and across Union Street from the Project site has a land use classification of Mixed Housing Type Residential. This land use classification generally applies to many of the older established neighborhood housing areas of Oakland, where a mix of unit types (single family homes, townhouses, and small multi-unit buildings) along with small-scale neighborhood-serving businesses, are frequently found in close proximity to each other.

Zoning

The Project site and the surrounding blocks to the west and south are zoned Urban Residential Zone-2 (RU-2) (see also **Figure 4**).[5] The intent of the RU-2 zone is to, "create, maintain, and enhance areas of the City that are appropriate for multi-unit, low-rise or mid-rise residential structures and neighborhood businesses where appropriate in locations with good access to transportation and other services". Pursuant to Oakland Municipal Code (OMC) Table 17.19.01: Permitted and Conditionally Permitted Activities, community assembly, community education, and civic administration land uses are conditionally permitted activities within this zoning district. Pursuant to OMC Section 17.19.050, the property development standards in the RU-2 zone require 10-foot front setbacks, 4-foot side yard setbacks, and 15-foot rear yard setbacks. The maximum building height limit is 50 feet for the primary building and 15 feet for accessory structures.

Relevant Provisions of the California Government Code

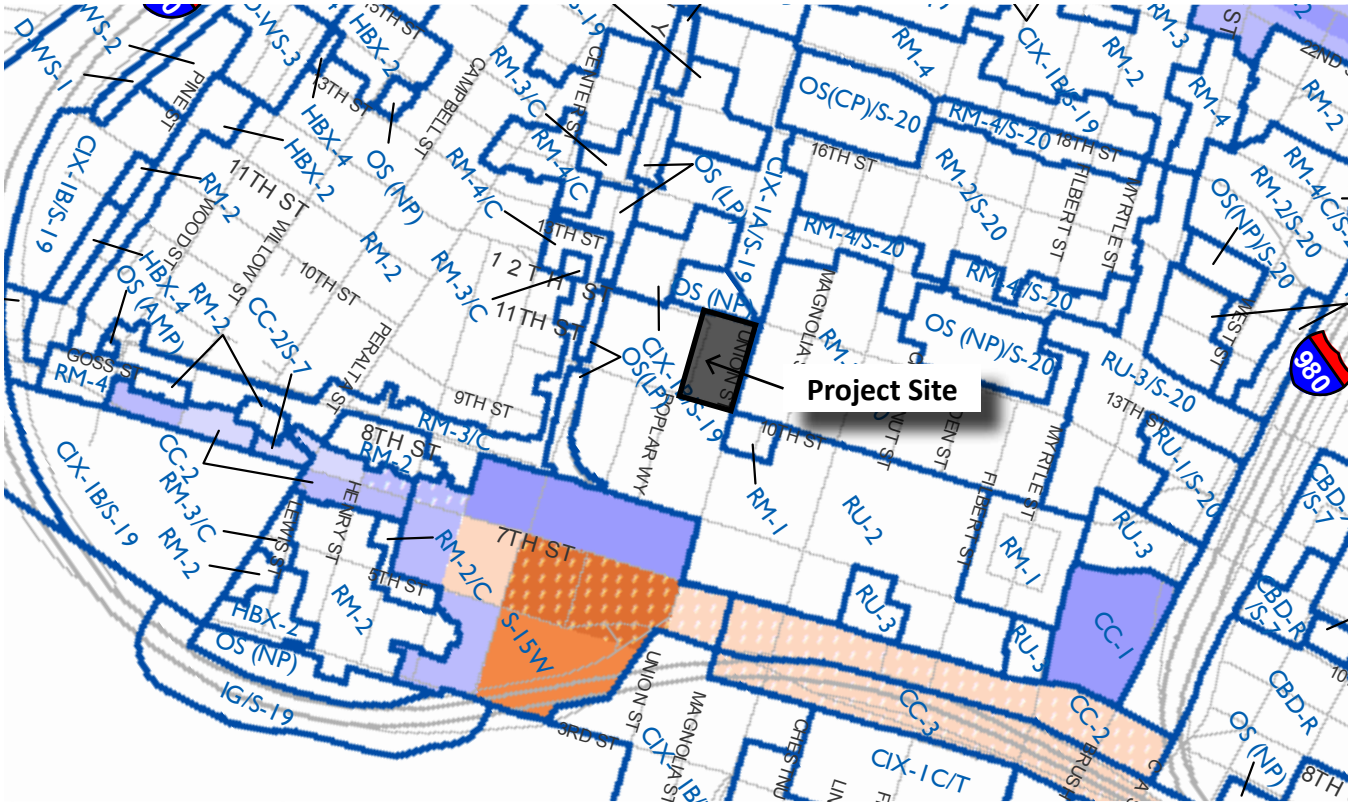
California Government Code, Section 53095 (2017) provides that, "the governing board of a school district . . . by a vote of two-thirds of its members, may render a city or county zoning ordinance inapplicable to a proposed use of property by the school district. The governing board of the school district *may not* take this action when the proposed use of the property by the school district is for non-classroom facilities, including, but not limited to warehouses, *administrative buildings*, and automotive storage and repair buildings" (emphasis added). This provision of the California Government Code does not exempt the portion of the proposed Project that is to be used for administrative use, from the requirements of the City Planning Code.

[4] City of Oakland General Plan Land Use and Transportation Element, March 1998, page 148

[5] City of Oakland Planning Code, updated as of June 2020, accessed at: https://www.oaklandca.gov/resources/planning-code



General Plan Land Use Diagram - Project Site as Urban Residential



Zoning Map, Project Site as Urban Residential-2 (RU-2)

Figure 4
City of Oakland General Plan and Zoning

Source: City of Oakland, at: https://www.oaklandca.gov/resources/zoning-map

Detailed Description of the Project

As further described below, the proposed Project is a phased approach to redevelopment of the Project site. This approach provides the District with the capability of building and furnishing the new space over time, as funding is allocated to the Project and as the Board of Education makes final determinations for the best use of the building space within the Project. The phasing sequence is as follows:

- The first phase of the Project includes removal of all existing building foundations on the northerly portion of the site. All existing concrete, pavement and asphalt, existing on-site utility infrastructure and fencing on the northerly portion of the site would be removed and disposed of.
- After the northerly portion of the site has been cleared, remediation of soil contaminants from throughout the site (except soils under the Cole Building) would occur. This remediation generally involves excavation and removal of the top three feet of soil from across the site, to be conducted in phases (see detailed description of Remediation, below).
- During the removal of the on-site soils, new clean fill will be brought to the site to reestablish existing grade. The clean fill will be placed back into the excavated area as reworked engineered fill, and the northerly portion of the site would be regraded to accommodate a new building.
- Once all site preparation and remediation activities are complete on the northerly portion of the site, the Project would involve construction of a new, two-story, 56,176 square-foot Cole Administrative /Education Center building on the northwest portion of the site.
- With completion of the Cole Administrative /Education Center building shell, the District's main computer servers and equipment (the Data Center, which is currently housed in the Cole Middle School building) would be relocated into the new Administrative /Education Center building, so that this critical function can continue to operate throughout the construction process.
- Once the Data Center has been relocated, the existing Cole Middle School building on the southerly portion of the site would be demolished. All existing building foundations, concrete, pavement and asphalt, existing on-site utility infrastructure and fencing on this portion of the site would be removed and disposed of, and this portion of the site would be graded to accommodate new parking.
- The Project's construction would be completed with installation of site landscape and hardscape improvements.

Further details for each of these phases of development are provided below.

Site Remediation/Excavation and Fill

As is more fully described in the Hazards and Hazardous Materials section of this Initial Study, a Preliminary Endangerment Assessment for the property was conducted, and a Preliminary Environmental Assessment Work Plan was approved by DTSC.[6] Pursuant to that PEA, lead and arsenic was detected in soil samples from throughout the site, at levels that exceed DTSC screening levels. DTSC requires remediation of soil contaminated with lead and arsenic during the construction phase of the Project, and soil excavation and off-site disposal is the preferred remedial action alternative. This remediation will be separated into Phase 1 and Phase 2 remediation areas to accommodate the Project's construction schedule (see **Figure 5**).

[6] Ninyo and Moore, Preliminary Endangerment Assessment (PEA) Work Plan, August 2021, approved by DTSC October 21, 2021, per DTSC Envirostor website at https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60003015

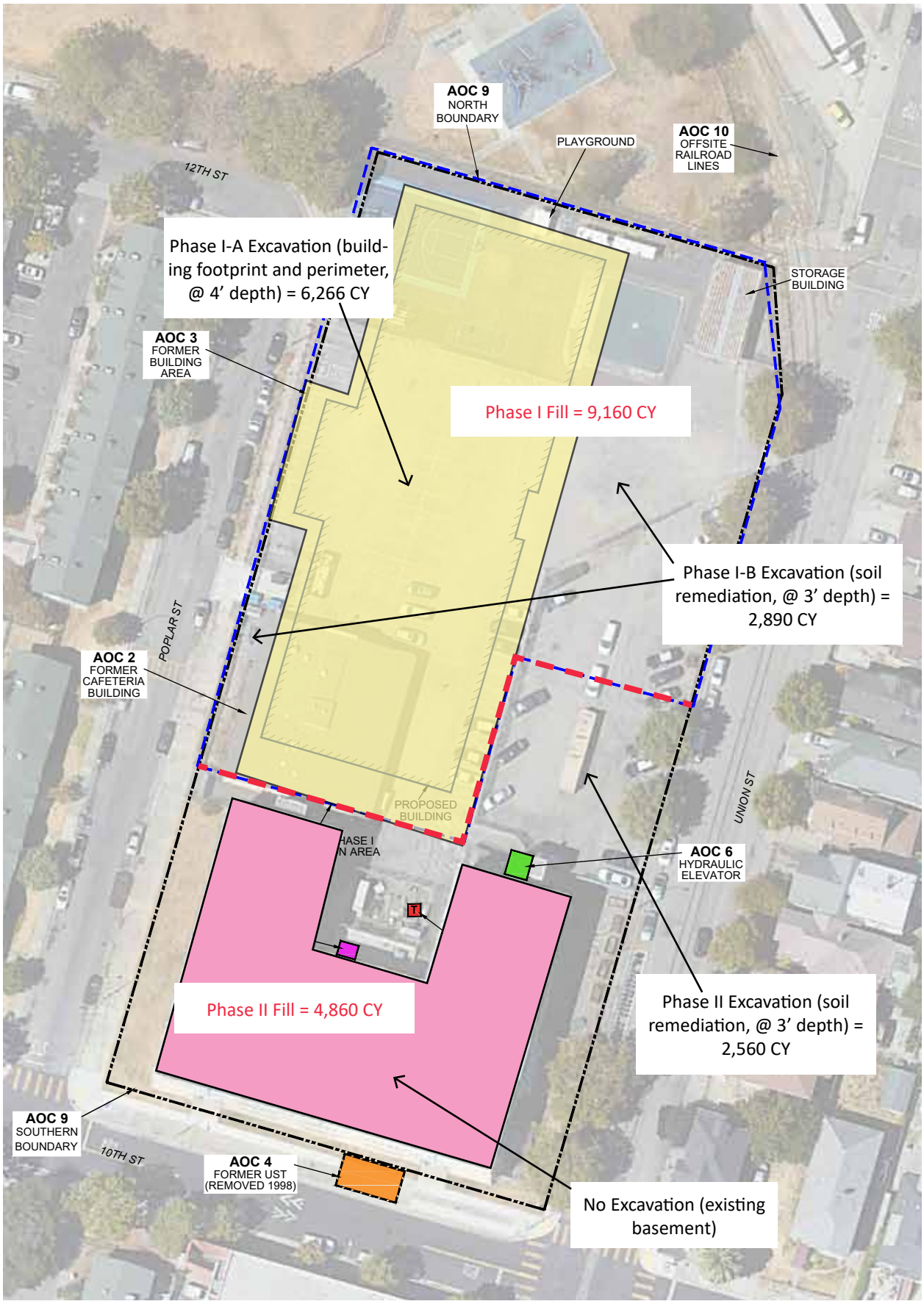


Figure 5
Soil Cut and Fill, for Site Preparation and Remediation

Source: Ninyo & Moore, March 2022

- Phase 1 will occur on an approximately 1.6-acre (67,000 square-foot) northerly portion of the site, and will include excavation of the area below the planned Cole Administration/Education building to a depth of 4 feet (as needed for the structure's foundation). Phase I will also include excavation of approximately 26,000 square feet of the remainder of the Phase I area to a depth of 3 feet, to remove/remediate soils with lead and arsenic concentrations at levels that exceed DTSC environmental screening levels. In total, Phase I remediation (plus excavation for the building foundation) will involve excavation and off-haul of approximately 9,160 cubic yards (CY) of soil.
- Once the building foundation is constructed, the Phase I portion of the site would be refilled with a similar amount of imported clean fill, reworked as engineered fill across the site.

After completion of the Cole Administrative /Education Center building shell, remediation of the Phase II portion of the site would commence.

- Phase 2 remediation will include the remaining area of the site, beginning with demolition and removal of the existing Cole Middle School building. That building has a basement level, so the remaining area surrounding the building foundation (approximately 23,000 square feet) will be excavated to a depth of 3 feet to remove/remediate soils with lead and arsenic at levels that exceed DTSC environmental screening levels. This would involve excavation and off-haul of approximately 2,560 CY of soil.
- The Phase II remediation portion of the site would then be refilled with a similar 2,560 CY of imported clean fill, and an additional 2,300 CY of imported clean fill will be needed to raise the prior basement level of the former Cole building to grade, for a total fill import of approximately 4,860 CY of clean fill material.

In total, the Project's site work (inclusive of soil remediation) will involve approximately 11,720 CY of soil export and 14,020 CY of clean fill import.

Prior to implementation of any proposed remediation (i.e., the proposed soil excavation and off-haul), the District will need to enter into a School Cleanup Agreement with DTSC. Pursuant to that Agreement, the District will develop detailed Remedial Action Work Plans (RAW) for DTSC approval for Phase 1 and Phase II remediation, and prepare Soils Management Plans and Health & Safety Plans, all subject to DTSC approval.

Remedial Action Workplan

The Phase I RAW will identify the remediation goals and objectives, and the performance measures for soil excavation and off-site disposal of lead and arsenic-contaminated soil. The RAW is subject to review and final approval from DTSC. Sections of the RAW will include:

- Description of the Removal Action process, site background information, description of the nature, source and extent of contamination, a risk evaluation and clean up goals, and an engineering evaluation/cost analysis
- All Applicable or Relevant and Appropriate Requirements (ARARs), including chemical-specific ARARs in accordance with DTSC human health risk screening process (including Air Quality Management and a Health and Safety Plan), action-specific ARARs (for waste management, storm water discharge and quality assurance) and location-specific ARARs
- RAW implementation, which will include field documentation, site preparation and security measures, identification of work zones, the excavation plan, meteorological and air monitoring, a Sampling and Analysis Plan (waste characterization and excavation confirmation sampling), a Transportation Plan for off-site disposal, backfill and site restoration plans, and a Project Schedule and Report of Completion.

A similar RAW will be needed prior to initiation of any remediation efforts in the Phase II area, which will also need to address delineated-lead contaminated soil around the current Cole school building, and further evaluation of soil vapor in the southern Phase II portion of the site.

Soils Management Plan

A Soil Management Plan (SMP) will be implemented during future remediation excavation and construction activities to protect construction workers, site occupants and off-site receptors from potential exposure to lead and arsenic in the soil. The SMP will serve as the guidance document for evaluation of clean, contaminated and hazardous soils during soil disturbance activities. Sections of the SMP will include:

- A program of participant roles and responsibilities, description of the physical setting, soil screening criteria, soil management objectives, remedial actions and notifications
- Health and Safety plans, including a discussion of proper personal protective equipment (PPE) to mitigate direct contact exposure of contaminated soils to site workers
- Delineation of exclusion work zones and hazard warning signage, best management practices (BMPs) for PPE and equipment decontamination and site worker hygiene
- Soil excavation and monitoring, soil segregation, stockpiling soil and stockpile management, including proper storage of excavated soils to prevent cross contamination (e.g. stockpiling on plastic sheeting and covering) and soil testing
- Clean imported fill based on DTSC requirements
- Risk management measures

The District will prepare separate site-specific Health and Safety Plans and a Soil Management Plans for DTSC approval prior to any work in Phase I and Phase II areas, where contractors will be working in, or excavating soil.

Site Grading

Following the remediation and excavation/fill process for the site, finish grading is generally anticipated to be minor surface grading to establish new site grades. Finish grade at the Project site is generally flat, with elevations of between 16 to 18 feet above mean sea level (msl).[7] Finish grading of the entire site will be conducted to provide a flat building pad at elevation 19 feet above msl at the northwest portion of the site, at 18.5 feet above msl at the northeast portion of the site, and at elevations of between 16 and 18 feet above msl at the southern portion of the site. These elevations will provide for positive drainage of the site, away from future building locations.

Administrative /Education Center Building Construction

Once all site preparation activities are complete on the northerly portion of the site, the Project would involve construction of a new two-story, 56,176 square-foot Cole Administrative /Education Center building on the northwest portion of the site. The District has considered numerous options for how to best program the space in this new building, and has concluded with the following programming of this space:

- The 28,826 net square-foot first floor of the Administrative /Education Center building would hold new OUSD school functions, accommodating the OUSD Adult and Career Education

[7] Shah Kawasaki Architects and Siegfried Engineers, *Grading Plan*, Sheet C-104 of Central Administration Center at Cole Campus submittal to State Architects, March 9. 2021

programs. The first floor of the building would include an entry lobby, 13 to 14 new classrooms, 3 offices/meeting rooms, an IT Department workroom and a separate server room relocation of the Data Center, plus multiple spaces for storage, hallways and circulation (staircases and elevators), restrooms and utility rooms (see **Figure 6**).

- The 27,350 net square-foot second floor of the Administrative/Education Center building would include a large meeting room, 3 large open office spaces (each over 2,300 sf), 34 individual office spaces and 23 shared offices/collaboration rooms/huddle rooms. Accessory spaces include a central lobby at the elevator bays, multiple spaces for storage, hallways and staircases, elevator bays, restrooms and utility rooms (see **Figure 7**).

Furnishing and occupancy of this building may occur in phases. For example, the second floor administrative offices may be furnished and occupied as part of a first phase, and the first floor may remain as "shell space" while the District defines a specific educational program plan for the first floor classrooms.

Parking

Parking for the Project will be provided in two separate parking areas of the site. The first is a 63-space parking lot at the southern portion of the site, with access via one curb cut on 10th Street. The second is a 30-space parking area on the westerly portion of the site near the entrance to the Administrative/ Education Center building, with a one-way looped driveway (2 curb cuts) off of Union Street (see **Figure 8**). Included within the 93 total parking spaces are 5 ADA-accessible spaces (including two accessible van spaces), 10 EV-ready spaces, 10 EV spaces with electrical conduit installed, and 10 designated clean-air vehicle spaces.

The Project would also provide a total of 8 short-term bike racks, located between the staff parking lot and the Administrative/Education Center building; and 16 long-term bike lockers, located at the rear of the building along Poplar Street.

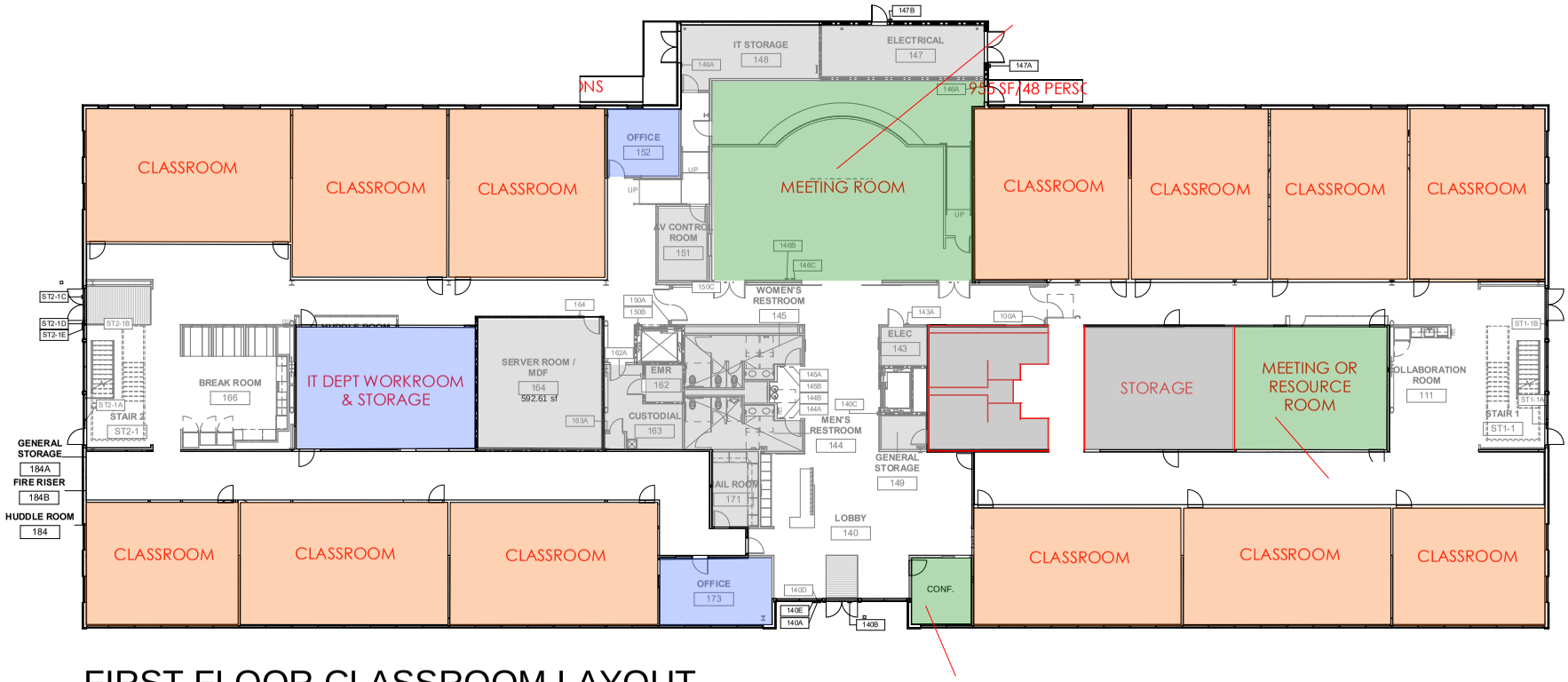
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FIRST FLOOR CLASSROOM LAYOUT

Figure 6
Proposed Cole Administrative Office/Education Center Building, First Floor Classroom Plan

Source: Shah Kawasaki Architects, Plan Set Sheet A-014, 6/8/2020

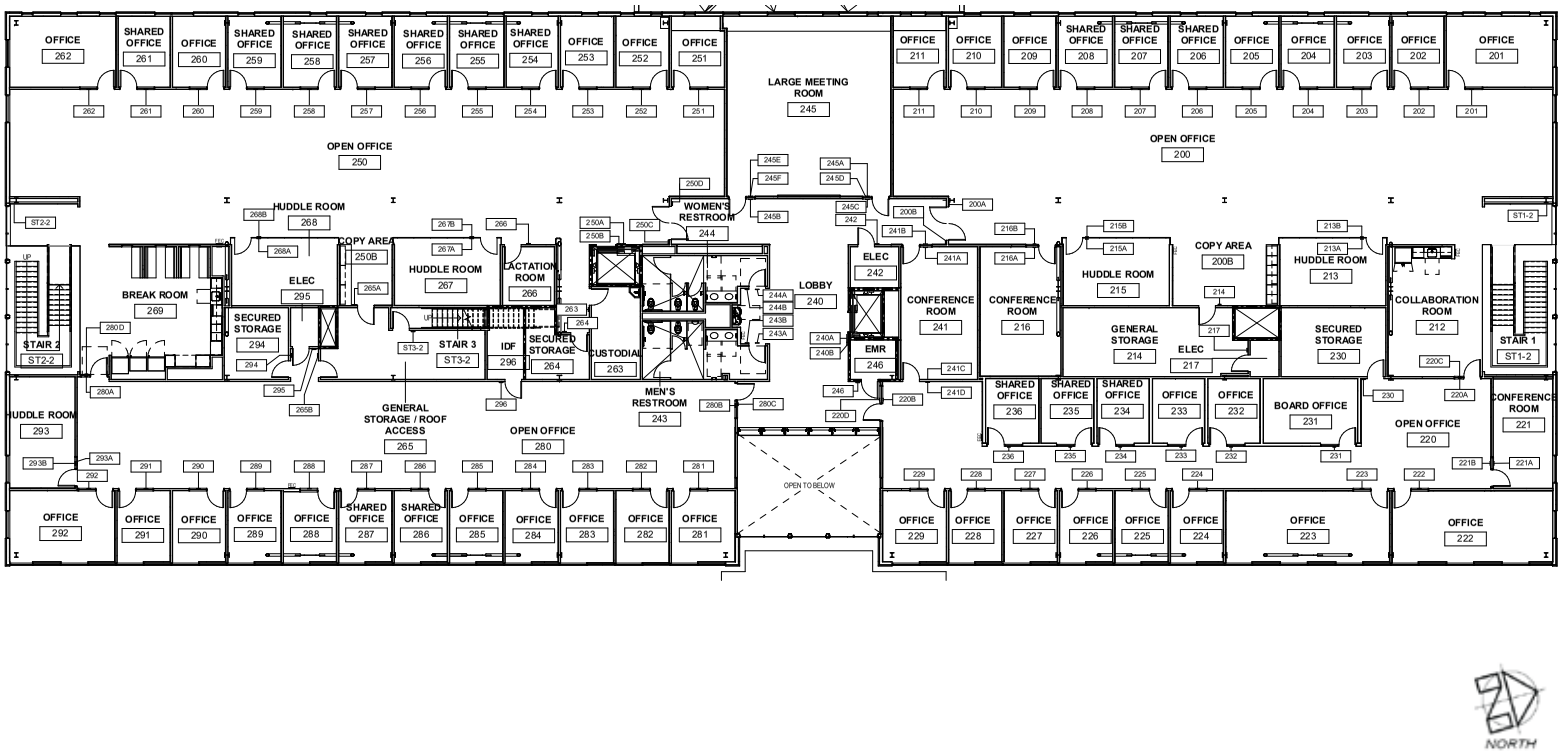


Figure 7
Proposed Cole Administrative Office/Education Center Building, Second Floor Office Plan

Source: Shah Kawasaki Architects, Plan Set Sheet A-015, 2/19/21

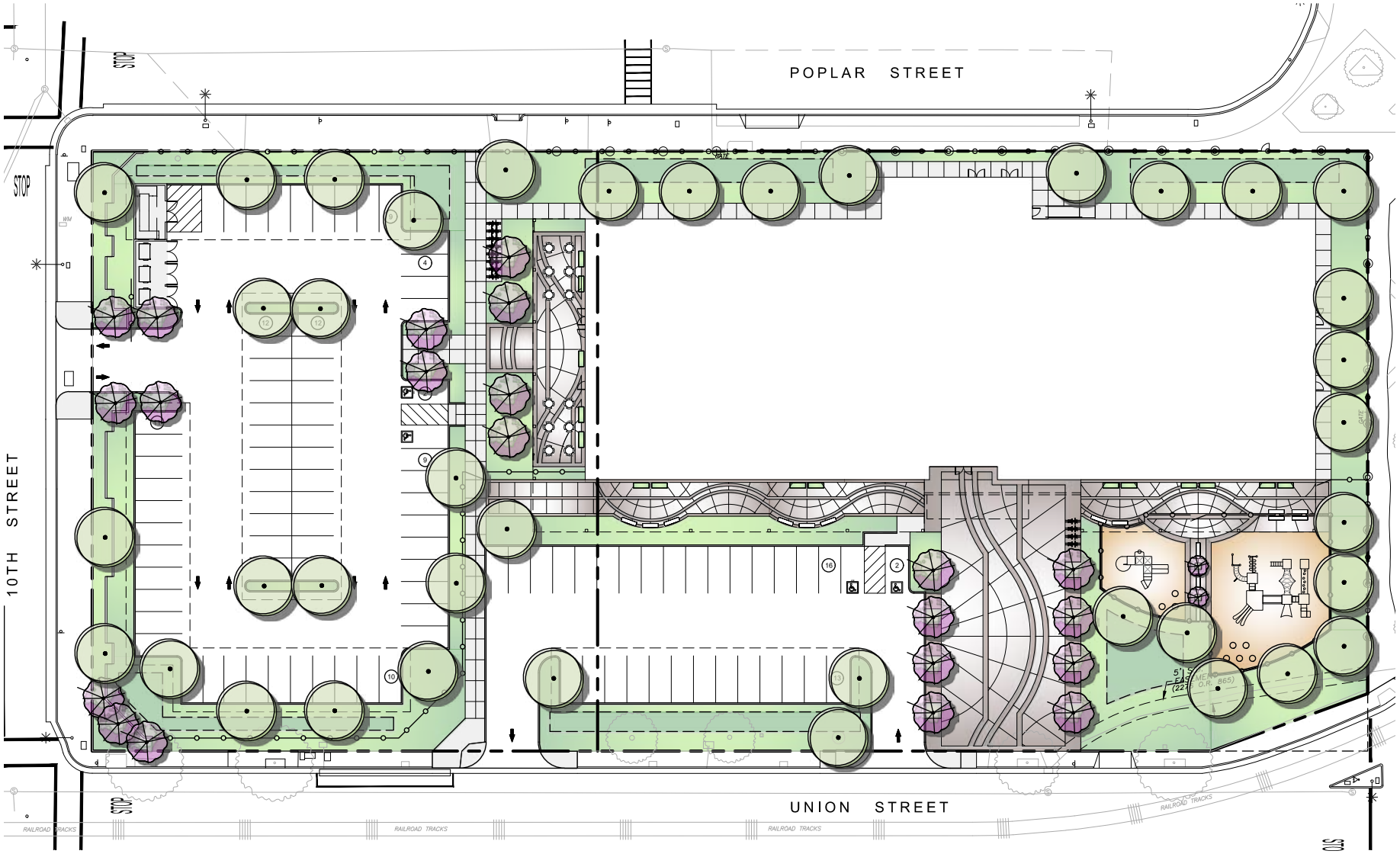


Figure 8
Project Site Plan

Source: Shah Kawasaki Architects, 1/27/2022

Landscape

Landscape plans for the Project include three primary landscape elements: a hardscaped/landscaped main entry to the Administrative/Education Center building, perimeter landscaping around the building, and parking lot and streetscape landscaping (see prior Figure 8).

- The primary entry to the Administrative /Education Center building is on the east from Union Street, adjacent to the visitor's parking lot. This entry includes a large, decorated concrete entry court with seat benches, bollard lighting and framed by two rows of flowering trees, intended to provide a spacious and welcoming entry to the building (see **Figure 9**).
- The entry is connected to a decorative concrete walkway across the entire front of the building, with a planter boxes and seating benches. The decorated concrete entry and walkway has a circular or serpentine design to add interest to the paving materials.
- A courtyard provides a secondary staff entrance to the southerly façade of building, separated by landscaped beds of trees, shrubs and groundcover.
- A perimeter sidewalk surrounds the building on the west and north facades, separated from Poplar Street and the adjacent Wade Johnson Park by generous planter beds of trees, shrubs and groundcover.
- The staff parking lot and the visitor parking lot are also separated from the adjacent streets by planter beds of street trees, shrubs and groundcover.

Perimeter landscape beds provide dual purposes of attractive landscape features, as well as stormwater treatment as bio-swales and stormwater filtration. Additionally, the Project proposes that at least 80% of all landscape will be comprised of native California species, and capable of achieving a 20% reduction in otherwise required water demands.

Sustainability

The Collaborative for High Performance Schools (CHPS) was founded in 1999 as a collaboration of California's major utilities to address energy efficiency in schools. The program was developed specifically to reduce energy consumption in California's K-12 educational facilities as a means of reducing operating costs. CHPS quickly expanded to address all aspects of school design, construction, and operation, and is now a nationally recognized evaluative tool for measuring high-performance school buildings. The CA-CHPS provides California-specific criteria for defining high performance schools, and addresses topics of integration, indoor environmental quality, energy, water, site, materials and waste management, and operations metrics. School districts are encouraged to adopt the CA-CHPS criteria for their new and existing schools.

Of the total 250 points used in the CA-CHPS Criteria, 200 points are dedicated towards achievement of "core criteria" of maximize the health, well-being and performance of students, educators and staff; conserving energy, water and other resources to minimize greenhouse gas emissions and reduce operating costs; and practicing good environmental stewardship within schools to achieve community environmental goals. Per the latest CA-CHPS Criteria, non-classroom buildings are now eligible for CHPS "Designed" and CHPS "Verified"/"Verified Leader" recognition.[8] Taking into consideration the wide range of building uses and project scopes for classroom and non-classroom spaces, the 2021 CA-CHPS Criteria establishes point thresholds for "CHPS Designed/Verified" at 83 points out of a possible 250 points, and 120 points as the threshold for "CHPS Verified Leader".

[8] Collaborative for High Performance Schools, *CA-CHPS Criteria*, Version 2.0, June 6, 2021



Figure 9
Proposed OUSD Cole Administrative/Education Center - Entry Rendering

Source: Shaw Kawasaki Architects, Plan Set Sheet A-001, 3/29/21

Based on the CA-CHPS Worksheet prepared by the District for the Cole Administrative /Education Center building, the Project's design and operational plans achieve a total of 112 points, exceeding the CA-CHPS criteria for a CHPS Designed/Verified building, and achieving all CA-CHPS pre-requisite criteria as well as all CalGreen/Title 24 measures.[9]

Utilities

On-site utilities would include electricity, domestic water, wastewater, and storm drainage. No natural gas service is planned for the Project. East Bay Municipal Utility District (EBMUD) provides municipal water and sewer treatment and disposal, the City of Oakland generally owns and maintains local sewer lines within the public right-of-way. Pacific Gas and Electric (PG&E) provides electric service. All on-site utilities would constructed and operated in accordance with applicable codes and current engineering practices. Trash receptacles would be located adjacent to the staff parking lot near the corner of 10th Street and Poplar Street for easy access for pick up by solid waste service providers, placed together with a back-up generator to ensure power for the Project elevators in the event of a power outage, as well as back-up power for the Data Center.

Staffing Occupancy and Adult/Continuing Ed Programming

OUSD Administrative Staff

The District had originally anticipated the need for new administrative building space to accommodate as many as 337 OUSD administrative staff in order to reunify their staff into one centralized location. However, of these 337 current OUSD administrative staff, 180 administrative staff member work at school sites and they will remain at those locations. The remaining 157 administrative staff members will be 'assigned' to work at the Cole building. These 157 'assigned' employees' work schedule is assumed as follows

- For new OUSD administrative facilities such as Cole, the District presumes that 50% of the 'assigned' staff will permanently work from home, and only come in for required face-to-face meetings. At the new Cole Building, 50% of 'assigned' employees (or 78 employees) will work from home, and only come to the Cole building once a week for meetings. For planning purposes, it is assumed that these employees will be on a rotating meeting schedule, with 15 of these employees 'reporting' to Cole each day on a once-weekly meeting basis.
- Of the remaining 50% of employees 'assigned' to Cole, approximately 60% (or 47 employees) will be on a rotating work schedule, and will reserve a workstation via the School's app. For planning purposes, it is assumed that half of these 47 employees come in every other day, meaning that 23 of these rotating schedule employees will report every day.
- Of the remaining 50% of employees 'assigned' to Cole, approximately 40% (or 31 employees) will report every day.

Based on these assumptions, the daily employee population at the Cole building will be 31 every day employees, and 23 daily rotating employees, and 15 weekly meeting employees, for approximately 70 OUSD administrative staff employees on the second floor of the Cole building on a daily basis.

Adult/Continuing Ed Programming

The first floor of the Cole Administrative /Education Center building would hold new OUSD school functions, accommodating the OUSD Adult and Career Education programs. The current Oakland Adult

[9] Shah Kawasaki Architects, CHPS Scorecard, Sheet A-005 of Central Administration Center at Cole Campus submittal to State Architects, February 19, 2021

and Career Education program offers classes in High School Diploma/Credit Recovery and High School Equivalency (GED/HiSET), English as a Second Language (ESL), College & Career Readiness Pathways, ESL Citizenship, Pre-Apprenticeship Math, FabLab (classes in how to use digital manufacturing machines and design software) and Project SEARCH (internships for adults with developmental disabilities). Currently, the majority of these Programs are held at McClymonds High School in West Oakland. The Project would enable consolidation of the Oakland Adult and Career Education program at the Cole site, and enable the District to re-program McClymonds to better accommodate the high school needs of the District.

It is assumed that the OUSD Adult and Career Education program would continue to offer classes on its current schedule, with certain classes offered between 9:00 to 12:00 AM, certain classes offered between 1:00 and 4:00 PM, and other classes offered between 6:00 and 8:30 PM. For planning purposes, it is further assumed that a total of approximately 100 students and faculty will attend the morning class schedule, approximately 100 students and faculty will attend the afternoon class schedule, and as many as 175 students and faculty will attend the evening class schedule. At these attendance rates and schedules, and assuming a ratio of about 20 persons (students and faculty) per class, not all classrooms on the first floor will be occupied during the day. This will allow for overlap in scheduling, and reserving certain classrooms for specific programming purposes.

Approvals Required for the Project

The following approvals have already been obtained for the Project:

OUSD Board of Education

- Approval for expenditures to design the Project, approved by the Board per Resolution No. 1920-2024, September 11, 2019
- Approval for expenditures to construct the Project, approved by the Board per Resolution No. 2021-0305, June 30, 2021

California Division of the State Architect and State of California Natural Resources Agency/Department of Conservation/California Geological Survey

- Review and approval of building design (building permits) and construction for compliance with State/DSA building code requirements related to structural safety, fire and life safety, accessibility and sustainability, approved by the Division of the State Architect per Application No. 01-119003, April 1, 2021
- Review and approval of engineering geology and seismology, based on Geotechnical engineering and Geologic study dated May 22, 2022, approval granted by California Geological Survey on October 2, 2022 for CGS Application No. 01-CGS4511
- Oakland Fire Department/Fire Prevention Bureau: AMR Request #2020-39514 (Minimum Fire Apparatus Road Width), approved on October 26, 2021

The following additional approvals, permits and/or authorizations are required pursuant to Project implementation:

OUSD Board of Education

- Approval for final occupancy of the anticipated mixes of uses of the building

City of Oakland

- Conditional Use Permit (CUP) for administrative office use in a residential zone
- Tree permit for the removal of four trees from the Project's frontage along Union Street

- Post-Construction Stormwater Management Plan (SWMP) – City as the NPDES discharge permittee
- Encroachment permit for any work within the public right-of-way
- Oakland Fire Department/Fire Prevention Bureau: Hydrant/Fire Service Application #2022-00496 submitted January 28, 2022
- Oakland Fire Department/Fire Prevention Bureau: ERRC #2021-95521 (pending)

California Department of Toxic Substances Control

- Approval of a Final Preliminary Environmental Assessment
- Voluntary Cleanup Agreement or School Cleanup Agreement
- Removal Action Work Plan or Remedial Action Plan, including Soil Management Plan
- Oversight of cleanup activities
- "No Further Action" letter

California State Water Resources Control Board / San Francisco Bay Regional Water Quality Control Board

- Coverage under the Construction General Permit (CGP), pursuant to the Project's submitted Notice of Intent (NOI)
- Stormwater Pollution Prevention Plan, pursuant to CGP

Bay Area Air Quality Management District (BAAQMD)

- Report to the Air Pollution Control Officer, with a description of emission controls used for demolition and removal of any asbestos-containing materials, pursuant to BAAQMD Regulation 11, Rule 2
- Permits pursuant to CARB's Stationary Diesel Airborne Toxics Control Measure (ATCM) for the Project's proposed diesel-powered emergency generator

East Bay Municipal Utility District (EMUD)

- Service connections for new water and firewater service

Initial Study Checklist

Environmental factors that may be affected by the Project are listed by topic below. Factors marked with a solid box ("■") were determined to be potentially affected by the Project, involving at least one impact that is a potentially significant impact as indicated by the Checklist on the following pages. Unmarked factors ("☐") were determined to not be significantly affected by the Project, or reduced to a level of less than significant through mitigation, based on analysis and discussion provided in the Checklist.

☐ Aesthetics	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards/Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

The Checklist portion of the Initial Study begins on the following page, with explanations of each CEQA issue topic. Four outcomes are possible, as explained below.

1. A "no impact" response indicates that no action that would have an adverse effect on the environment would occur due to the Project.
2. A "less than significant" response indicates that, while there may be potential for an environmental impact, there are standard procedures or regulations in place, or other features of the Project as proposed, which would limit the extent of this impact to a level of "less than significant".
3. Responses that indicate that the impact of the Project would be "less than significant with mitigation" indicate that mitigation measures identified in the Checklist analysis will be required as a condition of Project approval, and that implementation of those mitigation measures would effectively reduce potential Project-related environmental impacts to a level of "less than significant".
4. A "potentially significant impact" response indicates that further analysis is required to determine the extent of the potential impact and to identify appropriate mitigation. If any topics were to be indicated with a "potentially significant impact", these topics would need to be analyzed in an Environmental Impact Report.

Aesthetics

Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Have a substantial adverse effect on a scenic vista?	❒	❒	❒	■
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	❒	❒	❒	■
c) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	❒	❒	■	❒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	❒	❒	■	❒

Scenic Vistas and Scenic Resources

The Project site is located in an urbanized area with no significant scenic vistas. Development of the Project would demolish the existing 1- and 2-story buildings on the site to develop a new 2-story mixed office/classroom building and surface parking (see prior Figure 8). The new building would be of similar scale and bulk as the adjacent Oakland Housing Authority office building on the south side of 10th Street. The Project's new building would not adversely affect a scenic resource.

According to the City of Oakland General Plan's Scenic Highways Element, scenic routes are "distinctively attractive roadways that traverse the City and the visual corridors which surround them". Current and future scenic routes may include officially designated State scenic highways, municipally designated City roadways or informally recognized local scenic byways. Within the City of Oakland, the entire length of I-580 from the San Leandro city limits to the San Francisco-Oakland Bay Bridge is identified as a designated scenic route. The segment of I-580 from the San Leandro city limit to State Route 24 is also an officially designated State scenic highway. I-980 is identified as a route that could be considered for possible future designation. The nearest segment of I-580 is the elevated Oakland Maze, approximately 1.2 miles from the Project site. This segment of the freeway is elevated, allowing views across West Oakland, but at this distance the Project will not be distinctly visible and will not substantially damage any scenic resources within or adjacent to a state scenic highway.

Scenic Quality

The Project is located in an urbanized area, and the applicable CEQA threshold related to potential impacts to scenic quality is whether the Project would conflict with applicable zoning and other regulations governing scenic quality. The Project site is located within an area zoned as Urban Residential Zone-2 (RU-2). Therefore, the following provides a brief comparison of the Project to the development standards of the RU-2 zoning district:

Building Setbacks

Pursuant to OMC Section 17.19.050, the property development standards in the RU-2 zone require 10-foot front setbacks, 4-foot side yard setbacks, and 15-foot rear yard setbacks. Since the Project includes an entire block, the larger 10-foot front setback is assumed to apply to the Poplar Street, 10th Street and Union Street frontage. [10]

Consistent with these development standards, the Project maintains at 10-foot setback to the nearest wall along Union Street, a 30-foot setback to the trash enclosure and generator structure nearest to 10th Street, and more than 19-foot setback to the nearest wall of the Multi-Purpose Building from Union Street (see **Figure 10**). The Project also maintains a 20-foot setback from Wade Johnson Park, greater than both the 4-foot side yard or 15-foot rear yard setback. The Project complies with all setback requirements.

Building Height

The maximum building height limit in the RU-2 zone is 50 feet for the primary building, and 15 feet for accessory structures. Buildings in the RU-2 zone are also limited to a 30-foot maximum height at the setback line along any rear or interior side lot line that abuts a lot within a residential zone (i.e., in an RH, RD, RM, or RU-1 Zone). This maximum height may increase by 1 foot for every foot of distance away from the setback line.

The proposed Cole Building has a roof height of 33 feet, with a sloped roof that extends to a maximum of 37'-10" (see **Figure 11**). This building is below the maximum building height of 50 feet. To the north, the Wade Johnson Park is zoned as Open Space (OS), and the building height limits for buildings adjacent to residential zones does not apply.

Lot Coverage and FAR

The RU-2 zone does not include any development standards relative to building coverage of the lot or FAR. The Project is consistent with all applicable zoning and other regulations governing scenic quality.

Conclusions

Based on the above, the Project would not conflict with any applicable zoning and other regulations governing scenic quality. The new building would provide an inviting architectural focal point and an overall positive improvement to the existing visual character of the area. The Project would be contemporary in design and include amenities such as street-level landscaping and lighting. As such, the Project's effect related to scenic quality would be less than significant.

[10] Oakland Planning Code, Section 17.19.050, accessed at: https://library.municode.com/ca/oakland/codes/planning_code

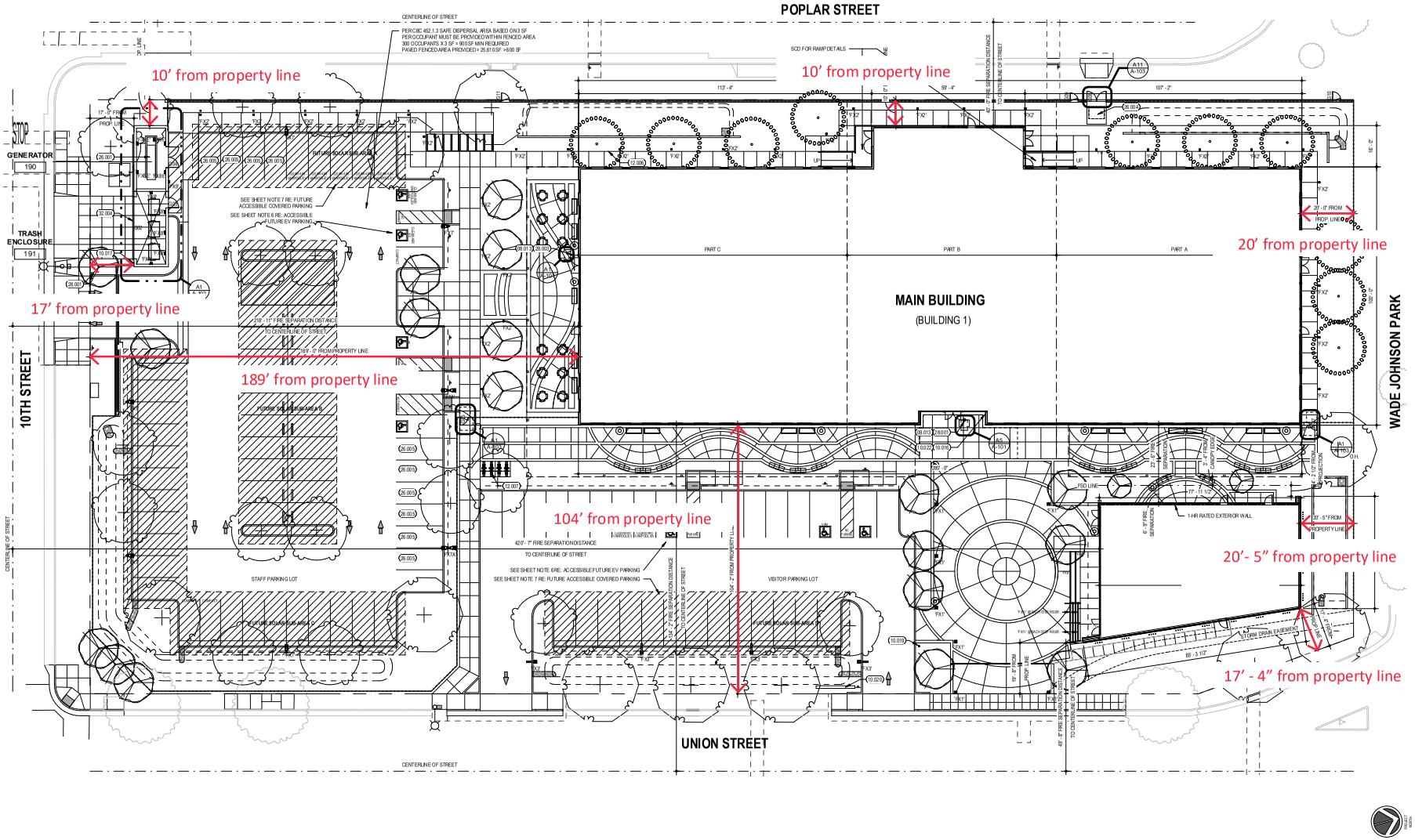


Figure 10
Project's Consistency with Building Setbacks

Source: Shah Kawasaki Architects, Sheet A-201, March 2021

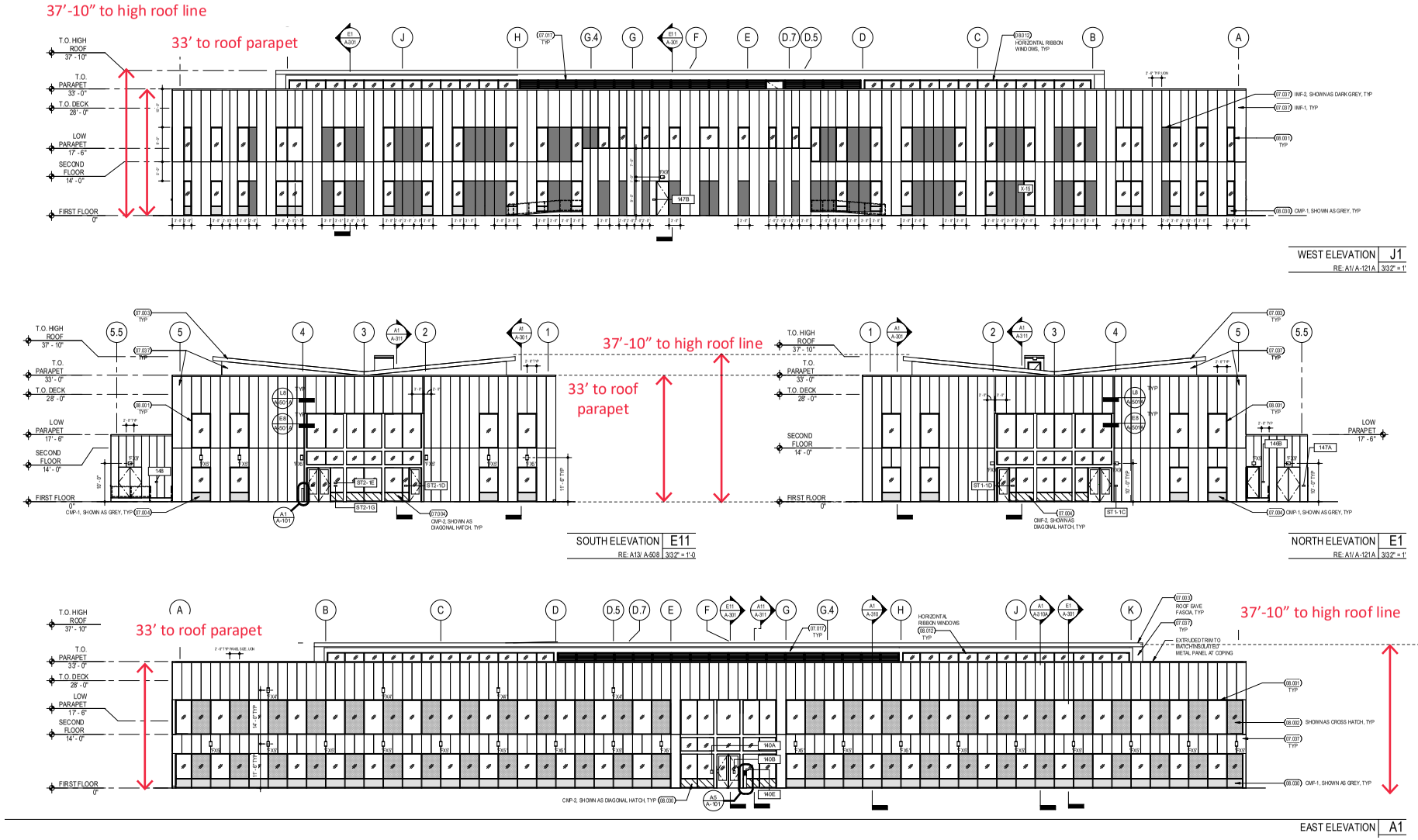


Figure 11
Project’s Consistency with Building Height Limits (50-feet)

Source: Shah Kawasaki Architects, Sheet A-201, March 2021

Light and Glare

Evening activities at the Project would include late afternoon and evening classes for the OUSD Oakland Adult and Career Education program and after-hours office use of staff workstations. The Project site and other land uses in the vicinity currently generate outdoor lighting typical for an urban area. The Project would add to the existing light sources with building, parking lot and landscape lighting. The Project proposes a wide array of outdoor lighting fixtures, including the following:

- recessed wall-mounted lighting fixtures at the building entry plaza
- exterior recessed downlights at the main entry doorway
- recessed step lights at the Poplar Street entry ramps
- exterior bollard-style lights along the walkways at the Poplar Street, Wade Johnson Park and parking lots sides of the new building
- exterior pole-mounted area lights at the entry and exits to the guest parking lot
- exterior wall-mounted floodlights along the front (easterly) façade of the new building, between the parking lot and the entry
- exterior wall-mounted downlights across the front (easterly) and side (southerly) façades of the new building
- exterior pole-mounted single-head lights and exterior pole-mounted double-head lights along the perimeter of the employee parking lot
- exterior wall-mounted area lights at the generator and trash enclosure [11]

All of these light fixtures are energy efficient LED directional lights that would minimize "light spill", and are either downcast, box-enclosed, or have hooded shields to a point below the light bulb and reflector to prevent unnecessary up lighting and glare onto adjacent properties. Increases in light at the closest residential and commercial uses would be consistent with the existing urban setting and the overall effect of the exterior lighting of the building and parking areas would not be substantially different from the current levels of night lighting from the existing Cole building and its parking areas. Potential impacts related to light and glare would be less than significant.

[11] Shah Kawasaki Architects and Interface Engineering, Luminaire Schedule, Sheet E-002 of Central Administration Center at Cole Campus submittal to State Architects, March 2021

Agriculture and Forestry Resources

Would the Project:	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	❒	❒	❒	■
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	❒	❒	❒	■
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production(as defined by Government Code section 51104(g))?	❒	❒	❒	■
d) Result in the loss of forestland or conversion of forestland to non-forest use?	❒	❒	❒	■
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?	❒	❒	❒	■

Agricultural and Forestry Resources

The Project site is located in a developed, urban area and is not identified as being prime farmland, unique farmland, or farmland of statewide or local importance pursuant to the Farmland Mapping and Monitoring Program of the California Resource Agency, and is not under a Williamson Act contract.[12] The Project site does not contain forestland or timber resources, nor is it zoned for forestland or for timber production. The Project site has a General Plan designation of Urban Residential, and adjacent properties are similarly designated. There are no agricultural or forestry uses existing in the immediate area. The proposed Project would not conflict with agricultural or forestland zoning or with Williamson Act contracts. No impact would occur.

[12] California Department of Conservation. Website accessed January 3, 2020 at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2014/ala14.pdf

Air Quality

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. a) Conflict with or obstruct implementation of the applicable air quality plan?	❒	❒	❒	■
b) Result in a cumulatively considerable net increase of any construction-period criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	❒	■	❒	❒
c) Result in a cumulatively considerable net increase of any operational-period criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	❒	❒	■	❒
c) Expose sensitive receptors to substantial pollutant concentrations?	❒	■	❒	❒
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	❒	❒	❒	■

Conflict with Air Quality Plan

The Project site is subject to the Bay Area Clean Air Plan, last adopted by the Bay Area Air Quality Management District (BAAQMD) in 2017 to meet state requirements and those of the federal Clean Air Act. The plan is meant to demonstrate progress toward meeting the ozone standards, and includes other elements related to particulate matter, toxic air contaminants, and greenhouse gases.

A project is judged to conflict with or obstruct implementation of the Clean Air Plan if it is inconsistent with regional growth assumptions or hinders implementation of air pollution emissions control strategies. The land use proposed for the Project (administrative and educational uses) is consistent with regional growth assumptions, and does not include any activities that would hinder implementation of air pollution emissions control strategies of the Clean Air Plan. The Project would not conflict with or obstruct implementation of the Bay Area Clean Air Plan, and there would be no impact.

Air Quality Standards for Criteria Pollutants

Ambient air quality standards have been established by state and federal environmental agencies for specific air pollutants most pervasive in urban environments. These pollutants are referred to as criteria air pollutants because the standards established for them were developed to meet specific health and welfare criteria set forth in the enabling legislation and include ozone precursors (nitrogen oxides and reactive organic gases), carbon monoxide, and suspended particulate matter (PM_{10} and $PM_{2.5}$). The Bay Area is considered "non-attainment" for ozone and particulate matter. Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. Very few types of single projects are sufficient in size, by themselves, to result in non-attainment of ambient air quality standards. Instead, a project's individual emissions may contribute to existing cumulatively significant adverse air quality impacts. If a

project's contribution to a cumulative impact were considerable, then the project's impact on air quality would be considered significant.[13]

BAAQMD's most recent CEQA Guidelines (May 2017) include recommended thresholds of significance. These thresholds are average daily emissions of 54 pounds per day or 10 tons per year of nitrogen oxides (NO_x), reactive organic gases (ROG), and $PM_{2.5}$, and 82 pounds per day or 15 tons per year of PM_{10}. Both the daily and annual thresholds apply to operation, and only the daily thresholds apply to construction. The project's potential air quality impacts fall into two categories: short-term impacts that would occur during construction, and long-term impacts due to Project operation.

Construction-Period Criteria Pollutant Emissions

Construction activities associated with the Project would generate fugitive dust in the short-term. Construction activities may result in significant quantities of fugitive dust emissions, including PM_{10} and $PM_{2.5}$, on a temporary and intermittent basis during the construction period. Emissions from off-road vehicles and construction equipment may also contribute to criteria pollutant emissions.

The BAAQMD's 2017 CEQA Guidelines provide preliminary screening levels that provide the Lead Agency with a conservative indication of whether a proposed project would result in the generation of construction-related criteria air pollutants and/or precursors that exceed the thresholds of significance. If all of the screening criteria can be met, construction of the Project is presumed to result in a less than significant impact related to criteria air pollutant and precursor emissions. The size of the Project does meet applicable screening level size. However, the Project does include demolition, simultaneous occurrence of more than two construction phases, and substantial soil import/export. Accordingly, the screening criteria was not used, and instead the Project's construction activity was modeled using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2, to estimate Project construction emissions of ROG, NO_X, PM_{10} exhaust, and $PM_{2.5}$ exhaust (see **Appendix A**). Parameters used in modeling of the construction process include the following:

- Construction includes 27.3 thousand square feet (ksf) of government office building space, 28.6 ksf of educational space (using the closest CalEEmod-available land use type of 'Junior College'), and 93 parking spaces
- The construction schedule relies on default values of CalEEMod for the duration of construction phases, for all phases of the Project other than soil import and export. The duration of those construction phases with soil import and export rely on the following Project assumptions:
    - Phase I remediation assumes 9,160 CY of soil export, at 8 CY per haul trip. This results in a total of 1,145 haul trips, at 60 haul trips per day, or 19 days
    - Phase I grading assumes 9,160 CY of soil import, at 8 CY per haul trip. This results in a total of 1,145 haul trips, at 60 haul trips per day, or 19 days
    - Phase II remediation assumes 2,560 CY of soil export, at 8 CY per haul trip. This results in a total of 300 haul trips, at 60 haul trips per day, or 5 days
    - Phase II grading assumes 4,860 CY of soil import, at 8 CY per haul trip. This results in a total of 608 haul trips, at 60 haul trips per day, or 10 days
- The amount to soil import and export by construction phase is as described in the Project Description
- The amount of demolition by construction phase is as described in the Project Description

[13] BAAQMD, *California Environmental Quality Act Air Quality Guidelines*, May 2017

- Haul trip lengths rely on CalEEMod default values of 20 miles per haul trip, except those haul trips exporting contaminated soil. The length of those haul trips was assumed at 200 miles to the nearest licensed landfill
- The types of off-road construction equipment used during each phase of construction is based on CalEEMod default values
- All other input to the construction modeling for criteria pollutant emissions relies on CalEEMod default values

Based on these input parameters, the results of the CalEEMod modeling of construction-period emissions of criteria pollutants is as summarized in **Table 1**. Based on the default values of CalEEMod and the Project-specific assumptions related to soil export and import, the construction period for the Project is assumed to take 12 months to complete.[14] Therefore, the construction-period emissions of criteria pollutants is as summarized in Table 1 represent an annual emissions rate.

According to BAQMD CEQA Guidelines (May 2017), the threshold values for construction-period emissions are an annual average daily emission of 54 lbs. /day for ROG, NOx and PM 2.5, and 82 lbs./day for PM10. To obtain the Project's annual average daily emission, the total annual emission (in tons) as multiplied by 2,000 lbs. per ton, and then divided by 260 construction days per year.

[14] Per the District's general contractor, the actual construction period is estimated to be approximately 15 months. The shortened construction period as calculated by the CalEEMod default assumptions produces as shorter construction period estimate on 12 months. This shorter construction period as estimated by CalEEMod results in the same quantity of criteria pollutants emitted during the construction period, but within a more condensed period. This CalEEmod approach is more conservative (i.e., a worst-case scenario), as it results in greater concentrations of emissions than likely will occur.

Table 1: Construction-Period Criteria Pollutant Emissions				
Emission Sources:	**ROG**	**NOx**	**PM10 (Total)**	**PM2.5 (Total)**
Demolition Phase I (on-site)	0.0169	0.1662	0.0115	0.0078
(off-site)	0.0004	0.0027	0.0013	0.0003
Remediation Phase I (on-site)	0.0131	0.1488	0.0062	0.0052
(off-site)	0.0213	0.8627	0.1063	0.0084
Grading Phase I	0.0146	0.1613	0.0656	0.0065
(off-site)	0.0029	0.0959	0.0113	0.0009
Bldg. Construction (on-site)	0.1966	1.5545	0.0725	0.0696
(off-site)	0.0133	0.0892	0.0430	0.0123
Demolition Phase II (on-site)	0.0147	0.1432	0.0284	0.0096
(off-site)	0.0006	0.0134	0.0028	0.0009
Remediation Phase II (on-site)	0.0033	0.0362	0.0167	0.0097
(off-site)	0.0019	0.1847	0.0291	0.0092
Grading Phase II	0.0067	0.0723	0.0339	0.0194
(off-site)	0.0008	0.0400	0.0059	0.0019
Paving (on-site)	0.0055	0.0431	0.0022	0.0194
Off-site	0.0002	0.0001	0.0006	0.0002
Architectural Coating (on-site)	0.3002	0.0065	0.0004	0.0004
Off-site	0.0001	0.0001	0.0003	0.0001
Total construction emissions (tons)	**0.6131**	**3.6209**	**0.4379**	**0.2434**
Total construction emissions (lbs.)	1,226	7,242	876	487
Average daily emissions (pounds/day)[1]	4.72 lbs./day	27.85 lbs./day	3.73 lbs./day	1.87 lbs./day
Thresholds (pounds per day)	54 lbs./day	54 lbs./day	82 lbs./day	54 lbs./day
Exceed Threshold?	**No**	**No**	**No**	**No**

[1] Assumes 260 workdays within a 1 calendar-year period

Source: Lamphier-Gregory 2022, CalEEMod results included in Attachment X

As shown in the table above, the modeled construction-period emissions for the Project indicate that the Project's construction-period emissions would not exceed the significance thresholds, and construction-period emissions of criteria pollutants would be less than significant.

Mitigation Measures and Regulatory Requirements

For all projects, BAAQMD recommends the implementation of all Basic Construction Mitigation Measures, whether or not construction-related emissions exceed applicable thresholds of significance. Whereas these recommendations are not regulatory, they are listed below as mitigation measures.

Mitigation Measure Air-1, Basic Construction Mitigation:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Because the Project includes demolition, simultaneous occurrence of more than two construction phases, and substantial soil import/export, the following additional construction mitigation measures are recommended to address the Project's contribution to local cumulative air quality:

Mitigation Measure Air-2, Additional Construction Mitigation Measures:

1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
2. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
3. Windbreaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Windbreaks should have at maximum 50 percent air porosity.
4. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
5. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
6. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
7. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.
8. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
9. Minimizing the idling time of diesel powered construction equipment to two minutes.
10. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOX reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels,

engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.

11. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).

12. Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM.

13. Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy-duty diesel engines.

Regulatory Requirement Air-3, Asbestos in Structures: The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM). These include but are not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health and Safety Code sections 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended.

Resulting Level of Significance

Implementation of these regulatory requirements, Air District recommendation, and mitigation measures would reduce construction-period criteria pollutant impacts to levels of less than significant.

Operational Emissions

Operational air emissions from the Project would be generated primarily from automobiles driven by future administrative staff, faculty and students, as well as indirect emissions (i.e., energy used for heating and cooling), as well as other on-site area source emissions.

The BAAQMD's 2017 CEQA Guidelines provide preliminary screening levels that provide the Lead Agency with a conservative indication of whether a proposed project would result in the generation of operations-related criteria air pollutants and/or precursors that exceed the thresholds of significance. If a project meets applicable screening size criteria, operation of that project is presumed to result in a less than-significant impact pertaining to criteria air pollutant and ozone precursor emissions. The applicable screening sizes are 277,000 square feet for government office use, and 152,000 square feet for a junior college (the land use type closest to that proposed for the Project). As shown in **Table 2**, the Project does not exceed either of these screening sizes, and does not exceed 100% of the combined portions of these screening sizes. The Project is presumed to have a less than significant effect related to operational emissions of criterial pollutants.

Table 2: Comparison to Operational Screening Size Criteria

	Government Office	Education (Junior College)	Total
Screening Size	277,000	152,000	
Project	28,826	27,350	
% Screening Size	11%	18%	29%

To verify the less than significant conclusion based on screening size, the CalEEMod emissions model was used to calculate the Project's likely operational emissions of ROG, NOX, PM10 and PM2.5 emissions (see **Table 3**).

Table 3: Operational Criteria Pollutant Emissions				
Non-Mitigated Scenario	**ROG**	**NO_x**	**PM_{10}**	**$PM_{2.5}$**
Area Source Emission	0.2508	0.0001	-	-
Energy Emissions	0.0080	0.0731	0.0056	0.0056
Mobile Source Emissions	0.3569	0.4343	0.7191	0.1955
Waste (Indirect Emissions)	-	-	-	-
Water (Indirect Emissions)	-	-	-	-
Project Operational Emissions (*tons/year*)	**0.6157**	**0.5074**	**0.7246**	**0.2011**
Thresholds (tons /year)	10 tons	10 tons	15 tons	10 tons
Exceed Threshold?	**No**	**No**	**No**	**No**
Project Annual Average Daily Operational Emissions (*lbs/day*)[1]	4.74 lbs.	3.90 lbs.	5.57 lbs.	1.57 lbs.
Thresholds (pounds/day)	*54* lbs.	*54* lbs.	*82* lbs.	*54* lbs.
Exceed Threshold?	**No**	**No**	**No**	**No**

Notes: 1. Assumes 260 days per year of operations

Source: Lamphier-Gregory 2020, CalEEMod results included in Attachment X

As shown in Table 3, CalEEMod results (which do not rely on any assumed mitigation measures incorporated into the Project) indicate that the Project's operational emissions would not exceed the significance thresholds for any of the identified criteria pollutants. Therefore, the Project's impact related to operational criteria pollutant emissions would be less than significant.

Exposure of Sensitive Receptors to Substantial Pollutant Concentrations, Construction-Period

As reported in the West Oakland Specific Plan EIR, the California Air Resources Board's West Oakland Health Risk Assessment includes findings that ambient diesel PM concentrations in West Oakland are estimated to be nearly three times the background concentrations averaged over the entire Bay Area. Other reports indicate that the air inside of homes in West Oakland has black soot at nearly 5 times the concentration levels of other Oakland homes. West Oakland residents are 5 times more likely to be hospitalized for asthma, and children in West Oakland are 7 times more likely to be hospitalized for asthma as compared to the average California resident. Heavy-duty trucks on the roadways within West Oakland and on the freeways surrounding West Oakland are the largest contributors of diesel PM. Under the BAAQMD's Community Air Risk Evaluation (CARE) program, West Oakland has been identified as an area with high TAC emissions and sensitive populations affected by these emissions.[15]

Construction activities associated with the Project would generate construction-related TAC emissions, specifically diesel particulate matter (DPM, as both PM10 and PM2.5) from on-road haul trucks and off-road equipment exhaust emissions. These emissions would contribute to ambient air quality emissions from nearby freeways, industrial sites, and the Port, potentially contributing to cumulative cancer risks and non-cancer health concerns at nearby sensitive receptors. The nearest sensitive receptors are those residences adjacent to the Project site along Union Street and Poplar Street.

[15] City of Oakland, *West Oakland Specific Plan Final EIR*, May 2014, page 4-16

The generation of TAC emissions during Project construction would be temporary.[16] There will be an even shorter amount of time when diesel-powered construction equipment will be within an influential distance, and that would result in the exposure of sensitive receptors to substantial concentrations of construction-period TAC. For the most part, the Project would use standard construction equipment such as loaders, backhoes and haul trucks, similar to operations at other construction sites in Oakland. However, the export of contaminated soil and import of new clean fill will result in concentrated periods of one to three weeks at a time when these types of diesel-powered construction equipment will be in all-day operations, potentially generating periodic concentrations of diesel emissions.

Mitigation Measures

Given that the West Oakland community is at high risk for adverse health risks attributable to cumulative air quality conditions, and to address the Project's contributions to these ambient diesel PM concentrations, the following mitigation measure is recommended to substantially reduce the Project's contribution of toxic air contaminants during the construction period.

Mitigation Measure Air-4, Diesel Particulate Matter Controls: The District shall ensure that all off-road diesel equipment used during the construction period, and all haul trucks used for soil export and import for the Project, are equipped with the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type, as certified by CARB. Methods to comply with this standard include, but are not limited to, new clean diesel trucks (Tier 4 engines automatically meet this requirement), higher-tier diesel engine trucks with added Particulate Matter (PM) filters, hybrid trucks, alternative energy trucks, or other methods that achieve the applicable CARB emission standard. This equipment must be properly maintained and tuned in accordance with manufacturer specifications, and verified through an equipment inventory submittal and Certification Statement.

Resulting Level of Significance

The Tier 4 engine standards have been found to reduce emissions of PM and NOx (including small PM emissions of DPM) by approximately 90%, as compared to Tier 2 and Tier 3 engines without such controls. These emission reductions can be achieved through use of advanced control technologies, including advanced exhaust gas after-treatment methods. With a 90% reduction in construction-period emissions of DMP, the Project's emissions of toxic air contaminants would be reduced to levels of less than significant, and its contribution of toxic air contaminants would be a less than cumulatively considerable contribution to overall cumulative air quality.

Exposure of Sensitive Receptors to Substantial Pollutant Concentrations, Operations Emissions

The Project would not include any regular operational activities that have the potential to generate substantial amounts of toxic air emissions. The Project's office and classroom spaces are not sources of toxic chemicals or emissions. The Project does include an emergency generator, which would provide the building (especially the elevator) with power supply in the event of a power outage. This emergency generator would only be used in the event of an emergency. It would not operate on a continuous basis.

Regulatory Requirements

Regulatory Requirement Air-5, Emergency Generator – TBACT: The Project's proposed diesel-powered emergency generator will be subject to CARB's Stationary Diesel Airborne Toxics Control Measure

[16] All construction is expected to be completed within 15 months - see prior footnote #14 explaining the difference between CalEEmod-estimated construction schedule and estimated construction schedule per the District's general contractor.

(ATCM), and will require permits from the BAAQMD. As part of the BAAQMD permit requirements, the engine emissions will have to meet Best Available Control Technology for Toxics (TBACT).

Sources of air pollutant emissions complying with all applicable BAAQMD regulations are generally not considered to have a significant air quality or community health risk impact.

Odor Emissions

Operation of the Project would not result in odor emissions that would adversely affect a substantial number of people. During construction, diesel-powered vehicles and equipment would create odors that some may find objectionable. However, these odors would be temporary and not likely to be noticeable much beyond the Project site's boundaries. The Project's impact related to odor emissions would be less than significant.

Biological Resources

Would the Project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	❒	❒	■	❒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	❒	❒	❒	■
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	❒	❒	❒	■
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	❒	■	❒	❒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	❒	■	❒	❒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	❒	❒	❒	■

Special Status Species

According to the West Oakland Specific Plan EIR, wildlife use within West Oakland is expected to be relatively low due to the absence of natural habitat, the proximity of streets and development, and the lack of protective cover. Special-status species are not expected to occur within the West Oakland Planning Area because of a lack of suitable habitat, the smaller size and fragmented nature of remaining habitat, prior disturbance, and the current level of human activity. According to the Open Space, Conservation and Recreation Element of the City of Oakland General Plan, there are no special-status species known to occur within West Oakland. [17]

The Project site is located in an urban area that is fully developed. The site contains existing buildings and paved surface parking lots. On-site vegetation consists of shrubs and mature trees along the eastern perimeter of the site, and small grass-covered areas adjacent to boundary sidewalks. The potential for the Project to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species is less than significant.

[17] City of Oakland, *West Oakland Specific Plan Draft EIR*, May 2014, page 4.12-2

Riparian Habitat and Wetlands

There are no riparian habitats, wetlands or other sensitive natural communities on the Project site or in the vicinity. The Project site is entirely covered with buildings and with paved surface parking lots. The adjacent Wade Johnson Park is an urban park with no riparian habitats, wetlands or other sensitive natural communities present.

Wildlife Corridors and Nesting Sites

The Project would not substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. However, future demolition and construction activities associated with the Project could temporarily reduce nesting opportunities for resident and migratory bird species protected by the federal Migratory Bird Treaty Act or California Fish and Game Code Sections 3503, 3503.5, and 3800. Demolition and construction could also eliminate bat roosts and, if construction were to occur during the maternal roosting season, young bats incapable of flight could be destroyed. The California Fish and Game Code prohibit the "take, possession, or destruction of birds, their nests or eggs". Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered a "take", and such a take would violate the Migratory Bird Treaty Act. Passerines (songbirds) and non-passerine land birds are protected under the federal Migratory Bird Treaty Act.

Mitigation Measures

The following mitigation measure is recommended for the Project to avoid adverse effects on nesting birds

Mitigation Measure Biology-1: Protect Nesting Birds. During construction of the Project, the removal of any trees and demolition of the existing buildings shall occur between September 1 and January 31. Tree removal and building demolition should be avoided from February 1 to August 31, which is the typical migratory bird's nesting period in this part of California. If no vegetation removal or building demolition is proposed during the nesting period, then no surveys are required.

1. If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work.
2. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based largely on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.

Resulting Level of Significance

With implementation of mitigation measure Biology-1, which requires a nesting survey close to initiation of construction activities, the Project's impacts on nesting birds would be reduced to a level of less than significant.

Conflict with Local Policies Protecting Biological Resources (Tree Ordinance)

There are seven street trees that are located on the Project site's frontage along Union Street, all of which appear to be big-leaf maples. The Project proposes to retain the two trees nearest to 10th Street and the one tree nearest to Wade Johnson Park, but to remove the four trees in the center of the block to accommodate new construction (see **Figure 12**).

Regulatory Requirements

The City's Tree Protection Ordinance (OMC Chapter 12.36) provides that, "it is in the interest of the public health, safety and welfare of the Oakland community to: 1) protect and preserve trees by regulating their removal; 2) prevent unnecessary tree loss and minimize environmental damage from improper tree removal; 3) encourage appropriate tree replacement plantings; 4) effectively enforce tree preservation regulations; and 5) promote the appreciation and understanding of trees". Accordingly, the Project will be subject to the following provisions of the OMC:

Regulatory Requirement Biology-1, Compliance with Tree Protection Ordinance: The Project will be required to obtain a tree permit from the City of Oakland for the removal of four trees from the Project's frontage along Union Street, and to abide by the conditions of that permit. Standard conditions that apply to the City's tree permit include the following:

1. Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist
2. Replacement tree plantings shall be required for tree removals for the purposes of erosion control, groundwater replenishment, visual screening, wildlife habitat, and preventing excessive loss of shade
3. No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered.

The Big Leaf maple (acer macrophyllum) is native to western North America, mostly near the Pacific coast, from southernmost Alaska south to southern California. Therefore, pursuant to the City's Tree Ordinance, replacement plantings for removal of these native trees would be required. The Project proposes to plant as many as 57 new trees as part of its landscape plans, including 9 Trident maples (acer buergerianum) and 2 Japanese maples (acer palmatum), more than fulfilling the City Tree Ordinance requirements for tree replacement plantings. Accordingly, the Project would not conflict with the local City of Oakland Tree Preservation Ordinance or policy, and this impact would be less than significant.

Conflict with Habitat Conservation Plans

There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans or other approved local, regional or state habitat conservation plans that are applicable to the site or the surrounding area. Therefore, the Project would not conflict with any such habitat conservation plans and no impact would occur.

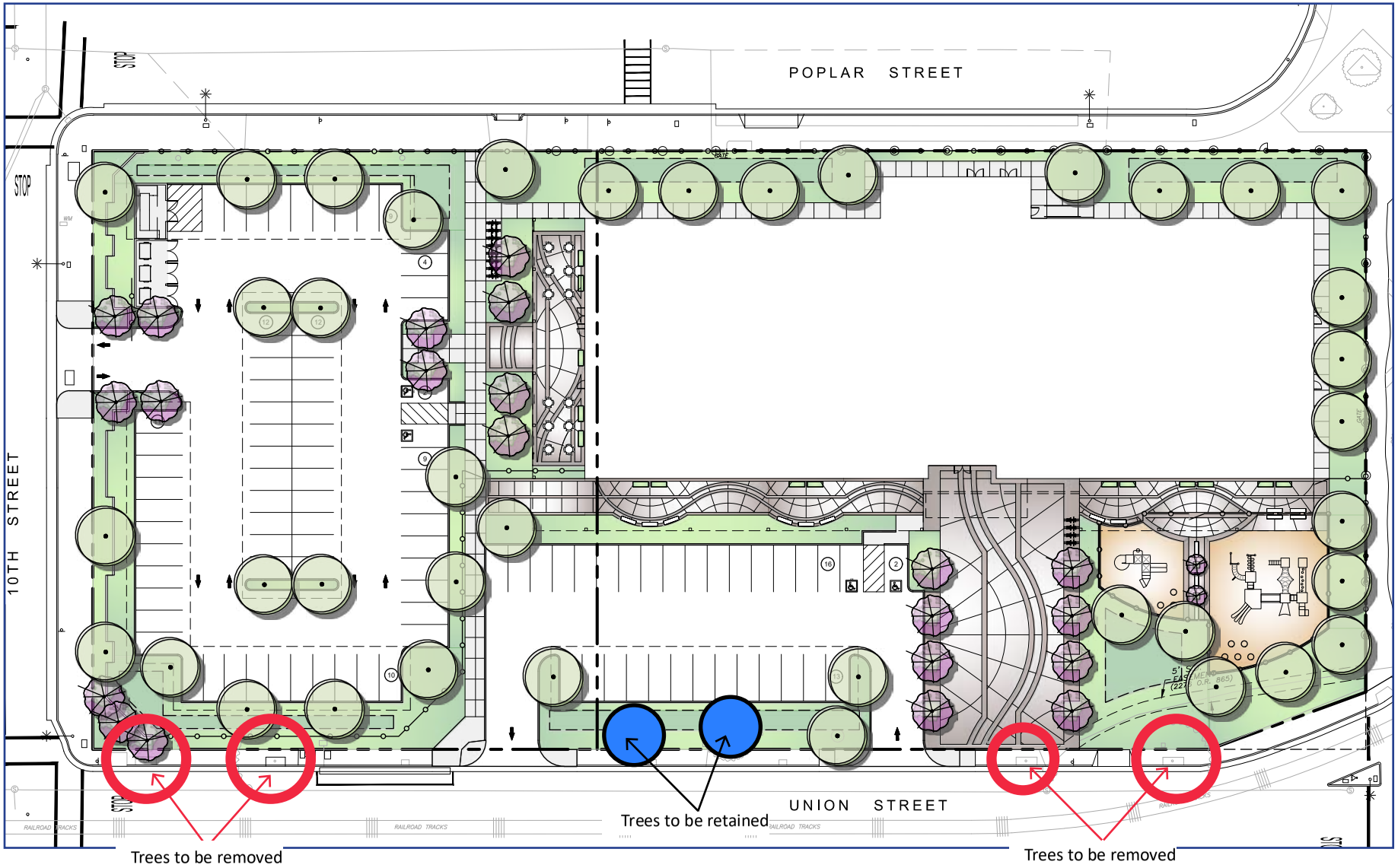


Figure 12
Proposed Tree Removal

Source: Shah Kawasaki Architects, 1/27/2022

Cultural Resources

Would the Project:	Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Public Resources Code Section 15064.5?	❒	❒	■	❒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Public Resources Code Section 15064.5?	❒	❒	■	❒
c) Disturb any human remains, including those interred outside of formal cemeteries?	❒	❒	■	❒

Historical Resources

Information for this section of the Initial Study has been derived from the following primary source:

- Page & Turnbull, *Cole Middle School 1011 Union Street, Historic Resource Evaluation (HRE)*, December 23, 2019 (**Appendix B**)

The 2019 HRE evaluated the two educational buildings that were situated within the property: the existing classroom building (Cole School) originally constructed in 1925 and renovated 1936; and the now-removed cafeteria building constructed in 1949. The HRE did not address the former ancillary building at the northeast corner of the site, which was a modular structure built in 2011 and also now removed. The HRA was prepared based on research collected at various local repositories including the Alameda County Office of the Clerk-Recorder, the City of Oakland Building Department and Oakland Public Library History Room, as well as various online sources including California Digital Newspaper Collection, Newspapers.com, and the David Rumsey Map Collection. Key primary sources consulted and cited in this report include Sanborn Map Company fire insurance maps, historic newspapers, building permit applications, city directories, and historic building plans provided by OUSD. In October 2019, a site visit was conducted, complete with architectural photography and field notes.

Historic Setting

The existing Cole School stands on a site that was acquired by the City of Oakland's Board of Education in 1875. Between 1877 and 1880, the original Cole Grammar School Building was built at the site. The original school was a two-story, Gothic Revival style building with a hipped roof and tall narrow windows. The school was named in honor of Rector E. Cole, a prominent dentist and City Council member who was, at the time of the school's founding, president of the Oakland Board of Education. The Cole Grammar School educated numerous children, perhaps most notably the famed author, Jack London. In late December 1923, the original Cole Grammar School building was destroyed by arson.

Between 1924 and 1925, the first iteration of the existing Cole School building was designed and constructed. The cornerstone for the Cole School building that currently stands at the property was laid in May 1925. This first iteration of the existing Cole Building was a Late Gothic Revival design, with a brick exterior and cast cement exterior ornamentation, across a U-shaped plan. However, in March of 1926 the nearly complete building was rejected by the Superintendent of Buildings and Grounds for failure to comply with material specifications.

In 1936, the school was renovated with its current Moderne style exterior.[18] Plans for this renovation were prepared under the supervision of architect and engineering consultant William G. Corlett. Exterior brick and cast concrete ornamentation and window mullions were removed and replaced with cement plaster exterior surfaces and wood, respectively.

In 1949, the Cafeteria building was designed by Oakland-based architect, Edward O. Blodgett. The one-story, hybrid reinforced concrete and wood-frame building was described as a new "wing" to the Cole School when it was dedicated in March of 1950. The Cafeteria building was also designed to house the school's music program, and had one additional classroom and an overall capacity for 214 students.

In 1973, the Cole School was closed for renovation, and it appears to have remained closed until 1975. During this time, the exterior staircases and elevator at the rear wings of the building were constructed. By 1980, 12th Street was closed between Union and Poplar Streets, and replaced with green space. The Cole School converted from its original use as an elementary school to that of a middle school in 1980, and continued to operate as such until 2009, when it was closed as a school. The building began its last use housing administrative offices for OUSD and the OUSD Police Unit.

Historic Status

The following section examines the national, state and local historical ratings currently assigned to the property at 1011 Union Street.

- 1011 Union Street is not currently listed in the National Register of Historic Places.
- 1011 Union Street is not currently listed in the California Register of Historical Resources.
- Cole School is listed in the California Historic Resources Information System (CHRIS) database with a Status Code of 6Z (found ineligible for National Register, California Register or Local designation through survey evaluation). The 6Z status relates to a survey and evaluation undertaken in 1990. The most recent update to the CHRIS database for Alameda County that lists this status codes was in 2011.
- 1011 Union Street was documented by the Oakland Cultural Heritage Survey (OCHS) in 1990, and was assigned an OCHS rating of "C3". This rating indicates the property is of secondary importance (representative architecture example) and is not located within a historic district. 1011 Union Street is not a City of Oakland Landmark and is not currently listed in the Local Register.

Historic Re-Evaluation

The HRE assessed the Cole School classroom building and the cafeteria at the Cole Middle School campus (1011 Union Street) to determine if these building may qualify as eligible historic resources for purposes of review under CEQA. Using the City of Oakland criteria, an historical resource under CEQA is defined as a resource that meets any of the following criteria:

- A resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR)

[18] The Moderne style, also referred to as Art Moderne and Streamline Moderne, is a late Art Deco architecture style that appeared in commercial buildings, public buildings, theaters, gas stations, and residential buildings between 1930 and 1950. It emerged in Germany in the work of the New Objectivity artists and in the buildings by architects involved in the German Werkbund, led by Hermann Muthesius. Taking cues from the Werkbund, American designers were similarly interested to strip Art Deco of its excessive ornamentation and focus on its streamlined aesthetic, especially during the Great Depression in the 1930s.

- A resource that meets the criteria for listing on the CRHR
- A resource included in Oakland's Local Register of historical resources, unless the preponderance of evidence demonstrates that it is not historically or culturally significant
- A resource identified as significant (e.g., rated 1-5) in a historical resource survey recorded on Department of Parks and Recreation Form 523, unless the preponderance of evidence demonstrates that it is not historically or culturally significant, or
- A resource that is determined by the Oakland City Council to be historically or culturally significant, even though it does not meet the other four criteria listed above

In order for a property to be eligible for listing in the California Register, it must be found significant under one or more of the following criteria.

- *Criterion 1 (Events)*: Resources that are associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
- *Criterion 2 (Persons)*: Resources that are associated with the lives of persons important to local, California, or national history.
- *Criterion 3 (Architecture)*: Resources that embody the distinctive characteristics of a type, period, region or method of construction, or which represents the work of a master, or possess high artistic value.
- *Criterion 4 (Information Potential)*: Resources or sites that have yielded or have the potential to yield information important to the prehistory or history of the local area, California, or the nation

Criterion 1 (Events)

The Cole School property at 1011 Union Street in West Oakland does not appear to be individually eligible under Criterion 1 (Events), as the property is not associated with significant events nor does it appear to have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States. The buildings do not date to the earliest school development of the property in 1875. Rather, these buildings reflect the widespread changes in the design of educational buildings that took place in the 1930s in association with the Field Act of 1933, which resulted in reconstruction or heavy alteration of many schools throughout the State to meet updated seismic safety standards. The existing Cole School building is not known to have been the location of any singular events with significance to the history of Oakland, the State or the nation. The Cafeteria was designed and built as a secondary or supplementary building within the campus. Research did not find information to support a finding of significance under this criterion.

Criterion 2 (Persons)

1011 Union Street does not appear to be individually eligible under Criterion 2 (Persons). The original Cole Grammar School (non-extant) was named for a prominent Oakland dentist and president of the Board of Education, Rector E. Cole. Although the school's name carried on after the destruction of the original school building in 1923, the existing building and property do not bear significant association to Cole. They do not represent Cole's achievements in dentistry or as a member of the Board of Education, and were built after Cole's professional, productive life occurred. The school's notoriety as having been Jack London's elementary school is not reflected by the existing buildings and property, which were developed after London attended the Cole Grammar School.

Criterion 3 (Architecture)

1011 Union Street does not appear to be individually eligible under Criterion 3 (Architecture). The subject property was originally developed in 1879-1880 with a two-story, Gothic Revival style school building, which stood at the site and operated as the Cole Grammar School until it was destroyed by fire in 1923. In 1925, the existing building known as the Cole School was built with a Late Gothic Revival style aesthetic (**see Figure 13**), but suffered from material deficiencies.

After the passing of the Field Act of 1933, the school building was heavily renovated and restyled in the then emergent Moderne aesthetic by noted Oakland-based architect and engineer William G. Corlett, who served contemporaneously as a consulting design professional to the City's Board of Education. Corlett's association to the Cole School's alterations is notable. However, the building does not appear to be among the most important works of his career, which included other City of Oakland public school buildings and several prominent institutional buildings across the Bay Area region. The Cole School does not bear the same strength of association with Corlett's career as buildings that were designed in their entirety by Corlett. Rather, the Cole School building represents Corlett's role in redesigning a pre-existing work of architecture (see **Figure 14**).

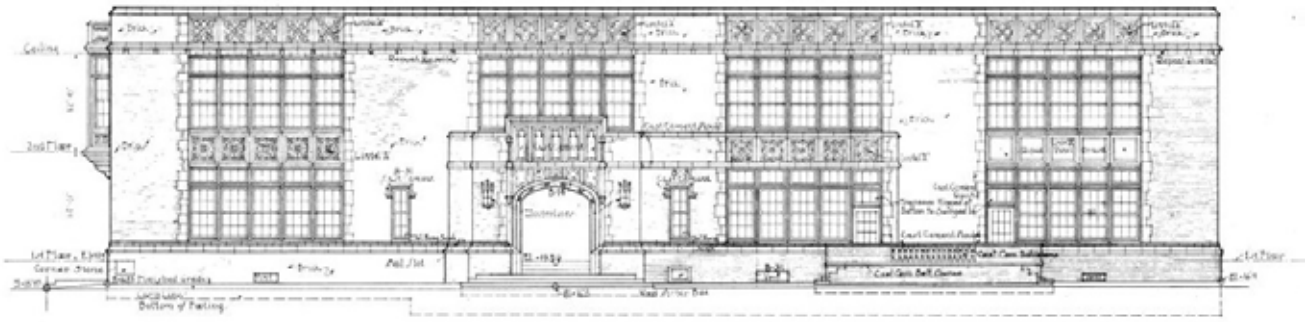
The Cole School building embodies the horizontal emphasis and massing commonly seen in Moderne style buildings ca. 1936 and features a modest exterior material palette and limited ornamentation. The building lacks the fusion of curvilinear forms across its massing, such as curved bays and corners that would enable it to stand out as a very strong local representation of the style's application to an education building. Rather, the Cole School is an application of the Moderne style to a pre-existing, formerly Late Gothic Revival school. The building's fenestration pattern largely reflects its original design, despite alterations, but does not stand out as a particularly important example of an education building designed in 1925, and renovated and restyled in 1936.

The Cafeteria building was designed in 1949 by Oakland-based architect Edward O. Blodgett, who served as draftsman and architect for the City of Oakland's Board of Education between 1934 and 1949, after having worked with William G. Corlett and Walter Reed of Reed & Corlett as a draftsman. The Cafeteria building was designed in a modest, modern form that communicated the building's use as an educational building more so than a particular architectural style. The building did not have characteristics that enabled it to stand out as an individually distinct example of an education building constructed in 1949 in Oakland.

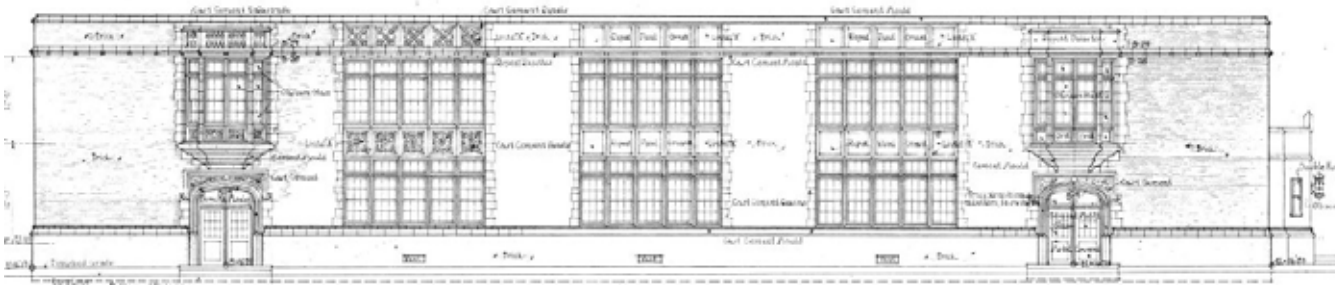
Overall, the one remaining age-eligible building within the former Cole School property, and the site as a whole, does not stand out as individually significant entities under this criterion.

Criterion 4 (Information Potential)

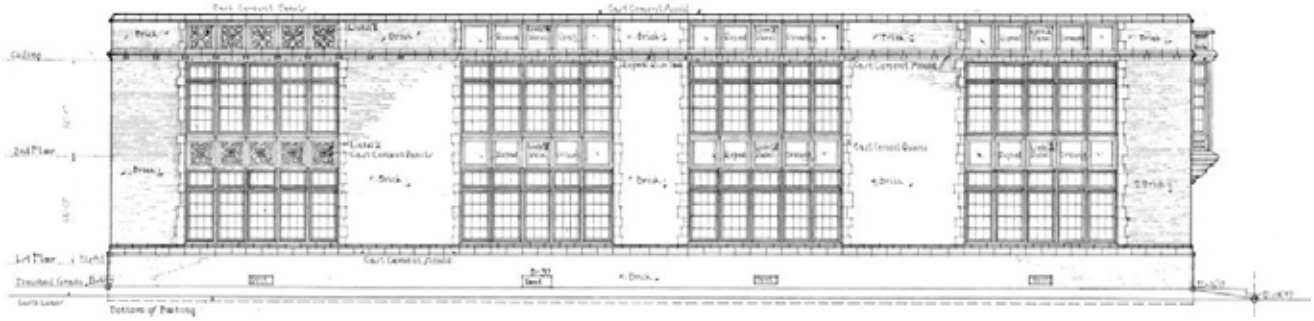
The "potential to yield information important to the prehistory or history of California" typically relates to archeological resources, rather than built resources. When California Register Criterion 4 (Information Potential) does relate to built resources, it is for cases when the building itself is the principal source of important construction-related information. The subject property does not appear to feature construction or material types, or embody engineering practices that, with additional study, would provide important information.



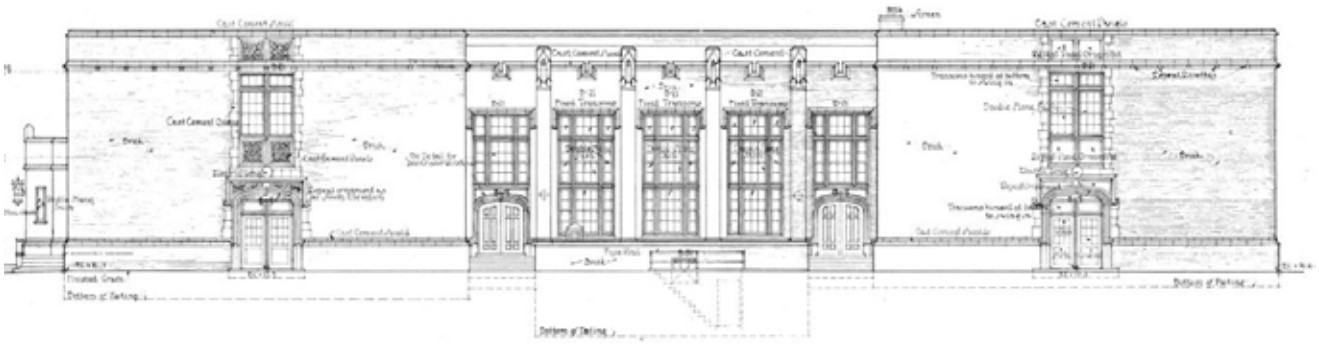
Primary (east) façade, as designed in 1925. Source: OUSD.



South façade, as designed in 1925. Source: OUSD.



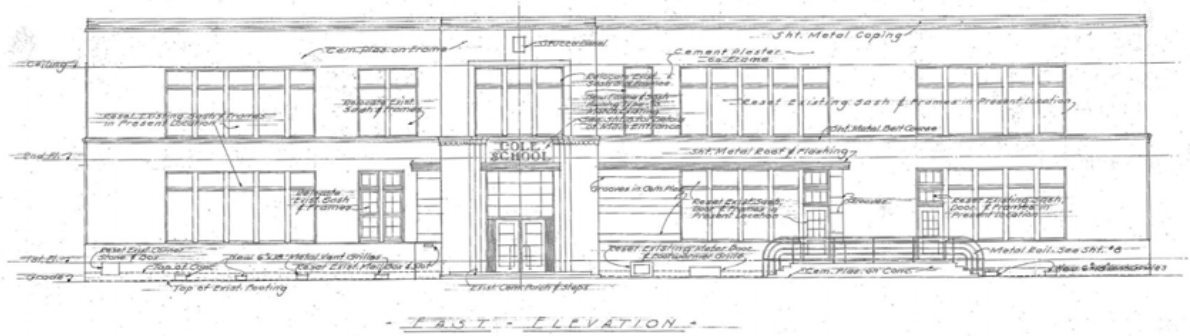
: West façade, as designed in 1925. Source: OUSD.



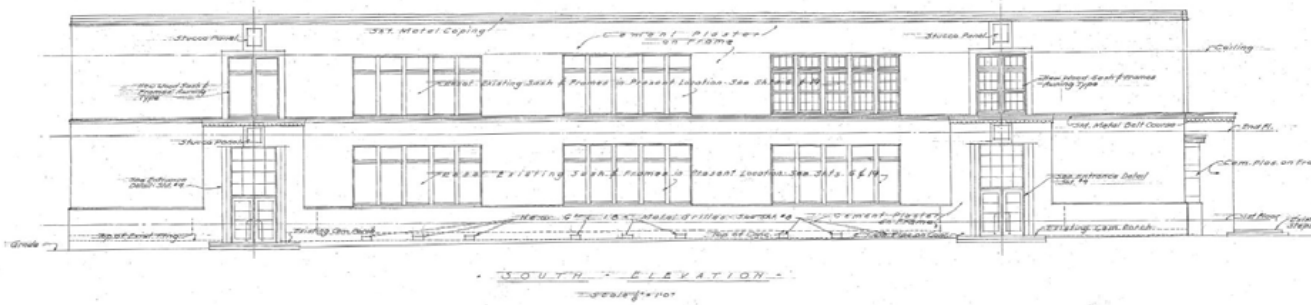
North façade, as designed in 1925. Source: OUSD.

Figure 13
Elevations of Cole School as Designed in 1925

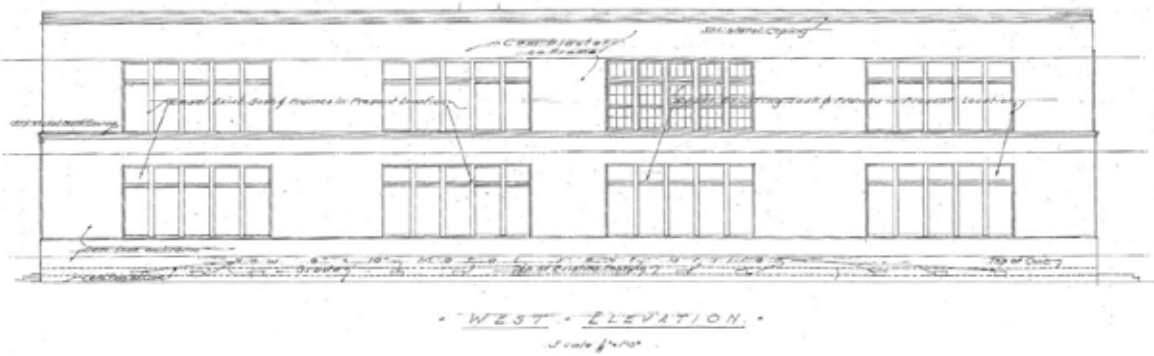
Source: Page & Turnbull, 2020



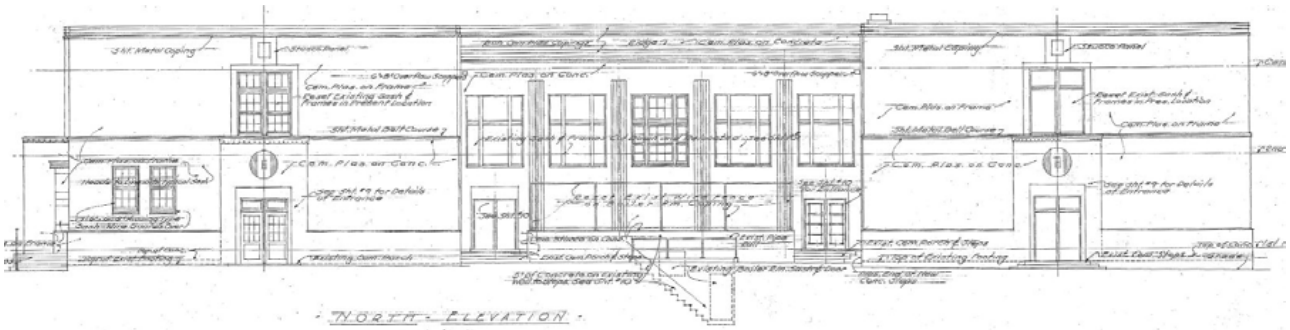
: Primary (east) façade, as designed in 1936. Source: OUSD.



: South façade, as designed in 1936. Source: OUSD.



West façade, as designed in 1936. Source: OUSD.



: North façade, as designed in 1936. Source: OUSD.

Figure 14
Elevations of Cole Facade Renovations, 1936

Source: Page & Turnbull, 2020

Potential Impacts

Neither the Cole School building or the former Cafeteria are listed in, nor do they appear to be eligible for the California Register. The subject property does not meet either of these criteria of the City of Oakland's definition of historical resources under CEQA. The Oakland General Plan Historic Preservation Element (HPE) defines the criteria for significance that must be met by a resource for it to be considered for listing in the Oakland Local Register of Historical Resources (Local Register), and would therefore be considered a historical resource under CEQA. According to the HPE and for purposes of environmental review under CEQA, those properties meeting the following criteria constitute the City of Oakland's Local Register:

- All Designated Historic Properties, including Oakland Landmarks, S-7 and S-20 Preservation Districts, and Preservation Study List properties, and
- Those Potential Designated Historic Properties (PDHPs) that have an existing rating of "A" or "B", or are located within an Area of Primary Importance

The property is not currently listed on Oakland's Local Register, and was previously assigned an individual property rating of "C3" by the OCHS in 1990. The Individual Property Rating indicated the building appeared to be of secondary importance and is not located within a historic district or Area of Primary or Secondary Importance.

The HRE evaluation finds that the OCHS rating of "C3" remains applicable to the subject property. This rating would not qualify the property for listing in Oakland's Local Register. Unless found uniquely significant to Oakland's history by City Council, preliminary review of the subject property indicates that it is unlikely to meet the requisite criteria to attain the status of historical resource under CEQA. Based on the conclusions of the Page & Turnbull HRE (see full report as Appendix B), development of the Project would not cause a substantial adverse change to an eligible historic resource, and the potential for direct or indirect impacts on historic resources would be less than significant.

Mitigation Measures

None needed

Archaeological Resources and Human Remains

Information for this section of the Initial Study has been derived from the following primary source:

- PaleoWest Archaeology, *Archaeological Desktop Review in Support of the Central Administration Center at Cole Campus Project, Alameda County, California*, March 2020 (**Appendix C**)

The Project site in urbanized Oakland has been developed and in active use as a public school since the 1870s. The site is surrounded by other urban development. The cultural resources investigation conducted for the Project included a cultural resource literature and records search conducted at the Northwest Information Center (NWIC), and a Sacred Lands File search through the Native American Heritage Commission (NAHC). The records search results indicate that no cultural resources have been previously recorded within the Project area.

The NWIC records search did identify 62 previously conducted cultural resource studies conducted within a 0.25-mile radius of the Project site, including one previous study covering the Project site. The NWIC records search identified 22 cultural resources that were discovered during these previous studies. All of the cultural resources reported within the ¼-mile buffer of the Project area (except 1), are sites of residential and commercial buildings that date from the late 19th century to the mid-20th century. The one exception is a prehistoric deposit site that was found during the construction of the Mandela Gateway project. The prehistoric deposit contained midden comprised of a dense quantity of shell, few faunal fragments and few charcoal chunks, interpreted as a likely a food-processing site

associated with an unknown nearby habitation deposit. The one previous study that did cross the Project area did not reveal any known cultural resources.

The entirety of the Project site is covered with either buildings or asphalt, and no test borings or shovel pits were conducted pursuant to the archaeological review.

Potential Impacts

Construction-related subsurface disturbance of the Project site could potentially damage or destroy previously unidentified prehistoric archaeological resources. Ground disturbing activities associated with construction activities in the Project area could also disturb previously unknown human remains, including those interred outside of formal cemeteries. The potential to uncover Native American human remains exists in locations throughout California. Although not anticipated, human remains may be discovered during site-preparation and grading activities. In the event of an inadvertent discovery of archaeological resources and/or human remains during ground-disturbing activities, such a discovery would be considered a potentially significant impact.

Mitigation Measures

To address the potential for discovery of archaeological resources or human remains during construction, and to minimize potential risks to such resources if discovered during Project construction, the following mitigation measures are recommended:

Mitigation Measure Cultural-1: Survey of the Project Area. An archaeologist should conduct a pedestrian archaeological survey of the Project area after building demolition and asphalt removal, and after soil excavation. Any newly discovered historic (over 45 years of age) or prehistoric archaeological sites identified during the survey must be recorded, as required, on appropriate Department of Parks and Recreation Primary Record (DPR 523) and associated (e.g., Building-Structure-Object) forms.

Mitigation Measure Cultural-2: Inadvertent Discoveries. If any previously unknown prehistoric resources are discovered during grading, trenching, or other on-site excavation(s), then earthwork within 25 feet of these materials shall be stopped until a qualified professional archaeologist has evaluated the potential significance of the find, and suggests appropriate steps to protect the resource.

1. According to CEQA Section 15126.4, avoidance is the preferred mitigation. Since CEQA provisions regarding the preservation of historic resources direct that adverse effects to historic resources shall be avoided, if feasible, the resource shall be protected from damaging effects through avoidance.

2. If avoidance of any previously undiscovered archaeological site is not feasible, data recovery shall be conducted in accordance with an approved Archaeological Data Recovery Plan (ADRP) to mitigate adverse effects to the significance of the site – the area of data recovery being limited to the area of adverse effect. This would fulfill CEQA requirements that the mitigation measure must be "roughly proportional" to the impacts of the project. A professional, qualified archaeologist shall conduct data recovery in compliance with CEQA Guideline Section §15064.5. Once the site has been properly tested, subject to data recovery, or preserved to the satisfaction of the professional archaeologist in compliance with CEQA Guideline §15064.5, the site can be further developed.

Mitigation Measure Cultural-3: Inadvertent Discovery of Human Remains. Section 7050.5(b) of the California Health and Safety code will be implemented in the event that human remains, or possible human remains, are located during Project-related construction excavation. Section 7050.5(b) states, "In the event of discovery or recognition of any human remains in any location other than a

dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code."

1. The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the NAHC within 24 hours. The NAHC has various powers and duties, including the appointment of a Most Likely Descendant (MLD) to the Project. The MLD, or in lieu of the MLD, the NAHC, has the responsibility to provide guidance as to the ultimate disposition of any Native American remains.

Resulting Level of Significance

With required implementation of Mitigation Measures Cultural-1 through Cultural-3, potential adverse effects on as-yet undiscovered archaeological resources or human remains would be less than significant.

Energy

Would the Project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	❒	❒	■	❒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	❒	❒	■	❒

Energy Use and Efficiency

Construction and operation of the Project would result in the consumption of fuel and energy resources for construction vehicles and equipment during construction, for vehicles accessing the site during operations, and for heating, lighting and other electrical needs during operations. The Project has been designed to meet and exceed applicable performance measures for energy efficiency as described by the Collaborative for High Performance Schools (CA-CHPS). CA-CHPS is a collaboration of California's major utilities to address energy efficiency in schools. CHPS addresses all aspects of school design, construction and operation, and is a nationally recognized evaluative tool for measuring high-performance school buildings. The CA-CHPS provides California-specific criteria for defining high performance schools, and addresses topics of integration, indoor environmental quality, energy, water, site, materials and waste management, and operations metrics.

Based on the CA-CHPS Worksheet prepared by the District for the Administrative/Education Center building at Cole (see **Appendix D**), the Project's design and operational plans achieve a total of 112 points out of a possible 250 points.[19] This point rating exceeds the CA-CHPS criteria for a CHPS Designed/Verified non-classroom building (at 83 points), and achieving all CA-CHPS pre-requisite criteria as well as all CalGreen/Title 24 measures for energy efficiency and incorporation of energy-conserving design and construction. The Project would comply with all applicable regulations and energy standards, and its use of energy would not be wasteful, inefficient, or unnecessary. The Project's impact related to energy resources would be less than significant.

[19] Shah Kawasaki Architects, CHPS Scorecard, Sheet A-005 of Central Administration Center at Cole Campus submittal to State Architects, February 19, 2021

Geology and Soils

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42)	❒	❒	■	❒
ii) Strong seismic ground shaking?	❒	■	❒	❒
iii) Seismic-related ground failure, including liquefaction?	❒	❒	■	❒
iv) Landslides?	❒	❒	❒	■
b) Result in substantial soil erosion or the loss of topsoil, creating substantial risks to life, property, or creek/waterways?	❒	■	❒	❒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	❒	❒	■	❒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	❒	❒	■	❒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	❒	❒	❒	■
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	❒	❒	■	❒

Information supporting the following section of this Initial Study has been derived from the following primary source:

- Consolidated Engineering Laboratories, "*Geotechnical Engineering and Geologic Hazards Study for the Cole Campus Central Administrative Center*", as revised September 25, 2020 (**Appendix E**)

This geotechnical and geologic report has been reviewed by the California Natural Resources Agency's Department of Conservation, California Geological Survey, and the California Geological Survey has already concluded that, "the engineering geology and seismology issues at this site are adequately assessed in the referenced report, and no further information is requested." This conclusion is documented in the California Geological Survey letter, *Second Engineering Geology and Seismology Review for Central Administrative Center at Cole Campus – New Buildings*, October 2, 2020 (**Appendix F**).

The Consolidated Engineering Laboratories' Geotechnical Engineering and Geologic Hazards Study (CEL Geology Study) for the Project includes a review of all pertinent geologic and geotechnical literature pertaining to the site. This includes publications and maps issued by the United States Geological Survey (USGS), California Geological Survey (CGS), United States Department of Agriculture (USDA), Federal Emergency Management Agency (FEMA), water agencies and other government agencies. In order to characterize the subsurface conditions beneath the proposed improvement areas, a field exploration program was conducted at the site in November 2019 and May 2020. That field exploration program consisted of a combination of five drilled test borings and four Cone Penetration Tests (CPT) to supplement two borings previously drilled at the site. Laboratory tests were performed on select samples to determine some of the physical and engineering properties of the subsurface soils. The results of the laboratory testing are also included in Appendix F.

Fault Rupture

The State of California adopted the Alquist-Priolo Earthquake Fault Zone Act of 1972 (Chapter 7.5, Division 2, Sections 2621 – 2630, California Public Resources Code), which regulates development near active faults for the purpose of preventing surface fault rupture hazards to structures for human occupancy. In accordance with the Alquist-Priolo Act, the California Geological Survey established boundary zones or "Earthquake Fault Zones", surrounding faults or fault segments judged as sufficiently active, well defined and mapped for some distance. These zones generally extend at least 500 feet on each side of a mapped or inferred trace of an active fault. Structures for human occupancy within designated Earthquake Fault Zone boundaries are not permitted unless surface fault rupture and fault creep hazards are adequately addressed in a site-specific evaluation of the development site.

The Project site is not currently within a designated Earthquake Fault Zone as defined by the State. The closest Earthquake Fault Zone is that of the Hayward Fault, which is located about four miles east of the site. The CEL Geology Study concludes that, "since the site is not within an Earthquake Fault Zone and no faults are known to be present that are within or toward the Project site, the potential for fault ground rupture and surface manifestations from fault creep is judged to be very low to nil", (i.e., less than significant).

Seismic Shaking

The Project site is located in a seismically active region dominated by major faults of the San Andreas Fault System. Major active faults include the San Andreas Fault and the Hayward Fault (located approximately 4 miles northeast of the site). Other major active faults include the Calaveras Fault (located on the order of 14 miles northeast of the site), the Concord- Green Valley Fault (located on the order of 18 miles northeast of the site), and the San Gregorio Fault (estimated to be on the order of 23 miles southwest of the site). The CEL Geology Study concludes that, "the site may experience strong to severe ground shaking from a major earthquake originating from these major Bay Area faults". This is considered a potentially significant impact.

Regulatory Requirements and Mitigation Measures

Regulatory Requirement Geology-1, California Building Code: Because the Project site is located within a seismically active region, the building design and construction must consider the effects of seismic activity in accordance with the latest (2019) edition of the California Building Code (CBC). The building design has already been reviewed by the California State Architect and the California Geologic Survey, and those agencies have determined that the engineering geology and seismology issues at this site are adequately assessed, and no further information is requested.

The CEL Geology Study concludes that the Project site is considered geologically and geo-technically suitable for the Project, provided the Study's recommendations are incorporated into the design and

implemented during construction. The CEL Geology Study provides the following recommendations, included as mitigation measures for this Initial Study, to address seismic shaking:

Mitigation Measure Geology-2, Seismic Design Parameters: According to the CEL Geology Study, the Project should be designed in accordance with local design practice to resist the lateral forces generated by ground shaking associated with a major earthquake occurring within the greater San Francisco Bay region. Based on the measured shear wave velocity at the site, CEL has estimated average shear wave velocity of 300 meter/second, and classified the site as Site Class "D". For design of the site structures in accordance with the seismic provisions of the CBC 2019 and American Society of Civil Engineers (ASCE) 7-16, the following design seismic ground motion values are recommended.

1. Mapped Spectral Response Accelerations: Short Period - 1.592 g, and 1-second Period - 0.6 g
2. Adjusted Maximum Spectral Response Accelerations: Short Period - 1.778 g, and 1-second Period - 1.650 g
3. Design Spectral Response Accelerations: Short Period - 1.185 g, and 1-second Period - 1.100 g
4. Site-Specific Peak Ground Acceleration (PGA): 0.700 g

Mitigation Measure Geology-3, Utility Penetrations at Building Perimeter: Flexible connections at building perimeters should be considered for utility lines going through perimeter foundations. This would provide flexibility during a seismic event. This could be provided by special flexible connections, pipe sleeving with appropriate waterproofing, or other methods.

Resulting Level of Significance

These seismic design parameters and recommendations have been reviewed and accepted by the California Geological Survey as appropriate for the Project, and the Project's seismic design pursuant to these parameters has been reviewed and approved by the California Division of the State Architect. With construction of the Project as recommended, designed and approved, the hazards associated with seismic shaking will be reduced to levels considered acceptable by professional geotechnical engineers and State regulations, and thus would mitigate this impact to less than significant.

Liquefaction

The Project site has been mapped as within a Seismic Hazard Zone for liquefaction based on the State of California, Official Map of the Oakland West Quadrangle, 2003. The soils encountered below the water table at the Project site include layers of dense to very dense sand that may be susceptible to liquefaction in response to strong ground shaking.

The CEL Geology Study included a detailed analysis for liquefaction settlement using software, calculations and procedures and as recommended by CGS. Based on that analysis, the CEL Geology Study finds that seismically induced settlements at the Project site due to the design earthquake may potentially range between approximately ⅓ to ¾ inch, with differential settlements across the site generally considered ½ to ⅔ the maximum estimated total seismic settlement value. These settlements were calculated to occur in discontinuous layers primarily between depth intervals of 15 to 18 feet. The CEL Geology Study assumes a 1-meter-thick liquefiable zone overlain by 5 meters of non-liquefiable materials, and finds that, "the calculated values of potential liquefaction settlement would not result in significant surface manifestation, and that significant post-seismic reduction in the bearing capacities of the existing overlying soils would not occur", (i.e., would be less than significant).

Dynamic Compaction

Dynamic compaction is a phenomenon where loose, sandy soil located above the water table densified from vibratory loading, typically from seismic shaking or vibratory equipment. The Project site is generally underlain by layers of medium dense to very dense silty to clayey sand. Based on the CEL Geology Study evaluation of the composition, measured density and strength of the soils encountered above the historic high ground-water table depth in the borings, "potential dynamic settlements for the design seismic event are anticipated to be less than 0.1 inch", (i.e., would be less than significant).

Lateral Spreading

Lateral spreading involves both vertical and lateral ground movement, resulting from liquefaction. In addition to liquefaction, a free face or slope is necessary in most cases for lateral spreading to occur. Lateral spreading can occur on relatively flat sites with slopes less than two percent under certain circumstances, and manifest itself at the ground surface in the form of cracking and settlement. Lateral spreading can occur in areas located within close proximity to an open face which are supported by underlying liquefiable soil under or close to the open face. Under a lateral spreading condition, soils which liquefy lose strength and the slope moves towards the open face. Any structures or improvements located within close proximity to the slope can also move and possibly be destabilized.

No significant free slope faces are present within the general vicinity of the Project site. In addition, no significant continuous liquefiable subsurface layers underlying the site were identified in the explorations. Therefore, the CEL Geology Study concludes that, "the potential for the occurrence of lateral spreading effects (i.e., surface cracking, settlement) significant enough to structurally impact the new buildings is very low to nil", (i.e., less than significant)

Landsliding

Landslides can occur under a variety of loading conditions, including both static and seismic, but involve sloping ground. The Project site is not within a zone of seismically induced landslide investigation. The site and immediate vicinity are relatively flat, covered by urban development, and do not exhibit landslide features as determined by the CEL Geology Study's site reconnaissance and literature review. Therefore, "the site is not considered susceptible to landsliding", (i.e., no impact).

Soil Erosion

Development of the Project would involve construction activities (e.g., grading) on an approximately 2.6-acre site, resulting in the potential for erosion and sedimentation of downstream receiving waters.

Long-term erosion at the site will be reduced by landscaping and hardscape areas, such as parking lots and walkways, designed with appropriate surface drainage facilities.

Regulatory Requirements

The CEL Geology Study states that present construction techniques and agency requirements have provisions to limit soil erosion and resultant siltation during construction. These measures will reduce the potential for soil erosion at the site during the various construction phases. Erosion control standards are set by the Regional Water Quality Control Board (RWQCB) and administered through the National Pollutant Discharge Elimination System (NPDES) permit process. The following measures and will be required of the Project pursuant to these permit regulations:

Regulatory Requirement Geology-4, Notice of Intent: The project applicant shall submit a Notice of Intent (NOI) to comply with the requirements of the Construction General Permit issued by the State Water Resources Control Board (SWRCB)

Regulatory Requirement Geology-5, Stormwater Pollution Prevention Plan: Pursuant to the Construction General Permit, the project applicant shall prepare and implement during construction a Stormwater Pollution Prevention Plan (SWPPP), including Best Management Practices (BMPs) to reduce erosion, sedimentation and water quality impacts during construction to the maximum extent practicable.

The Project will be required to comply with these regulatory and permit requirements related to erosion control, which will reduce impacts related to soil erosion to levels of less than significant.

Settlement Due to Consolidation

Consolidation is the densification of soil into a more dense arrangement from additional loading, such as new fills or foundations. Consolidation of clayey soils is usually a long-term process, whereby the water is squeezed out of the soil matrix with time. Sandy soils consolidate relatively rapidly with an introduction of a load. Consolidation of soft and loose soil layers and lenses can cause settlement of the ground surface or buildings. The CEL Geology Study concludes that, "the subsurface soils are primarily granular, so are not considered to be susceptible to long-term consolidation settlement. However, the uppermost four feet underlying the site consists of loose sands which may be susceptible to immediate compression settlement due to imposed footing loads, as well as minor settlement due to earthquake shaking."

Mitigation Measures

The CEL Geology Study finds that immediate compression settlements of near surface loose sandy soils can be controlled by limiting the magnitude of building loads, or minimized by either deepening the building foundations to bear on denser underlying soils or by reworking loose soils under footings as compacted, engineered fill. The CEL Geology Study provides the following recommendations, included as mitigation measures for this Initial Study, to address consolidation/densification of soils.

Mitigation Measure Geology-6, Project Compaction Recommendations: The Project's grading plans should follow all recommended compaction requirements as presented in Table 6 of the CEL Geology Study.

Mitigation Measure Geology-7, Building Pad Grading. To reduce potential abrupt differential settlement of the near surface soils as well as to provide uniform bearing support, the buildings should be supported by a layer of reworked, engineered fill. The fill layer should extend to at least four feet below existing ground surface. It should be constructed by a combination of over-excavating the pad below the existing grade, scarifying the over-excavation subgrade to a depth of at least eight inches, and compacting the exposed surface to the project compaction requirements, and backfilling with compacted, engineered fill to the new building pad subgrades. Therefore, the scarified fill thickness can be considered part of the required minimum four-foot engineered fill thickness. The engineered fill layer should extend at least five feet horizontally beyond the perimeter of the building footprints or as feasible if limited by nearby structures.

1. Engineered fill should be placed and compacted to final pad subgrade in accordance with the detailed recommendations presented in the CEL Geology Study.
2. Due to the granular nature of the near-surface materials, excavating the edges of the over-excavations may require that slopes be cut back, as near-vertical slopes may not stand beyond the short-term.

Mitigation Measure Geology-7, Shallow Foundations: The proposed buildings can be supported on conventional continuous perimeter and interior spread footings bearing on the recommended engineered fill layer. Footings should have a minimum width of 18 inches and founded on a minimum of 24 inches below lowest adjacent finished grade (i.e., pad subgrade for interior continuous footings, exterior compacted surface grade for exterior footings, not including loose landscape or topsoil material).

Mitigation Measure Geology-8, Grading Flatwork/Pavement Areas: Areas to receive concrete hardscape or pavements should be scarified to a minimum depth of eight inches below existing grade or final subgrade, whichever is lower. Scarified areas should be moisture conditioned and compacted. Where required, engineered fill should be placed and compacted to reach design subgrade elevation. Rubber-tired heavy equipment, such as a full water truck, should be used to proof load exposed subgrade areas where pumping is suspected. Proof loading will determine if the subgrade soil is capable of supporting construction equipment without excessive pumping or rutting.

Resulting Level of Significance

These soil compaction parameters and recommendations have been reviewed and accepted by the California Geological Survey as appropriate for the Project, and the Project's design pursuant to these parameters has been reviewed and approved by the California Division of the State Architect. With construction of the Project as recommended, designed and approved, the hazards associated with compression and settlements of near surface soils will be reduced to levels considered acceptable by professional geotechnical engineers, and thus would mitigate this impact to less than significant.

Expansive and Collapsible Soils

Collapsible soils are fine sandy and silty soils that have been laid down by the action of flowing water, usually in alluvial fan deposits. Terrace deposits and fluvial deposits can also contain collapsible soil deposits. The soil particles are usually bound together with a mineral precipitate. The loose structure is maintained in the soil until a load is imposed on the soil and water is introduced. The water breaks down the inter-particle bonds and the newly imposed loading densifies the soil.

Subsurface deposits encountered during the drilling program conducted by CEL generally consisted of moist to wet, medium dense to very dense clayey to silty sand. Visual observation of selective samples of the near-surface soils indicated the soils to be of low plasticity, and the near-surface soils are considered to be generally of very low expansion potential. In addition, the soil did not show visual evidence of collapse potential.

Mitigation Measures

The CEL Geology Study finds the potential for collapsible soils underlying the site to be low. The CEL Geology Study provides the following recommendations, included as mitigation measures for this Initial Study, to address the potential for collapsible soils:

Mitigation Measure Geology-9, Interior Floor Slabs: Surficial onsite materials appears low to non-plastic; therefore, a non-expansive fill layer is not required for the proposed building. Slab reinforcing as well as slab construction joints should be designed by the structural engineer or slab

designer to satisfy the anticipated use and loading of the slab. Slab-on-grade subgrade surfaces should be proof-rolled to provide a smooth, unyielding surface for slab support.

Mitigation Measure Geology-10, Positive Drainage: Final grading should be designed to provide drainage away from structures and the top of slopes.

1. Soil areas within 10 feet of proposed structures should slope at a minimum of 5% away from the buildings.
2. Adjacent concrete hardscape should slope a minimum 2% away from the buildings.
3. Roof leaders and downspouts should not discharge into landscape areas adjacent to buildings, and should discharge onto paved surfaces sloping away from the structures or into a closed pipe system channeled away from the structure to an approved collector or outfall.

Mitigation Measure Geology-11, Vapor Barrier: A vapor retarder or barrier should be placed directly under the slab. A sand layer is not required over the vapor retarder from a geotechnical standpoint. During construction, all penetrations (e.g., pipes and conduits,) overlap seams, and punctures should be completely sealed using a waterproof tape or mastic applied in accordance with the vapor retarder manufacturer's specifications. The vapor retarder or barrier should extend to the perimeter cutoff beam or footing.

Resulting Level of Significance

These soil compaction parameters and recommendations have been reviewed and accepted by the California Geological Survey as appropriate for the Project, and the Project's design pursuant to these parameters has been reviewed and approved by the California Division of the State Architect. With construction of the Project as recommended, designed and approved, the hazards associated with expansive and/or collapsible soils will be reduced to levels considered acceptable by professional geotechnical engineers, and thus would mitigate this impact to less than significant.

Other Geologic Hazards - Naturally Occurring Asbestos

No sources of naturally occurring asbestos have been mapped near the site and therefore the potential for naturally occurring asbestos to impact the site is very low. The Project would have no impact related to naturally occurring asbestos.

Alternative Waste Water Disposal

The soils in relation to septic systems are not of concern for this Project because the Project would include connection to City sewer systems for wastewater disposal and would not include use of a septic system. ***No impact*** would occur.

Paleontological Resources

The Project site is in urbanized Oakland and is surrounded by urban development. Paleontological resources are not anticipated at or near the surface within the Project site due to historic development. However, construction-related subsurface disturbance of the Project site could expose and potentially damage previously unidentified paleontological resources.

Mitigation Measures

The following mitigation measures as listed in the Cultural Resources section of this Initial Study would serve to address the unlikely discovery of paleontological resources during construction:

Mitigation Measure Cultural-1: Survey of the Project Area (see details above)

Mitigation Measure Cultural-2: Inadvertent Discoveries (see details above)

Resulting Level of Significance

Pursuant to these mitigation measures, any excavations within 50 feet of a paleontological discovery would be temporarily halted or diverted until the discovery is examined by a qualified paleontologist, documented and evaluated for significance, and procedures established to consider avoidance of the resource or preparation of an excavation plan if avoidance is unfeasible. In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant. With required implementation of these mitigation measures, potential adverse effects on paleontological resources would be less than significant.

Greenhouse Gas Emissions

Would the Project:		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	❒	❒	■	❒
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	❒	❒	■	❒

Greenhouse Gas Emissions

Construction and operation of the Project would contribute additional sources of greenhouse gas (GHG) emissions, primarily through fuel consumption for transportation and energy uses on an ongoing basis. The Project is not anticipated to include stationary sources of GHGs that would generate emissions approaching the stationary source threshold of 10,000 $MTCO_2e$ per year. Any new stationary sources (e.g., emergency generator for the on-site elevator) will be subject to BAAQMD's requirement for New Source Review, and BAAQMD may impose conditions that would lead to GHG emission reductions from any new stationary sources that may be proposed.

The threshold of significance used in this Initial Study is based on BAAQMD CEQA Guidelines as recommended by the Air District for use by lead agencies. These thresholds consider a project to exceed the GHG threshold of significance if the project's emissions exceed 1,100 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year, and/or exceed the efficiency threshold of 4.6 $MTCO_2e$ per service population per year.[20]

The CalEEMod emissions calculator was used to estimate the GHG emissions of the Project (see **Table 4**). Model inputs shown in this Table rely on conservative default assumptions built into the emission calculator, and do not rely on the additional mitigation measures that are included in the Project's design. The results of these default inputs for the Project are shown in the CalEEMod calculations for the Project (see Appendix A), and summarized below.

[20] BAAQMD, May 2017. The Air District is currently updating its existing thresholds of significance. The Draft Thresholds of Significance Justification Report: CEQA Thresholds for Evaluating Climate Impacts from Land-Use Projects and Plans was available for review during a 30-day public comment period from February 16 to March 18, 2022. The updated CEQA Guidelines will be publicly available once the Thresholds of Significance for Climate Impacts are adopted by the Air District Board of Directors, per: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines

Table 4: Greenhouse Gas Emissions	
Emission Sources	**$MTCO_2e/yr$**
Construction (annualized over 40 years)	15.1
Area Sources	0.01
Energy	138.1
Mobile	649.5
Waste	31.5
Water	14.5
Total Annual GHG Emissions:	**848.1**
CEQA Threshold (Annual GHG Emissions)	1,100
Exceed Threshold?	**No**

Source: Lamphier-Gregory 2022, summary of CalEEMod results, included in Attachment X

Based on these calculated emissions, the Project would not exceed the Air District's recommended GHG emission threshold of 1,100 MTCO2e/year, and the Project impact would be less than significant.

Conflict with Adopted GHG Reduction Strategies

In July of 2020, the Oakland City Council adopted the City of Oakland's *2030 Equitable Climate Action Plan* (ECAP), with the intention that additional policies and ordinances would be adopted to implement some of the 2030 ECAP strategies. The 2030 ECAP sets forth a detailed, equitable path toward cost-effectively reducing Oakland's local GHG emissions by a minimum of 56% below baseline 2005 GHG emission levels by 2030. It provides for a transition away from fossil fuel dependence, removing carbon from the atmosphere through local projects, and ensuring that all of Oakland's communities are resilient to the foreseeable impacts of climate change by 2030. The current statewide goal pursuant to SB 32 is to reduce California's GHG emissions to 40 percent below 1990 levels by 2030. Oakland's adopted 2030 reductions target of 56% below Oakland's 2005 GHG emissions, reaching beyond that of the State's 40% target. The 2030 ECAP contains not only deeper targets, but also qualitatively different and more focused actions than those contained in its previous 2020 Energy and Climate Action Plan, including a major focus on building de-carbonization and energy resilience, fully removing natural gas from the built environment, and installing energy storage systems where appropriate and feasible. [21]

The City's 2030 ECAP does not have a specific numeric threshold for GHG emissions from individual projects. Instead, in December 2020, the City Planning Commission adopted an ECAP Checklist to show consistency with the 2030 ECAP. The ECAP Consistency Checklist includes topics such as consistency with the General Plan, parking limitations to reduce vehicle trip generation, electric vehicle charging infrastructure requirements, and all electric buildings (i.e., no natural gas connections). If a project can qualitatively demonstrate compliance with the ECAP Consistency Checklist items, or alternatively demonstrate to the City's satisfaction that a Checklist item is not applicable, then the project will be considered in compliance with the City's 2020 CEQA GHG threshold of significance

[21] City of Oakland, *2030 Equitable Climate Action Plan*, July 2020

Consistency with the 2030 Equitable Climate Action Plan Checklist

Although the Project is not subject to the City of Oakland's construction-related permits (the Project's design and building permit process is conducted through the California Division of the State Architect), the Project is generally consistent with the City's ECAP Checklist criteria, as summarized below:

- The Project is substantially consistent with the City's overall goals for land use and urban form. The Project involves removal of a prior underutilized school facility to accommodate District-related administrative uses and educational space, which are land uses conditionally permitted within the applicable zoning district of the Project site. The Project's height, setbacks and building mass are consistent with underlying zoning criteria.
- The Project site is located within a "Transit Accessible Areas" as defined in the City of Oakland Planning Code. The Project is located less than one-half mile walk from the Bay Area Rapid Transit District's (BART) West Oakland station, and AC Transit bus lines that run along Adeline Street, 10th Street and 14th Street are within 1 to 2 blocks of the site (CA-CHPS criteria SS 7.1). The Project does not provide any more parking spaces than necessary to accommodate anticipated parking demands.
- The Project does not include any structured parking, and so it is not designed to adapt such structured parking for future adaptation to other uses.
- The Project is subject to a Transportation Demand Management Program, which does include provision of transit passes for employees and students.
- The Project's parking area does include EV-ready conditions for future Plug-In Electric Vehicle (PEV) charging Infrastructure (CA-CHPS criteria EE 8.1).
- The Project would not result in displacement of any residents or essential businesses.
- The Project does include improvements to surrounding sidewalks and curb spaces, and does not introduce any conflicts with the City's adopted Bike and Pedestrian Plans. The Project will provide new walkways and bikeways from the building entry to the end of the property (CA-CHPS criteria SS 9.1).
- The Project does not create any new natural gas connections or hook-ups. The Project will not use natural gas consumption for space heating or water heating (CA-CHPS criteria EE 7.1)
- Whereas the Project is not required to comply with the City of Oakland Green Building Ordinance, the Project does comply with all CalGreen requirements (CA-CHPS criteria EE 8.1)
- The Project would reduce demolition waste from construction by 75% (CA-CHPS criteria MW 2.1), would provide for storage and collection of recyclables (CA-CHPS criteria MW 1.0), and construction materials would include at least 20% recycled materials by costs (CA-CHPS criteria MW 3.1)
- The Project is not located in a Very High Fire hazard Severity Zone.
- The Project would add a greater number of trees than will be removed.
- The Project will comply with all applicable NPDES C.3 requirements for protection of water quality (CA-CHPS criteria SS 5.1)

Based on the Project's general consistency with the City's ECAP Checklist criteria, as well as its CA-CHPS Scorecard that demonstrates the Project meets the criteria for CHPS-verified certification, the Project complies with applicable plans, policies and regulations adopted for reducing the emissions of greenhouse gases, and this impact would be less than significant.

Hazards and Hazardous Materials

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	❒	■	❒	❒
b) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?, or c) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	❒	❒	■	❒
d) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	❒	❒	■	❒
e) For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	❒	❒	❒	■
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	❒	❒	❒	■
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	❒	❒	❒	■

Hazardous Material Site - per Cortese List

In California, regulatory databases listing hazardous materials sites provided by numerous federal, state and local agencies are consolidated in the "Cortese List" pursuant to Government Code Section 65962.5. The Cortese List is located on the California Environmental Protection Agency's (Cal EPA) website and is a compilation of the following lists:

- Hazardous Waste and Substances sites from Department of Toxic Substances Control (DTSC) EnviroStor database
- Leaking Underground Storage Tank Sites from the State Water Board's GeoTracker database
- Solid waste disposal sites identified by Water Board with waste constituents above hazardous waste levels outside the waste management unit
- "Active" Cease and Desist Order and Cleanup and Abatement Order (CAO) sites from the SWRCB, and
- Hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, as identified by DTSC and listed on the EnviroStor database

The databases cited above identify sites with suspected and confirmed releases of hazardous materials to the sub-surface soil and/or groundwater. The reporting and status of these sites change as identification, monitoring and cleanup of hazardous sites progress. Typically, sites are "closed" once it has been demonstrated that existing site uses, combined with the levels of identified contamination, present no significant risk to human health or the environment.

The Project site is currently listed on the California Department of Toxic Substances Control (DTSC) EnviroStor database, as a School Site Remediation (see discussion, below).

2019 Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (Phase 1 ESA) of the Project site at 1011 Union Street was performed by Ninyo & Moore in December 2019 (see **Appendix F**). The Phase I ESA was performed in general accordance with ASTM International guidelines for Phase I ESAs (ASTM E 1527-05). The objective of this Phase I ESA was to identify records of environmental concern (RECs), defined as "the presence or likely presence of any hazardous substances or petroleum products in, on or at a property that posed a material threat of a future release to the environment". As part of that Phase I ESA, Ninyo & Moore obtained an Environmental Data Resources, Inc. (EDR) report, dated November 15, 2019, which contained a listing of all regulatory database sites located within a 1-mile radius of the Project site. Based on this information, the Project site was not identified at the time as being listed on the "Cortese List" pursuant to Government Code Section 65962.5.

The Phase I ESA did identify three on-site RECs with the potential to have adversely impacted the site. The identified RECs, included:

- potential use of lead-based paint on current or former residential structures constructed before January 1, 1979, and on school structures constructed before January 1, 1993
- potential application of termiticides containing organochlorine pesticides (OCPs) in soils in the area of current or former structures constructed prior to January 1, 1989
- potential for residual soil contamination to be present at the site related to an August 1998 removal of a 2,000-gallon heating oil tank, and on-site storage of hazardous substances, including diesel fuel storage for the on-site backup generator
- potential sources for metals and semi-volatile organic compounds (SVOCs) associated with a waste incinerator located in the basement of the Cole building

Based on these findings, the Phase I ESA recommended further investigations, including:

- Soil samples should be collected around the perimeter of the buildings and analyzed for lead, arsenic, and OCP
- Soil samples should be collected immediately adjacent to the incinerator and analyzed for metals and SVOCs

DTSC Oversight Agreement

In September of 2020, the District submitted the Phase I ESA to DTSC. In April of 2021, the District entered into an agreement with DTSC for oversight. DTSC has now entered the Project site into its EnviroStor website database, and is providing oversight of the process toward site clearance.[22]

[22] Identified as Central Administrative Center at Cole Campus (Case #60003015), Cleanup Status: Active as of 7/2/2020, Site Type: School – accessed at: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60003015

Pursuant to this Agreement, the District submitted all background information, sample analysis results, environmental assessment reports, and other information pertinent to the hazardous materials management and/or release, characterization and cleanup of the site. DTSC held a scoping meeting with the District and its representatives, and provided recommendations for a subsequent Work Plan for a Preliminary Endangerment Assessment (PEA). In October 2021, the District submitted a Preliminary Environmental Assessment Workplan for approval by DTSC.

Preliminary Endangerment Assessment

Pursuant to approval of that Workplan, Ninyo & Moore prepared a Preliminary Endangerment Assessment (PEA) Report for the School District and the Department of Toxic Substances Control (DTSC) for the Project site (see **Appendix H**) in December of 2021. The PEA evaluated soil and soil gas for potential environmental concerns. As identified in the PEA Work Plan, constituents of potential concern (COPC) in soil and soil gas at the site include metals, TPHs, OCPs, PCBs, SVOCs, VOCs, PAHs and dioxins/furans. These COPCs may be from the current structures, former structures, fill materials, naturally occurring constituents, or former burned structures.

Pursuant to the PEA, soil samples were collected from 124 borings across the site, and soil-gas samples were collected from four dual-nested soil vapor probes installed at a depth of 5 and 10 feet bgs (see **Figure 15**). All samples were transported to a laboratory under proper chain-of-custody protocols for analysis.

The PEA screening evaluation for human health effects involved identifying chemicals of potential concern (COPCs), evaluating exposure pathways and media of concern, assessing chemical toxicity, and then characterizing risk. Estimated health risks are based on a calculated dose, which integrates exposure parameters for the receptors of concern with chemical- specific toxicity criteria. The calculated risks are then compared to health-based guidelines developed by the EPA and DTSC. For the purpose of the PEA screening evaluation, the potential dose is calculated for a resident (adult and child) occupying the site.

Exposure to COPCs can only occur if there is a complete pathway by which the COPCs in soil, water or air can be contacted by humans. Therefore, the evaluation of exposure pathways was the first step in the human health screening evaluation. Potential health hazards and risk are then calculated based on an evaluation of potential exposure concentrations and the toxicity of the COPCs. For purpose of the PEA, it was assumed that “hypothetical residents” at the site could be exposed to chemicals through incidental ingestion, dermal contact, inhalation of soil particulates containing COPCs, and inhalation of soil vapor containing COPCs. In accordance with PEA guidelines, exposures to COPCs were evaluated assuming hypothetical residential exposure.

The health risk evaluation was based on the application of conservative methods and assumptions in all phases of the assessment. Because potential exposure point concentrations were derived from maximum detected concentrations, conservative assumptions and methodologies were necessarily employed to minimize the possibility of underestimating risks. This practice, although commonly used in the risk assessment process, necessarily introduces a significant level of conservatism in the conclusions derived from the assessment. Based on the results of the PEA investigation, the following conclusions were derived:

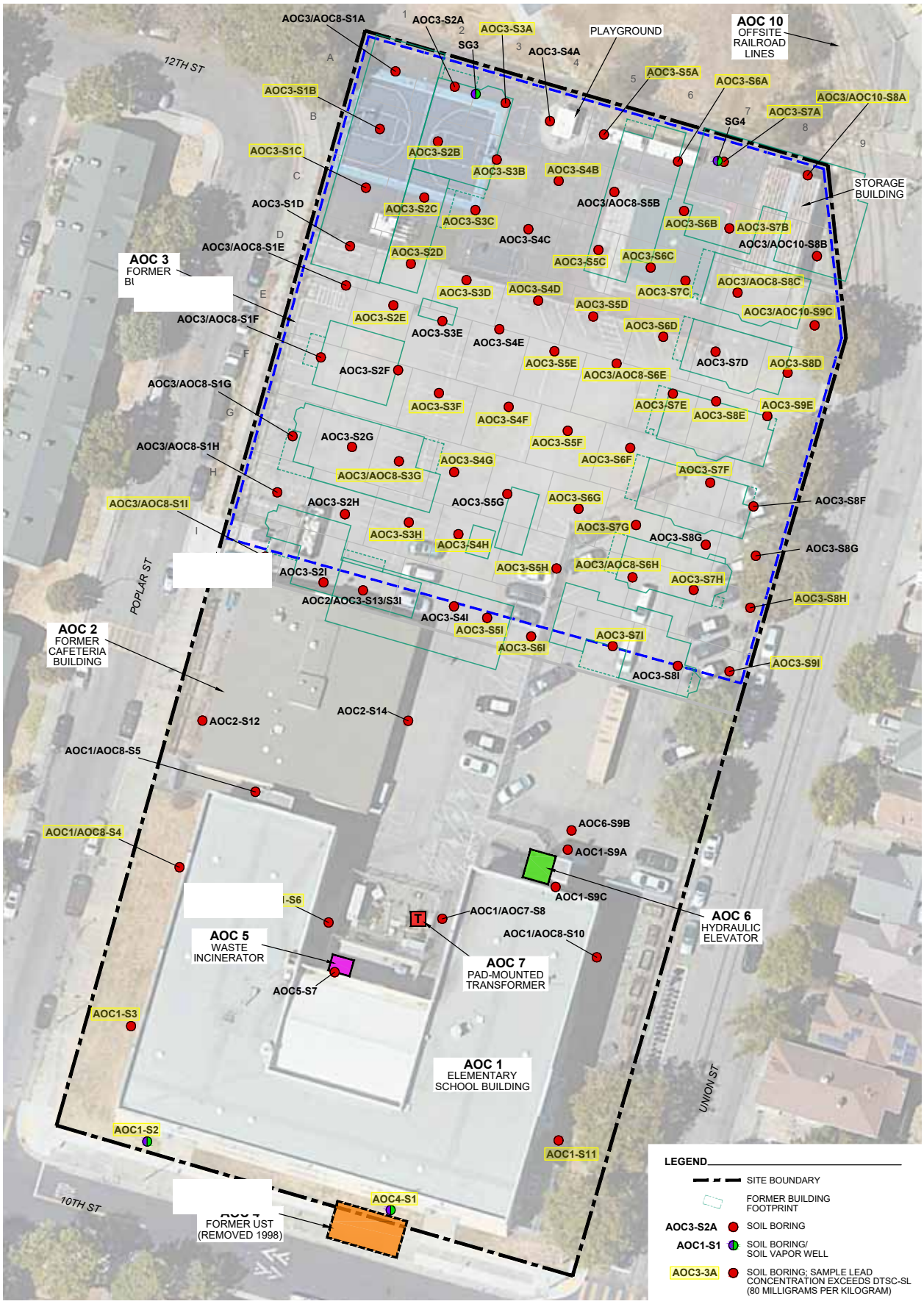


Figure 15
Soil Sample and Soil/Gas Sample Locations, Preliminary Endangerment Assessment

Source: Ninyo & Moore, December 2021

- The upper limit arsenic background concentration for at site was estimated to be 14.20 mg/kg, and 5 of the 124 soil samples collected at the site contained arsenic at concentrations higher than the estimated local background concentration. The distribution of arsenic contamination across the site appears to be limited and localized. The estimated 95% upper confidence limit (UCL) for arsenic using all available data was estimated to be 7.52 mg/kg.
- Relatively high concentrations of lead were detected in soil at the site. The estimated 95% UCL for lead was estimated to be 181.3 mg/kg. This value exceeds the DTSC soil screening value for lead of 80 mg/kg. Therefore, it is concluded lead in soil could pose a potential health hazard to future on-site receptors.
- Using maximum detected concentrations for all organic chemicals detected in soil at the site, the total incremental cancer risk for hypothetical residential exposure to site-related chemicals was estimated to be 4E-06. This value exceeds the acceptable cancer risk of 1E-06. The "risk drivers" were found to be dioxins/furans and Dieldrin.
- Using maximum VOC concentrations detected in soil gas, the total incremental cancer risk for hypothetical residential exposure to indoor air was estimated to be 5E-06. This value exceeds the acceptable cancer risk of 1E-06. The "risk driver" was found to be chloroform.[23]
- Using maximum detected soil chemical concentrations, the hazard indices estimated to result from soil exposure or indoor air exposure were estimated to be lower than 1. Both estimated hazard indices were within levels considered acceptable to California health and environmental protection agencies.

The PEA identifies that there are remaining data gaps that need further analysis. These data gaps include:

- Vertical delineation of lead concentrations that exceed screening levels, and
- Vertical and lateral delineation of dioxins/furans concentrations that exceed screening levels

Once these data gaps have been thoroughly investigated, the PEA recommends the following additional steps toward clearance of the site for future use pursuant to the Project:

- Evaluate mitigation and/or remediation options with respect to the proposed improvement plans (i.e., building locations, hardscape).
- Prepare a site-specific Health and Safety Plan and a Soil Management Plan for any work where contractors shall be working in or excavating soil.
- Delineate lead vertically in areas near the former buildings at the northern portion of the site, where grading is expected during development of the Project, and where soil will be removed and disposed of off-site. Vertical delineation will determine the distribution of elevated lead concentrations in soil that may be excavated during grading.
- Delineate dioxin/furans in soil vertically and laterally near the westerly side of the current Cole Middle School.

[23] It should be noted that chloroform is known to be formed from the reaction of chlorinated water with soil organic matter. Free chlorine can react with organic matter in soil to form chloroform and other trihalomethanes. Thus, it is highly likely that the chloroform detected in soil gas could have originated from chlorinated potable irrigation water in the subsurface. Furthermore, chloroform was only found above the SL in soil gas samples collected on along southern perimeter of the site in a landscaped area where irrigation lines were observed.

Preliminary Removal Action Work Plan (RAW)

In March of 2022, DTSC issued a Community Survey to help DTSC determine the level of community interest and potential desire for future community outreach activities related to cleanup of the Project site.[24] On April 1, 2022, DTSC and the District held a Scoping Meeting to discuss respective roles and responsibilities related to cleanup of the site, and to provide an overview of DTSC's Schools Unit process for remediation and cleanup. Based on this Scoping meeting, the following activities were identified as pending, pursuant to preparation, review and DTSC approval of a Removal Action Work Plan (RAW):

- A School Cleanup Agreement between the District and DTSC
- Submittal of a draft RAW(s) for DTSC review and approval [25]

As more fully described in the Project Description of this document, the preliminary approach for addressing areas of concern and chemicals of concern at the site is anticipated to involve remediation of soil contaminated with lead and arsenic during the construction phase of the Project. Soil excavation and removal with off-site disposal is expected to be the preferred remedial action alternative, to be fully developed as part of the RAW. Based on preliminary Scoping discussions, it is anticipated that the Project will involve two RAWs, separated into Phase 1 and Phase 2 areas to accommodate the Project's construction schedule.

- The Phase 1 RAW is expected to address an approximately 1.6-acre northerly portion of the site. The Phase I RAW is expected to involve excavation of this area to a depth of 3 feet to remove soils with lead and arsenic concentrations at levels that exceed DTSC environmental screening levels.
- The Phase 2 RAW is expected to address the remaining approximately 1-acre southerly portion of the area of the site, and is similarly expected to involve excavation of this area to a depth of 3 feet to remove soils with lead and arsenic concentrations at levels that exceed DTSC environmental screening levels. The Phase II RAW is also assumed to include further evaluation and identification of methods for addressing soil vapor near the westerly side of the current Cole Middle School building.

Each of these Removal Action Work Plans will identify the remediation goals and objectives, and the performance measures for soil excavation and off-site disposal of lead and arsenic-contaminated soil. They are also expected to include the following:

- a description of the Removal Action process, site background information, description of the nature, source and extent of contamination, risk evaluation and clean up goals, and an engineering evaluation/cost analysis
- a list of All Applicable or Relevant and Appropriate Requirements (ARARs), including chemical-specific ARARs in accordance with DTSC human health risk screening process (including Air Quality Management and a Health and Safety Plan), action-specific ARARs (for waste management, storm water discharge and quality assurance) and location-specific ARARs
- an implementation plan, which will include field documentation, site preparation and security measures, identification of work zones, the excavation plan, meteorological and air monitoring, a Sampling and Analysis Plan (waste characterization and excavation confirmation sampling), a

[24] DTSC, March 22, 2022, accessed at: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60003015&enforcement_id=60517542

[25] DTSC, April 1, 2022, accessed at: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60003015&enforcement_id=60517946

Transportation Plan for off-site disposal, backfill and site restoration plans, and a Project Schedule and Report of Completion.

Regulatory Requirements / Mitigation Measures

Pursuant to Health and Safety Code requirements for all responses actions for school sites (Education Code Section 17210.1, subsections (a) (1) and (2), and Section 17213.2, subsection (a)), the Project is required to complete the environmental review and cleanup process for the Project under the oversight of DTSCs Brownfields Restoration and School Evaluation Branch. Through this process, DTSC ensures protection of children, staff and the environment from the potential effects of exposure to hazardous materials.

Regulatory Requirement Hazards-1, Completion of the DTSC Environmental Review and Cleanup Process: Pursuant to Health and Safety Code requirements for projects under the regulatory review and oversight of DTCS's Brownfields Restoration and School Evaluation Branch, the Project must complete the DTSC-established protocols for site evaluation and cleanup. Pursuant to this process, remaining steps include, but are not limited to the following:

1. Approval and acceptance of a final Preliminary Environmental Assessment
2. Entering into a subsequent Voluntary Cleanup Agreement or School Cleanup Agreement
3. Preparation of a Removal Action Work Plan or Remedial Action Plan, including providing additional opportunities for public comment
4. Conducting all necessary cleanup activities pursuant to an approved Removal Action Work Plan or Remedial Action Plan
5. Obtaining a "No Further Action" letter from DTSC, once all cleanup activities are satisfactorily completed under DTSC oversight

Resulting Level of Significance

With full compliance with all DTSC-established procedures and protocols, threatened releases or potential releases of hazardous substances at or from the Project site will be fully investigated and remediated, such that the Project would not create a significant hazard to the public or the environment.

Hazardous Materials near Schools

The nearest schools to the Project site are Martin Luther King Jr. Elementary School (960 10th Street) and Ralph J. Bunche Academy (1240 18th Street), both of which are located approximately 0.3 mile from the Project site. There are no other schools located within one-quarter mile of the Project site. As noted above, hazardous materials used during construction and operation of the Project would be used in compliance with applicable regulations. Compliance with applicable regulations would reduce the potential hazardous materials exposure, and no impact to other nearby schools would occur.

Hazardous Materials Risks during Construction

As part of the Removal Action Work Plan for the site, contaminated soil may be temporarily stockpiled on-site for confirmation testing prior to being transported to an approved off-site disposal facility. There is a risk that such stockpiled soils could be subject to dispersal from wind and/or stormwater runoff.

The potential for off-site exposure to dust from contaminated soil resulting from disturbance of impacted soils during excavation activities is not considered a significant exposure pathway. This is because the exposure duration during transport is short, dust will disperse, and dust will be monitored at the perimeter of the site during excavation. Minor off-site exposure may occur during transport of

excavated contaminated soil to the disposal location. The level of exposure is not a significant impact given the very short-term exposure and the widespread dispersal of any dust released during transport.

Other construction and operation activities associated with the Project would involve the routine transport, use and disposal of hazardous materials including, but not limited to fuels, oils, solvents and glues. Inadvertent release of large quantities of these materials into the environment could adversely affect workers, the public, soil, or water quality.

Regulatory Requirements / Mitigation Measures

As more fully addressed in the Hydrology section of this Initial Study, the Project would be required to implement construction Best Management Practices during construction as part of a Stormwater Pollution Prevention Plan as required by the National Pollution Discharge Elimination System General Construction Permit. Implementation of these required BMP would minimize the potential for adverse effects to workers, the public, soils, and water quality, and this impact would be less than significant.

The District will be required to prepare separate Site-Specific Health and Safety Plans and a Soil Management Plans for DTSC approval prior to any work in Phase I and Phase II areas where contractors will be working in, or excavating soil.

Regulatory Requirement Hazards-2, Soil Management Plan: Pursuant to DTSC's review and approval of the Phase I and Phase II Removal Action Work Plans, these approvals will also require preparation and implementation of a Soil Management Plan (SMP). The SMP is to be implemented during future remediation excavation and construction activities to protect construction workers, site occupants and off-site receptors from potential exposure to lead and arsenic in the soil. The SMP will serve as the guidance document for evaluation of clean, contaminated and hazardous soils during soil disturbance activities. Sections of the SMP will include:

1. A program of participant roles and responsibilities, description of the physical setting, soil screening criteria, soil management objectives, remedial actions and notifications
2. Health and Safety plans, including a discussion of proper personal protective equipment (PPE) to mitigate direct contact exposure of contaminated soils to site workers
3. Delineation of exclusion work zones and hazard warning signage, best management practices (BMPs) for PPE and equipment decontamination, and site worker hygiene
4. Soil excavation and monitoring (including air monitoring of dust levels, and the requirement that all excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph (see Mitigation Measure Air-2)
5. Soil segregation, stockpiling soil and stockpile management, including proper storage of excavated soils to prevent cross contamination (e.g. stockpiling on plastic sheeting and covering), to prevent wind dispersal by requiring that stockpiled soil on-site be watered or treated with soil stabilizers, and covered (see Mitigation Measure Air-2), and to prevent inadvertent contamination from stormwater runoff (see Mitigation Measure Hydrology-2 pertaining to SWPPP requirements of the NPDES regulations)
6. Transport management, including the requirement that all trucks off-hauling soil maintain at least two feet of freeboard and employ covers (see Mitigation Measure Air-2)

With implementation of DTSC's regulatory requirements (including Project-specific mitigation measures) the activities associated with excavation and removal of contaminated soil would not create a significant impacts related to risks of exposure to contaminated materials during the soil removal process.

Routine Use and Risk of Spill of Hazardous Materials during Operations

Operation of the Project may include the handling, storage and transport of small amounts of hazardous materials that may include cleaning products; pesticides and fertilizers used for grounds maintenance; and paints, solvents, fuels and lubricants used in building operation and maintenance. The Project would not be expected to handle, store or transport these materials in large quantity. Most of these chemicals are typical household chemicals that must be used according to the manufacturers' recommendations and labeling, but do not create a significant hazard to the environment.

Regulatory Requirements

Title 8 of the California Code of Regulations requires every employer to develop and implement an effective Injury and Illness Prevention Program to improve safety and health in the workplace. Injury and Illness Prevention Program elements include hazard assessment, accident/exposure investigation, hazard correction, and training and instruction. OSHA has found that these programs are effective in reducing the number and severity of injuries and illness in the workplace, and is required of the Project.

Businesses that store hazardous materials or hazardous substances at reportable quantities are required to prepare and submit a Hazardous Materials Business Plan to the Alameda County Department of Environmental Health. The general reportable quantities are equal to or greater than 55 gallons of a liquid, 200 cubic feet of a gas, and 500 pounds of a solid. The Project is not anticipated to use or store any hazardous materials at reportable quantities.

By complying with manufacturers' recommendations and labeling, as well as applicable regulations as identified above, the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and this impact would be less than significant.

Airport Hazards

The Project site lies approximately 6 miles to the northwest of the Oakland International Airport and is not within its Airport Influence Area. [26] There are no other airports, either public or private, within the vicinity of the project site. No impact related to airport hazards would occur.

Emergency Response Plan

The Project has been subject to the California Division of State Architect (DSA) review of all architectural, mechanical/electrical and fire/life safety plans. DSA approvals included review by the Oakland Fire Department's Fire Prevention Bureau. This review has included verification that the proposed site ingress and egress is adequate for on-site police protection, fire access and emergency response.

The Project would not alter traffic patterns and would not impair implementation of any adopted emergency response plan or emergency evacuation plan. The Project would therefore have no impact related to an emergency response plan.

Wildland Fire

The Project site is located in an urbanized area removed from areas typically subject to wildland fire, and it has not been identified as a very-high fire-hazard severity zone. [27] Therefore, the Project would have no impact related to wildland fire.

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[26] Alameda County Airport Land Use Commission, *OAK Airport Land Use Compatibility Plan*, 2010

[27] California Department of Forestry and Fire Protection. Fire Hazard Severity Zones Maps. Website accessed 2.28.20 at https://osfm.fire.ca.gov/media/5606/oakland.pdf

Hazardous Materials near the Project's Education Program (non-CEQA)

As identified in the Phase I ESA, the California Cereal Products/Nabisco Brands Inc. property on 14th Street, downgradient of and north of the Project site, had two 10,000-gallon petroleum fuel oil USTs and one 750-gallon diesel UST removed in 1993. In 1994 and at this same site, a number of containers of unknown substances were dumped and burned on the railroad tracks. This spill occurred approximately 300 feet north of the Project site, and Oakland Terminal Railroad took responsibility for the cleanup. Due to the exact location of the dumping being unknown, the quantity and type of contaminant being unknown, the fact that a clean-up was completed, and that the dumping took place downgradient from the site, this is was not considered a records of environmental concern (REC) to the Project site. Several other off-site facilities were located within the EDR search radius from the Project site, and were evaluated as to their potential to impact soil, soil vapor, and/or groundwater at the Project site. The Phase I ESA found a low likelihood that these off-site properties represented a REC to the site, based on one or more of the following factors:

- The nature of the database(s) on which the property is listed, and/or because the property was not listed on a database that reports unauthorized releases of hazardous substances
- Reported regulatory agency status (i.e., case closed)
- Reported nature of the case (i.e., soil contamination only)
- Reported distance of the property from the site, and/or
- Location of the property in relation to the site with respect to topography or expected groundwater flow direction (northeast)

Further assessment of potential impacts from off-site properties to the north and south of the Project site included soil and soil gas samples collected along the northern and southern boundaries. Soil samples were analyzed for TPHd, TPHmo, TPHg, VOCs, and CAM 17 Metals. Soil gas samples were analyzed for VOCs, fixed gases (oxygen, carbon dioxide and methane) and helium (tracer gas compound). No exceedances of environmental screening levels were detected in any of the soil samples, and the only exceedance was a soil gas sample for chloroform. Further assessment of potential impacts from the railroad tracks adjacent to the northeast corner of the site included soil samples collected from adjacent soil borings. Soil samples were analyzed for CAM 17 metals, SVOCs, and PAHs. Only exceedances of lead were detected, and SVOCs and PAHs were not detected above the laboratory reporting limits.

Pending any further analysis that may be required (see Regulatory Requirements, above), there are no other known off-site contaminated sites or sources that would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of the Project. This impact is considered less than significant.

Hydrology and Water Quality

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	❒	❒	❒	■
b) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	❒	■	❒	❒
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	❒	❒	■	❒
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	❒	■	❒	❒
d) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	❒	❒	■	❒
e) In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation? Impede or redirect flood flows?	❒	❒	❒	■

Discharge in Violation or Conflict with a Water Quality Control Plan

Operation of the Project would not include any types of operations or land uses that would directly result in substantial degradation of water quality, or that would violate any water quality standards or waste discharge requirements.

Water Quality and Erosion during Construction

Site preparation and grading, and soil removal activities as may be identified in the DTSC-approved Remedial Action Workplan (as identified in the Hazards section of this Initial Study), all have the potential to expose underlying soils to wind and water erosion, and to introduce pollutants into stormwater runoff. Eroded soils can be carried by stormwater runoff into the downstream drainage channels and eventually into the Bay, causing increased sedimentation. Construction activities associated with the Project could adversely affect water quality through the potential discharge of construction materials and wastes to the stormwater collection system. The delivery, handling and storage of construction materials and wastes, as well as use of construction equipment, could also introduce the risk of stormwater contamination. Polluted stormwater or excessive sedimentation can lead to degradation of downstream waters.

Regulatory Requirements / Mitigation Measures

The Project is required to comply with regulatory requirements of the State Water Resources Control Board (SWRCB), including implementing all necessary measures to prevent excessive sedimentation in stormwater runoff or carrying of pollutants off-site in stormwater runoff during construction. Pursuant to existing regulatory requirements, the following measures are required of the Project:

Regulatory Requirement Hydrology-1, State Construction General Permit and SWPPP: The Project applicant shall file a Notice of Intent with the State Water Resources Control Board (SWRCB) for construction-period releases of stormwater to be covered under the State's Construction General Permit. Pursuant to the requirements of that at Permit, the Project sponsor shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) and other permit documents as may be required by the SWRCB. At a minimum, the SWPPP shall include:

1. Best Management Practices (BMPs) to minimize erosion and sediment (i.e. gravel bags, silt fence, straw wattle, sediment basin, soil stabilizers, etc.)
2. BMPs to minimize non-stormwater discharges (i.e. concrete waste management, material waste management, good housekeeping practices, etc.)
3. Site inspections and BMP maintenance

Resulting Level of Significance

By obtaining a Construction General Permit from the SWRCB and implementing all applicable provisions of that permit (i.e., a Project-specific SWPPP), the Project will prevent stormwater contamination, and control sediment and erosion to levels as required of that permit, and construction-period impacts on water quality will be reduced to less than significant.

Storm Drainage Conveyance

Under current conditions, only about 6,675 square feet (or about 6%) of the site is covered by pervious surface (the landscape strips surrounding three sides of the existing Cole Building), and the remaining approximately 104,345 square feet (or 94%) of the site is covered by impervious surfaces (i.e., the Cole Building, the Cafeteria building, the modular shed and asphalt). Under Project conditions, 23,373 square feet (or about 21%) of the site will be covered by pervious surfaces (landscaping and biotreatment areas), and the remaining approximately 87,647 square feet (or 79%) of the site will be covered by impervious surfaces (i.e., the new Cole Administration/Education Building, surface parking and sidewalks) (see **Appendix I**)

Since the Project will be decreasing total impervious surface area on the site, the rate and amount of surface runoff will not be substantially increased in a manner that might otherwise result in flooding on- or off-site. The impact of the Project pertaining to increased stormwater runoff will be less than significant.

Post-Construction Water Quality

The Project will introduce new sources of non-point water pollutants such as automotive fluids, pesticides, fertilizers and herbicides used in landscaped areas, trash and excess irrigation water, and air pollutants deposited on roof tops and other impervious surfaces. These non-point sources of pollutants could enter the storm drainage system and eventually contribute to surface water-quality degradation.

Regulatory Requirements

The Project's stormwater runoff would connect to, and ultimately be discharged through the City's stormdrain system. Therefore, the Project would be subject to the City's waste discharge requirements

under to the National Pollutant Discharge Elimination System (NPDES) permit. These requirements regulate the discharge of stormwater runoff from municipal separate storm sewer systems (MS4s) of Alameda County (including Oakland), and which are individually permitted under a San Francisco Bay Municipal Regional Stormwater Permit (MRP - Order R2-2009-0074; NPDES Permit No. CAS612008). The MRP ensures attainment of applicable water quality objectives and protection of the beneficial uses of receiving waters and associated habitat by requiring municipal dischargers (e.g., Oakland) to not cause exceedances of water quality objectives nor cause certain conditions to occur that create a condition of nuisance or water quality impairment in receiving waters.

Provision C.3 of the MRP requires new project and redevelopment projects that create or replace 10,000 square feet or more of impervious surface to implement certain measures to protect water quality and prevent erosion. The Project would exceed the 10,000 square-foot criteria, and would be subject to regulations that seek to minimizing sediment and other pollutants in site runoff. The goal of Provision C.3 of the MRP is to include appropriate source control, site design and stormwater treatment measures in new development projects to address both soluble and insoluble stormwater runoff pollutant discharges, and prevent increases in runoff flows. The Project will therefore be subject to the following regulatory requirement:

Regulatory Requirement Hydrology-2, Post-Construction Stormwater Management Plan: The Project shall be subject to compliance with the requirements of Provision c.3 of the Municipal Regional Stormwater Permit, including developing and implementing a Post-Construction Stormwater Management Plan (SWMP) subject to the review and approval of the City of Oakland (as the discharge permittee). The SWMP must identify the location and size of new and replaced impervious surfaces, the directional surface flow of stormwater runoff, and the location of proposed on-site storm drain lines, the site design measures to reduce the amount of impervious surface area, source control measures to limit stormwater pollution, and stormwater treatment measures to remove pollutants from stormwater runoff.

Project's Proposed Preliminary Stormwater Management Plan

The Project sponsor has prepared a preliminary post-construction Stormwater Control Plan to demonstrate how the requirements of the c.3 provisions of the MRP will be implemented at the Project site (see **Appendix I**).[28] This preliminary post-construction Stormwater Control Plan demonstrates that the Project site will be divided into five separate Drainage Management Areas (DMAs), and that each of these DMAs will be provided with water quality treatment in separate bio-retention planter areas that are sized to meet the treatment requirement from each DMA. The Project's stormwater drainage system will route all stormwater runoff from the Project's hardscape areas (i.e., rooftops, parking areas, sidewalks and walkways) into these bioretention planters which will serve both as stormwater detention and water quality treatment prior to discharge to the City of Oakland's storm drain system (see **Figure 16**). The bioretention areas have been sized to meet the volume of storm flows routed through each treatment area, as indicated in **Table 5,** below.

[28] Siegfried, Stormwater Management Memo for Cole Administration Building, February 9, 2022 (Appendix I)

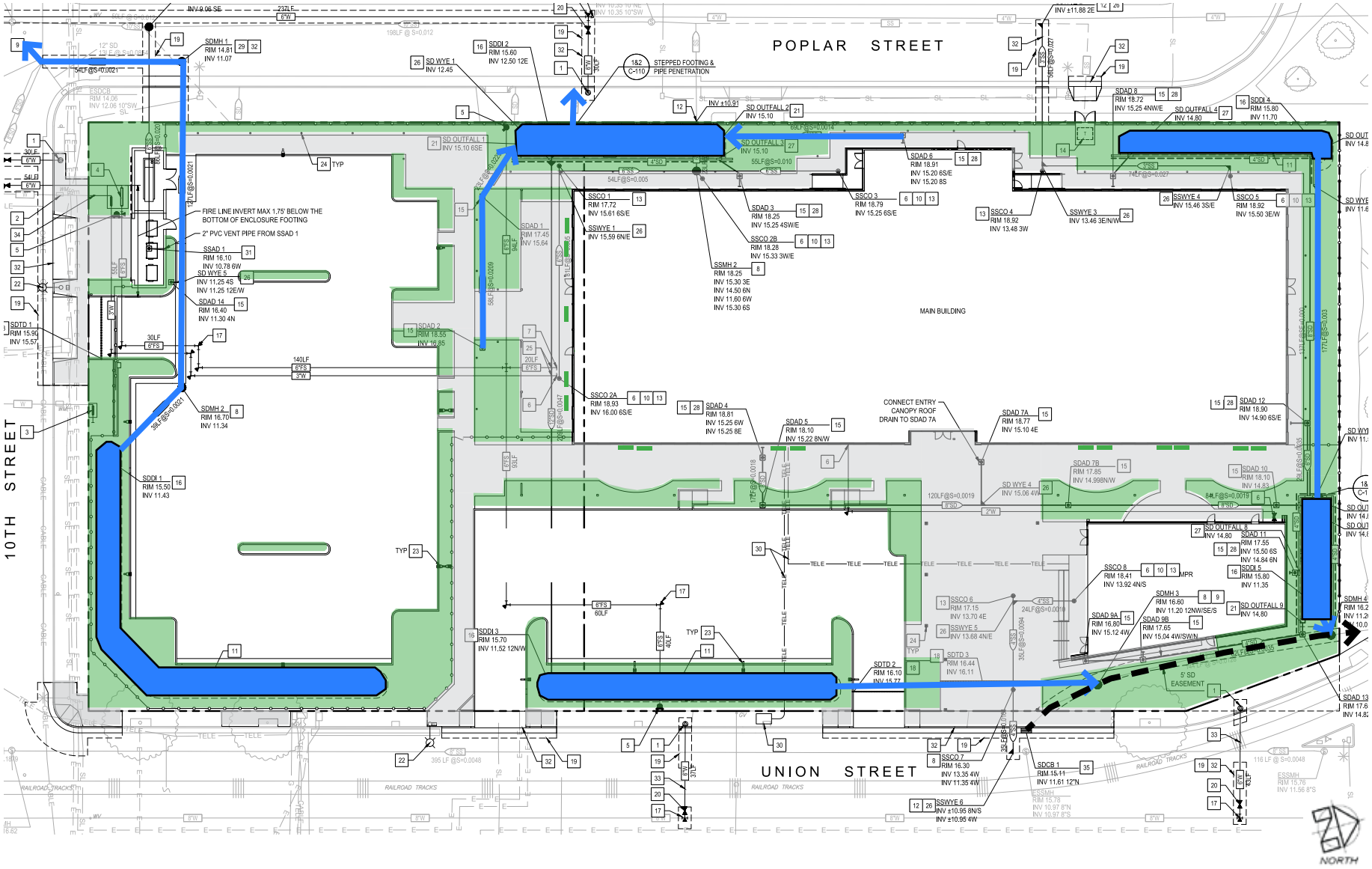


Figure 16
Preliminary Post-Construction Stormwater Management Plan

Source: Siegfried, Utilities Plan, Sheet C-105, 3/09/21

Table 5: Post-Construction Stormwater Bioretention Volume				
Drainage Mgt. Area	**Pervious Surface Area (sf)**	**Impervious Surface Area (sf)**	**Required Treatment Volume (cf) [1]**	**Provided Treatment Volume (cf)**
DMA 1	1,431	583	Pervious surfaces exceed 2:1 ratio as self-treating	
DMA 2	5,820	23,650	1,401	1,439
DMA 3	3,590	17,773	1,048	1,054
DMA 4	3,457	14,847	878	880
DMA 5	9,075	30,793	1,833	1,846
Total:	**23,373 (21%)**	**87,646 (79%)**	**5,160**	**5,218**

Source: Siegfried, February 2022 (see **Appendix I**)

Notes: 1. Required capture volume per Alameda County C.3 Technical Guidance V4.0 worksheet for Calculation the Water Quality Design Volume

With implementation of a post-construction Stormwater Management Plan, the Project will provide adequate BMPs for the treatment of water quality in stormwater runoff from the Project site, and these BMPs will be installed, implemented and maintained in a manner that will reduce post-construction water quality impacts to acceptable, less than significant levels. The Project would be consistent with policies and regulations related to stormwater pollutants, reducing the potential for impacts on water quality to less than significant.

Groundwater

The Project is not expected to involve substantial excavation that would affect groundwater. Dewatering activities are not anticipated to be necessary, but if subsequently determined to be required, any dewatering activities associated with the Project must comply with the General Construction Permit and requirements established by the RWQCB to ensure that such activities would not result in substantial changes in groundwater flow or quality.

The Project would not increase impervious surface area of the site (the site is currently nearly fully paved, other than side yard landscape), and new landscaping and stormwater capture would allow the minimal groundwater recharge that is occurring to continue. The Project would use potable water from the public water system for onsite water needs, and would not rely on groundwater for potable supply. The project would not increase groundwater use, deplete groundwater supplies, or interfere with groundwater recharge. No impacts on groundwater resources are anticipated.

Flood Risk

The Project site is not located within a 100-year flood zone (see **Figure 17**),[29] and it is not within a tsunami inundation zone.[30] Further, the site is not located near an inland body of water. The Project site is not at risk for inundation from flood hazard, tsunamic or seiche, would not pose a risk of release of pollutants due to project inundation, and would not impede or redirect flood flows. No impacts related to flooding conditions would occur.

[29] Federal Emergency Management Agency. National Flood Hazard Layer Viewer. Flood Insurance Rate Map Panel 06001C0006H6, December 21, 2018. Website accessed 3.3.20 at: https://fema.maps.arcgis.com/apps/webappviewer/index.html?id=29f87515702d4845a906419b287e2049.

[30] California Department of Conservation. Alameda County Tsunami Inundation Maps Website accessed 3.3.20 at: https://www.conservation.ca.gov/cgs/tsunami/maps/Alameda.



Figure 17
FEMA Flood Zone in Relationship to the Project Site

Source: FEMA's National Flood Hazard Layer (NFHL) Viewer accessed at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html

Land Use and Planning

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	❒	❒	■	❒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	❒	❒	■	❒

Division of a Community

Division of an established community typically occurs when a new physical feature physically transects an area, thereby removing mobility and access within an established community. The division of an established community can also occur through the removal of an existing road or pathway, which would reduce or remove access between a community and outlying areas. There is no aspect of the Project that would substantially reduce mobility or access.

There is a wide mix of land use types in the immediate vicinity of the Project site. These include Wade Johnson Park to the immediate north, the Oakland Housing Authority's West District offices to the immediate south, single-family residential homes to the east, and attached low-rise apartments of the Peralta Villa public housing community (owned and operated by the Oakland Housing Authority) to the west. The existing Cole Middle School Building, the Cafeteria building and existing parking currently occupies an entire city block within the middle of these existing land uses, and the Project would occupy generally this same space but with a different building and parking configuration. Nothing about the Project would physically divide the surrounding community any more than it is already divided, and the Project provides a relatively low impact use that separates the surrounding residential neighborhood from those industrial and light-industrial land uses that line 14th Street from Mandela Parkway to Union Street (a block to the north). Therefore, the Project would not divide an established community, and the Project would have a less than significant impact.

Conflict with Plans or Policies Adopted to Mitigate an Environmental Effect

There is no Habitat Conservation Plan, Natural Community Conservation Plan, or other adopted habitat conservation plan applicable to the Project site. The Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

As is noted in the City of Oakland's West Oakland Specific Plan EIR, there are many locations within West Oakland that are near freeways and other sources of diesel exhaust particulates and other toxic air contaminants (TACs). These sources of TAC pose a significant risk to human health. There are portions of West Oakland that are near freeways, high volume roadways, BART and the railroads that are also exposed to noise levels that may exceed City and state standards for noise compatibility. There are numerous properties throughout West Oakland with known contamination from prior industrial uses or

other sources. The City, in collaboration with other public agencies (BAAQMD, DTSC, etc.) has developed policies and regulations for the purpose of avoiding or mitigating these existing conditions. [31]

However, as is documented elsewhere in this Initial Study, the Project site is not located in sources of diesel exhaust particulates or other toxic air contaminants, is not near sources of noise levels that exceed City or state standards for noise compatibility, and is not a known previously contaminated site. Those City policies and regulation adopted for the purpose of avoiding or mitigating such conditions do not apply to the Project site.

The Project would not result in a substantial increase in land use intensity at the site, and would not introduce a new use that would conflict with other land uses in the vicinity. The Project would not conflict with any land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect, and the Project's effects would be less than significant.

[31] City of Oakland, West Oakland Specific Plan Draft EIR, January 2014, accessed at https://www.oaklandca.gov/resources/current-environmental-review-ceqa-eir-documents-2011-2021

Mineral Resources

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	❒	❒	❒	■
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	❒	❒	❒	■

Minerals

Areas designated as an Aggregate Resource sector are judged to be of prime importance in meeting future mineral needs in the region, and land use decisions must consider the importance of these resources to the region as a whole. According to the California Department of Conservation Division of Mines and Geology, the Project site is not currently considered an Aggregate Resource sector.[32]

The Leona Quarry (which was more than 5 miles from the Project site) was the last mine in Oakland to be identified as a regionally significant source of aggregate resources. The Leona Quarry has been closed for many years, and there is no other land in Oakland with such a designation. The Project site contains no known mineral resource that would be of value to the region, and is not a locally important mineral resource recovery site. No impact would occur.

[32] California Department of Mines and Geology, accesses at: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_96-03/ , Plate 12

Noise

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	❒	■	❒	❒
b) Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	❒	❒	■	❒
c) Generation of excessive groundborne vibration or groundborne noise levels?	❒	❒	■	❒
d) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	❒	❒	❒	■

Information for this section of the Initial Study has been derived from the following primary source:

- Illingworth & Rodkin , OUSD Central Administrative Center at Cole Campus Project Noise Study, April 7, 2022 (**Appendix J**)

Existing/Ambient Noise Conditions

The surrounding area is predominantly residential with multi-family residences to the west and south, an Oakland Housing Authority office to the south, and single-family residences to the east and northeast. The California Cereal Products industrial site to the north serves as the primary source of noise in the vicinity.

A noise monitoring survey was performed between July 15, 2020 and July 17, 2020 to quantify and characterize ambient noise levels at the site and in the vicinity. The monitoring survey included one long-term measurement and one short-term measurement.

- Long-term measurement was made at the southwest corner of the site near the intersection of Poplar Street and 10th Street. This location was chosen in order to characterize noise resulting from local traffic and industrial sources in the general vicinity, including ambient noise at the existing residences to the west. Hourly average noise levels at this location ranged from 54 to 65 dBA Leq during the day, and from 50 to 56 dBA Leq at night. The day-night average noise level on July 16, 2020 was 62 dBA Ldn.
- Short-term noise measurement was made over a 10-minute period on Wednesday, July 15, 2020 between 8:30 a.m. and 8:40 a.m. This measurement quantified noise levels near the northwestern corner of the site, across from Wade Johnson Park and approximately 275 feet southwest of the California Cereal Products industrial site (see **Table 6**). As with the rest of the site vicinity, noise at this location was dominated by industrial activities.

Table 6: Summary of Short-Term Noise Measurement Data (dBA)

Noise Measurement Location	Lmax	L(1)	L(10)	L(50)	L(90)	Leq(10-min)	Ldn1
ST-1: Across Poplar Street Near Northwest Corner of Site, ~175 feet Southwest of California Cereal Products Site	67	67	67	66	65	66	71

Source: Illingworth & Rodkin, April 2022

The noise environment at the Project site and vicinity is primarily the result of industrial operations at the California Cereal Products site located approximately 150 feet north of the nearest property line to the Project. Other secondary sources of noise, such as traffic along local roadways and distant highways, are insubstantial and dominated by noise from operations at this industrial site.

Temporary Construction Noise

Construction activities for the Project are to be carried out in stages. During each stage of construction, there would be a different mix of operating equipment, and noise levels would vary by stage, and vary within stages based on the amount of equipment in operation and the location at which the equipment is operating. Project construction is expected to last approximately 15 months, which includes two full construction phases:

- Phase I involves demolition of the Cafeteria Building foundation and surrounding asphalt and concrete; remediation, excavation and fill of the northerly two-thirds of the site, pouring of footings and the foundation for the new building; construction of the new building; and exterior/interior finishes.
- After Phase I is complete, Phase II would involve a similar phasing sequence of demolition of the existing Cole Middle School; remediation, excavation and fill of the remaining southerly one-third of the site, site grading and prep for paving; paving of the new parking lot; and exterior finishes and landscape.

Construction is expected to take place Mondays through Fridays, during the hours of 7:00 a.m. to 7:00 p.m. (consistent with the provisions of the City of Oakland Planning Code). Specific information on numbers and types of construction equipment to be used per phase is not available, but pile driving is not proposed as a method of construction. Typical construction noise levels for the different phases of construction (at a distance of 50 feet) are shown in **Table 7**. Using these typical noise levels for the construction of office buildings, noise from the Project's construction may reach between 75 to 89 dBA Leq at a distance of 50 feet. During the most intense soil export and import construction phases, loaders, backhoes and haul trucks will all be in full operation for periods of between one and three weeks at a time, and construction noise during these periods could exceed 89 dBA at 50 feet.

Table 7: Typical Ranges of Construction Noise for a Low-Rise Office Building (dBA Leq at 50 Feet)

	Maximum	Minimum
Ground Clearing	84	84
Remediation/Excavation	89	79
Foundations	78	78
Building Erection	87	75
Finishing	89	75

Maximum = All pertinent equipment present at site.

Minimum = Minimum required equipment present at site.

Source: US EPA, Legal Compilation on Noise, Vol. 1, p. 2-104, 1973

Residential property lines nearest the site are located about 170 feet east and west of the approximate center of construction. At this distance, construction noise levels may reach 64 to 78 dBA Leq during busy periods of construction, when multiple pieces of equipment are in operation. This would result in an increase of between 6 to 20 dBA over the existing daytime ambient noise level of 58 to 69 dBA Leq at these residences. During the most intense soil export and import construction phases, haul trucks will be operating along the public streets (as near as 50 feet form adjacent residences) and construction noise during these periods could exceed 89 dBA.

The nearest non-residential property lines are located at the Wade Johnson Playground about 250 feet north of the approximate center of construction, and at the Oakland Housing Authority office building about 300 feet south of the approximate center of construction. Noise levels during busy periods of construction with multiple pieces of equipment in operation may reach 61 to 75 dBA Leq at the Wade Johnson Playground, and 59 to 73 dBA Leq at the Oakland Housing Authority office building. This would result in an increase of up to 10 dBA over the existing daytime ambient noise level of 64 to 75 dBA Leq at Wade Johnson Park, and an increase of 6 to 20 dBA Leq over the existing daytime ambient noise level of 53 to 64 at the Oakland Housing Authority office building.

Mitigation Measures

The following mitigation measures are recommended to reduce construction noise, to limit construction hours, and to minimize disruption and annoyance during the construction process:

Mitigation Measure Noise-1, Construction Days/Hours: The Project's construction schedule should comply with the following restrictions concerning construction days and hours:

1. Construction activities should be limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that extreme noise generating activities greater than 90 dBA and soil import and export operations shall be limited to between 8:00 a.m. and 4:00 p.m. Use of concrete saws shall be limited to the hours between 8:00 am and 4:00 pm on weekdays.
2. Construction activities should be limited to between 9:00 a.m. and 5:00 p.m. on Saturday, but only within the interior of the building with the doors and windows closed.
3. No construction is allowed on Sunday or federal holidays.
4. Any construction activity proposed outside of the above days and hours for special activities (potentially such as the longer-duration soil export and import operations) shall be evaluated on a case-by-case basis by the District, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby

residents'/occupants' preferences. The District shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours.

Mitigation Measure Noise-2, Construction Noise Control Best Management Practices (BMPs): The District and the District's contractor should implement best management practices (BMPs) for noise reduction to reduce construction noise to the extent practical. Noise reduction BMPs include, but are not limited to the following

1. Equipment and trucks used for construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds), wherever feasible.
2. Impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. These types of mufflers can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.
3. Use electrical power instead of generators, where feasible.
4. Locate stationary noise sources as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers or use other measures to provide equivalent noise reduction. Stage large equipment, compressors or generators at least 25 feet from the site perimeters when work is not being done near these uses.
5. The noisiest phases of construction should be limited to less than 10 days at a time. Exceptions may be allowed if the District determines an extension is necessary and all available noise reduction controls are implemented.
6. Construction activities should be conducted in a manner that minimizes the noise impact at the adjacent property boundaries wherever possible. Construction equipment shall be positioned as far from noise sensitive receptors as possible.
7. Prohibit unnecessary idling of internal combustion engines.
8. Erect temporary plywood noise barriers around the construction site during the loudest construction phases (ground clearing and excavation).

Mitigation Measure Noise-3, Noise Monitoring and Complaint Response: The District should establish and implement a set of procedures for responding to complaints received pertaining to construction noise, and implement these procedures during construction. These procedures should include:

1. Notify property owners and occupants located within 300 feet of construction activities at least 14 calendar days prior to commencement of construction.
2. Designate an on-site construction complaint and enforcement manager for the project.
3. Post a large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures and phone numbers for the complaint manager.
4. Construction noise monitoring should be undertaken if reliable noise complaints are received during demolition, excavation and/or construction activities.

Resulting Level of Significance

Implementation of the above mitigation measures would reduce construction noise levels emanating from the site, limit construction hours, and minimize disruption and annoyance. The use of noise control BMPs is anticipated to reduce construction noise levels by 5 to 10 dBA. With implementation of these controls and recognizing that noise generated by construction activities would occur over a temporary period, the temporary increase in ambient noise levels would be less than significant.

Based on applicable City of Oakland standards, construction noise impacts are considered significant if construction activities exceed the noise performance standards of the City Noise Ordinance for more than 10 days. These standards are 70 dBA at commercial land uses and 65 dBA at residential uses, during weekday daytime hours. The City of Oakland Noise Ordinance allows for an exemption from these standards if an acoustical analysis is performed that identifies measures to reduce potential impacts. Since an acoustic analysis has been performed for the Project and mitigation measures have been identified, an exception from these standards is warranted.

Permanent Noise from On-Site Operations

Operational noise sources proposed with the Project include mechanical equipment, parking, and testing of an emergency backup generator.

Mechanical Equipment

Heating, ventilation and air conditioning (HVAC) equipment for the Project would include a variable refrigerant flow (VRF) system of outdoor heat pumps and interior fan coil units. Typical VRF heat pumps for office buildings of this size would generate noise levels around 58 to 68 dBA at a distance of 3 feet. Noise from mechanical equipment would typically drop off at a rate of about 6 dBA per doubling of distance. Outdoor heat pumps would be located on the building rooftop. For rooftop equipment, shielding from the rooftop and additional screens would be anticipated to provide 10 to 15 dBA of noise reduction, assuming the screen/rooftop would be constructed without any gaps or cracks. Any sound barriers should have a minimum surface weight of 3 pounds per square foot (such as 1-inch-thick wood, ½-inch laminated glass, masonry block, concrete, or metal one-inch).

The property lines for residential and civic land uses nearest to the likely locations for HVAC equipment are located at residences approximately 65 feet to the west, residences approximately 70 feet to the east, and the Wade Johnson Playground approximately 20 feet to the north. One commercial use, the Oakland Housing Authority office building, is located approximately 250 feet to the south. The most restrictive standard for operational noise as established in the City of Oakland Noise Ordinance limits operational noise sources at receiving residential and civic land uses to 60 dBA L_{33} during daytime hours, and 45 dBA L_{33} during nighttime hours. The L_{33} metric represents a noise level that is exceeded for one-third of any given hour (i.e., 20 minutes). Noise from HVAC equipment is stable when operating, so the average noise levels for VRF heat pumps can be applied to this standard.

Without considering shielding and attenuation from rooftops and parapet walls, noise from VRF heat pumps would not be expected to exceed 45 dBA beyond a distance of 46 feet from the equipment, or to exceed 60 dBA beyond a distance of 11 feet from the equipment. VRF equipment would not exceed daytime noise limits at any surrounding land uses. Under worst-case placement conditions, nighttime operation of VRF equipment could potentially exceed the noise limit of 45 dBA L_{33} at the Wade Johnson Playground. However, the City of Oakland Parks and Recreation Advisory Commission has established park hours at the Wade Johnson Playground to be from dawn to dusk, and therefore the park would not be used during nighttime hours.

This is a less than significant impact.

Generator Testing

A data center used by OUSD would be relocated from the existing Cole Middle School building to the new building. Continuous operation of data centers is ensured through use of emergency backup generators. The Project proposes to include a 150 kW Cummins QSB7-G5 diesel backup generator at the southwestern corner of the site. The generator would be housed in a level-2 sound enclosure and surrounded by a 12-inch thick, 15-foot high CMU wall. Testing of generators is typically considered an operational noise source.

Sound data for the generator was made available and analyzed. When equipped with the level-2 sound enclosure, testing of the generator at full capacity would result in a noise level of 73 dBA at a distance of 23 feet. Based on noise modeling in SoundPLAN, the 15-foot CMU wall surrounding the generator is anticipated to provide a noise reduction of about 17 dBA, resulting in a noise level during testing at full capacity of 56 dBA at a distance of 23 feet. The nearest noise-sensitive land uses to the generator are residences to the west and south, with property lines located approximately 75 feet from the center of the generator enclosure. At this distance, noise from generator testing is anticipated to reach approximately 47 dBA. Generator testing is typically only conducted during daytime hours and for a period of 15 minutes to two hours. With the level-2 sound enclosure and 15-foot CMU wall surrounding the generator, noise from generator testing would not exceed any daytime noise limits set in the City of Oakland Noise Ordinance.

This is a less than significant impact.

Parking Lot

Two parking lots totaling approximately 100 spaces would be located at the site, including one small lot near the entry and one larger lot along 10th Street. The parking lots would be located approximately 70 feet from the property lines of the nearest noise-sensitive land uses, which include residences to the east and west and the Oakland Housing Authority office building to the south.

Noise sources associated with the use of the parking lots would include vehicular circulation, engines, car alarms, squealing tires, door slams, and human voices. The sound of engines starting, doors slam closing, and people talking in a parking lot typically reach maximum levels of 50 to 60 dBA L_{max} at a distance of 50 feet. Parking lot noise would generate maximum noise levels in the range of 47 to 57 dBA L_{max} at a distance of 70 feet, not taking any shielding from terrain into account. The hourly average noise level resulting from all these noise-generating activities in the Project's parking lots would be anticipated to reach 40 dBA Leq at a distance of 50 feet from the parking areas. This parking lot noise would likely occur multiple times throughout the day, including:

- Between 8:30 and 9:30 a.m., when as many as 70 office employees and approximately 100 students for morning Adult/Continuing Ed. classes arrive
- Between noon and 1:00 p.m., when 100 students attending morning Adult/Continuing Ed. classes depart, and 100 other students for afternoon Adult/Continuing Ed. classes arrive
- Between 3:30 and 4:30 p.m., when 100 students for afternoon Adult/Continuing Ed. classes depart
- Between 5:00 and 6:00 p., when 70 office employees depart, and 175 students for evening Adult/Continuing Ed. classes arrive
- Between 7:30 and 8:30 p.m., when 175 students for evening Adult/Continuing Ed. classes depart

However, the maximum noise levels generated in the parking lots at each of the daytime use periods would be lower than existing maximum noise levels generated by the California Cereal Products industrial site, and would be below the daytime threshold established by the City of Oakland Noise Ordinance. The parking lot noise generated during the evening hours would also be below the maximum

allowable noise levels (in dBA Leq) established by the City of Oakland Noise Ordinance, which are 60 dBA L_{33} (or for 20 minutes) during a 1-hour period during the daytime between 7:00 a.m. and 10:00 p.m.

This is a less than significant impact.

Permanent Noise Increases from Project Traffic

Trip generation numbers were provided for the Project by Fehr & Peers, transportation consultants for this CEQA document. Traffic noise increases resulting from daily operations and peak hour operations were modeled in the Federal Highway Administration's (FHWA) Traffic Noise Model 2.5 (TNM). Based on traffic noise modeling, the Project may generate a traffic noise level of approximately 53 dBA Leq at 50 feet during the most busy p.m. peak-hour period (between 5:00 and 6:00), when 70 office employees depart and as many as 175 students for evening classes arrive.

When added to measured ambient noise levels of 59 dBA Leq at 5:00, the Project's traffic noise results in a combined ambient noise level of 60 dBA Leq, or a 1 dBA increase. When added to measured ambient noise levels of 62 dBA Leq at 6:00, the Project's traffic noise results in a combined ambient noise level of 62.5 dBA Leq, or a 0.5 dBA increase. Conservatively assuming a similar traffic noise generated by the Project during the evening departure time of 8:00, when the measured ambient noise level is only 57 dBA Leq, the Project's traffic noise results in a combined ambient noise level of 58.5 dBA Leq, or a 1.5 dBA increase. Under any of these peak period conditions, Project-generated traffic would not result in noise increases above the City's threshold of a 3-dBA increase.

Traffic resulting from earlier daily operations would not measurably increase noise levels in vicinity, as the ambient noise is dominated by industrial noise, and relatively small increases in roadway traffic would not be noticeable above the dominant industrial noise from the California Cereal Products facility.

This is a less than significant impact.

Exposure to Excessive Groundborne Vibration

Construction of the Project may generate perceptible vibration when heavy equipment or impact tools (e.g. jackhammers, hoe rams, etc.) are used in areas adjacent to developed properties. Construction activities would include demolition of existing structures, excavation, parking lot renovation and new construction.

The California Department of Transportation recommends a vibration limit of 0.3 in/sec PPV for buildings that are found to be structurally sound and designed to modern engineering standards, and a vibration limit of 0.25 in/sec PPV for historic and older buildings. The nearest historic building to the site is the Herbert Hoover House (an Oakland Landmark) located approximately 1,000 feet to the east at 1079 12th Street.

Project construction activities such as excavation, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, large haul trucks, compactors, etc.) may generate vibration in the immediate vicinity of the work area. **Table 8** presents typical vibration levels that could be expected from different types of construction equipment at a distance of 25 feet, and calculated vibration levels at distances representative of nearby structures. Pile driving would not be used as a method of construction for the Project.

Table 8: Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft. (in/sec)	PPV at 55 ft. (in/sec)	PPV at 75 ft. (in/sec)	PPV at 1,000 ft. (in/sec)
Clam shovel drop		0.202	0.085	0.060	0.003
Hydromill (slurry wall)	in soil	0.008	0.003	0.002	0.000
	in rock	0.017	0.007	0.005	0.000
Vibratory Roller		0.210	0.088	0.063	0.004
Hoe Ram		0.089	0.037	0.027	0.002
Large bulldozer		0.089	0.037	0.027	0.002
Caisson drilling		0.089	0.037	0.027	0.002
Loaded trucks		0.076	0.032	0.023	0.001
Jackhammer		0.035	0.015	0.010	0.001
Small bulldozer		0.003	0.001	0.001	0.000

Source: Transit Noise and Vibration Impact Assessment, United States Department of Transportation, Office of Planning and Environment, Federal Transit Administration, September 2018 as modified by Illingworth & Rodkin, Inc., April 2022

Vibration levels would vary depending on soil conditions, construction methods and equipment used. Residences are located as close as about 55 feet from the eastern property line of the site and 75 feet from the western and southern property lines of the site. At these distances, vibration levels resulting from the heaviest equipment use (clam shovel drop and vibratory rollers) would be expected to be about 0.085 to 0.088 in/sec PPV, which would be well below the 0.3 in/sec PPV limit recommended by the California Department of Transportation. Vibration levels at the historic Herbert Hoover House (about 1,000 feet away) are not expected to exceed 0.004 in/sec PPV and would not exceed any recommended limits.

This is a less than significant impact.

Airport Noise

The Project site is not subject to excessive noise from private airstrips, public airports or overhead aircraft. The nearest airport is the Oakland International Airport, about 6.5 miles to the southeast. Noise contours generated by aircraft arrival and departures at this airport do not extend as far as the Project site, and this would not be an impact for the Project.

Suitability of the Exterior Noise Environment (on-CEQA analysis)

CEQA does not require analysis or mitigation of effects that the existing environment may have on a project (with certain exceptions). Accordingly, this CEQA document presents the following analysis of the effects that ambient noise conditions may have on the Project for informational purposes, and to address questions of General Plan policy consistency, but does not identify these effects as significant impacts of the Project pursuant to CEQA.

The exterior noise environment at the Project site is primarily the result of operations at the California Cereal Products industrial facility. This analysis assumes that noise resulting from activity at this industrial site will continue in the future, and not substantially change from existing measured levels. Based on measurement data, noise levels throughout the site are dependent on distance from the industrial site to the north. Noise levels range from 62 dBA Ldn along the southern property line and increase to about 74 dBA Ldn along the northern property line, and the center of the proposed Cole Administration/Education building would fall in the range of about 68 dBA Ldn. This is within the 'conditionally acceptable' range of noise levels specified for school and office land uses per the State of California General Plan Guidelines (OPR, 2003) and per the City of Oakland General Plan.

Exterior Noise

Project plans indicate the potential for a small playground space at the northeastern corner of the site. This location is next to the existing Wade Johnson Playground. Given the proximity of the California Cereal Products industrial site, mitigating outdoor noise at this play space, particularly at the northern end of the Project site, is not practical. To adequately shield the playground space from ambient industrial noise such that the day-night noise level would not exceed the 'normally acceptable' criterion of 65 dBA Ldn, the playground would have to be substantially (if not fully) enclosed. Revising the site plan to relocate the playground to the southern end of the site along 10th Street would have the potential to reduce the noise level to below the 65-dBA Ldn criterion, but would diminish the function of the playground by no longer being adjacent to the Wade Johnson Playground and may also be considered impractical. No exterior noise mitigation is available, but it is worth noting that the Wade Johnson public park does not provide noise mitigation either.

Interior Noise Environment

The Cal Green Code requires that interior noise levels attributable to exterior sources not exceed 50 dBA Leq (1-hr) in occupied areas of non-residential uses during any hour of operation. Based on the results of the noise monitoring survey, peak-hour noise levels at the site are about 3 dBA higher than day-night average levels, and range between 65 dBA Leq (1-hr) at the southern end of the site to 77 dBA Leq (1-hr) at the northern end of the site. The greatest noise exposure would occur along the northern façades of the Proposed Cole Administration/Education building. Floorplans for the first and second floors indicate that rooms along the northern façades of the proposed building would include noise-sensitive uses such as offices, conferences rooms, and classrooms.

Noise levels along the northern façades of the building during the peak hour are expected to reach up to 77 dBA Leq (1-hr). A minimum exterior-to-interior noise reduction of 27 dBA would be required to ensure compatibility with the Cal Green Code standard of 50 dBA Leq (1-hr). Standard office construction with windows in the closed position typically provides for a noise reduction of about 25 dBA, with noise-rated construction materials being required to achieve a greater reduction. Preliminary calculations were made based on building elevations. Rooms near the center of the northern façade would feature large windows resulting in a window-to-wall ratio of up to 48%. Considering this and metal panel exterior wall construction, windows with a minimum Sound Transmission Class (STC) rating of 30 would be required along the northern façade of the Cole Administrative/Education Center building in order to provide the noise reduction necessary to meet the Cal Green Code standard of 50 dBA Leq (1-hr). Due to shielding provided by the proposed building and attenuation resulting from an increased distance from the California Cereal Products industrial site, noise levels along eastern, western, and southern façades of Project buildings are not expected to exceed 75 dBA Leq (1-hr), and therefore standard construction with windows in the closed position would be sufficient. Forced-air mechanical ventilation would be required to allow occupants to keep windows closed to control noise. The Project has no proposed operable windows.

Recommended Measures

Non-CEQA Recommendation Noise-4, Ventilation System for Closed Windows: Provide all occupied areas of the proposed building with a forced-air mechanical ventilation system to allow windows to be closed to control noise at the occupant's discretion.

Non-CEQA Recommendation Noise-5, Sound-Rated Building Treatments: Special building techniques (e.g., sound-rated windows and building façade treatments) are required to maintain interior noise levels along the northerly façade of the building at or below acceptable levels.

1. These treatments would include, but are not limited to, sound-rated windows and doors, sound-rated wall construction, acoustical caulking, and protected ventilation openings.

2. Preliminary calculations indicate that rooms located along the northern façade of the proposed building would require windows with a minimum STC rating of 30 to ensure that the 50 dBA Leq (1-hr) Cal Green Code standard is met.

Population and Housing

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	❒	❒	■	❒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	❒	❒	❒	■

Population Growth

The Project would provide new building space to accommodate OUSD administrative staff and educational classrooms that are currently occupying other office or school space within the city. The Project offers an opportunity to consolidate its administrative function into one coordinated location, and to free-up other classroom space currently used for the Adult and Career Education program for other OUSD functions. The Project would not induce substantial unplanned population or employment growth, and the impact on population growth would be less than significant.

Housing

The Project site contains currently unused OUSD buildings related to a former middle school, and does not contain any existing housing units or residences. The Project would not displace existing housing or people, would not require construction of replacement housing elsewhere, and no impact would occur.

Public Services

Would the Project	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services?				
a) Fire protection	❒	❒	■	❒
b) Police protection	❒	❒	■	❒
c) Schools	❒	❒	■	❒
d) Parks	❒	❒	■	❒
e) Other public facilities	❒	❒	■	❒

Public Services

Development of the Project would slightly increase the demand for local fire and police service and result in an associated increase in service calls, but not to an extent that would result in the need for new or physically altered fire or police protection facilities. The Project would be subject to the policies, regulations, and standards of the City of Oakland, including appropriate standards for emergency access roads, emergency water supply, and fire preparedness, capacity, and response. The Project would not substantially increase the permanent population and would not substantially affect other public services such as schools or libraries. Impacts related to public services would be ***less than significant***.

Recreation

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	❒	❒	■	❒
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	❒	❒	■	❒

Recreational Facilities

Development of the Project would not result in a substantial increase in the demand for recreational facilities. The Project includes no new housing, and users of the Project's OUSD offices and Oakland Adult and Career Education classrooms would not be expected to use the adjacent Wade Johnson Park for purposes other than periodic light recreation or leisure purposes. These types of limited uses of the adjacent park would not result in substantial physical deterioration of the park, or accelerate deterioration of the park.

The Project does not include construction of large-scale recreational facilities or require the expansion of recreational facilities. Therefore, the Project would have a less than significant impact on recreation facilities, or on the physical environment resulting from construction or expansion of recreational facilities.

Transportation

Since OUSD does not have its own thresholds of significance, this document relies on the following City of Oakland's thresholds of significance to determine if the Project would have a significant impact on the environment: **Would the Project:**	**Potentially Significant Impact**	**Less Than Significant With Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Cause substantial additional VMT per capita, per service population, or other appropriate efficiency measure?				
b) Conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths (except for automobile level of service or other measures of vehicle delay)?				
c) Substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new roadways to the network?				

Information for this section of the Initial Study has been derived from the following primary source:

- Fehr & Peers, Cole Administrative Center/Education Project – Transportation Assessment, April 25, 2022 (**Appendix K**)

Trip Generation

Trip generation is the process of estimating the number of motor vehicles that would likely access the Project on a typical day. **Table 9** summarizes the trip generation for the Project. Overall, the Project is estimated to generate about 710 daily trips, and 94 AM and 133 PM peak hour trips on a typical weekday. The trip generation characteristics for the Project on a typical weekday are described below.

- *Adult and Career Education Program* – Since applicable published data for this type of use is not available, the trip generation is estimated based on the expected number of students and faculty at the site, with full occupancy of the site as described in the Project Description.
- *Administrative Office Uses* - Trip generation data published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual* (11th Edition) for School District Office is used to estimate the trip generation for the administrative office uses.

Table 9: Project Automobile Trip Generation Summary

Land Use	Size	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
			In	Out	Total	In	Out	Total
Adult and Career Education Program[1]	375 students and faculty	940	100	10	110	175	18	193
Administrative Office[2]	27,400 square feet	400	50	16	66	10	47	57
Subtotal		*1,340*	*150*	*26*	*176*	*185*	*65*	*250*
Non-Auto Reduction[3]		*-630*	*-70*	-12	-82	-87	-30	-117
Adjusted Total Automobile Trips		**710**	**80**	**14**	**94**	**98**	**35**	**133**

Notes:

1. Based on the following assumptions:

Daily: assume 2.5 trips per person per day
AM Peak Hour: all morning class attendees arrive and about 10 percent leave during the AM peak hour
PM Peak Hour: all evening class attendees arrive and about 10 percent leave during the PM peak hour

2. ITE Trip Generation (11th Edition) land use category 538 (School District Office, General Urban/Suburban):

Daily: T = 14.72 * X -6.60
AM Peak Hour: T = 2.50 * X – 2.81 (76% in, 24% out)
PM Peak Hour: T = 2.19 * X – 2.81 (17% in, 83% out)

3. Reduction of 46.9% assumed, based on City of Oakland TIRG, based on Census data for an urban environment within 0.5 miles of a BART station.

Source: Fehr & Peers, 2022

The estimated trip generation for the Adult and Career Education Program assumes that all students and faculty would drive to and from the site. In addition, the ITE data is primarily based on data collected at single-use suburban sites where the automobile is often the only travel mode. However, the Project site is located near local and regional transit service in an area where many trips are walk, bike, or transit trips. Since the Project is about 0.5 miles from the West Oakland BART Station, this analysis reduces the trip generation by 47 percent to account for the non-vehicular trips. This adjustment is consistent with the City of Oakland's *Transportation Impact Review Guidelines* (TIRG, April 2017) and is based on US Census commute data for Alameda County from the 2014 5-Year Estimates of the American Community Survey (ACS), which shows that the non-automobile mode share for urban areas within 0.5 miles of a BART Station is about 47 percent.

Parking Demand

Table 10 summarizes the estimated parking demand for the Project site on a typical weekday based on the maximum occupancy of the site as described in the Project Description and the number of people expected to drive to and from the site as described in the Trip Generation section of this memorandum. It is estimated that the 93 off-street parking spaces provided by the Project would meet the parking demand generated by the Project employees and students during both daytime and nighttime on a typical weekday. It is expected that the site visitors would use on-street parking on the adjacent streets because the Project parking lots would be at or near capacity when the site is fully occupied.

Table 10: Project Automobile Parking Demand Summary

Use	Daytime		Nighttime	
	Population[1]	Parking Demand[2]	Population[1]	Parking Demand[2]
Adult and Career Education Program	100	53	175	93
Administrative Office	70	37	0	0
Total	170	90	175	93
Parking Supply		93		93
Parking Surplus		+3		0

Notes:

1. Population estimates provided by OUSD

2. Assuming that 53 percent of the population would drive to the site, consistent with the City of Oakland TIRG, using Census data for an urban environment within 0.5 miles of a BART station

Source: Fehr & Peers, 2022

Cause Substantial Additional Vehicle Miles Traveled

According to the City of Oakland TIRG, the following are thresholds of significance related to substantial additional VMT:

- For residential projects, a project would cause substantial additional VMT if it exceeds existing regional household VMT per capita minus 15-percent.
- For office projects, a project would cause substantial additional VMT if it exceeds the existing regional VMT per worker minus 15-percent.
- For retail projects, a project would cause substantial additional VMT if it results in a net increase in total VMT

Consistent with the State Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018), City of Oakland uses screening criteria that can be used to quickly identify projects that can be expected to cause a less-than-significant impact on VMT without conducting a detailed study. The City of Oakland TIRG includes several screening criteria. The criterion applicable to the Project is Criterion #2, Low-VMT Area, which states that VMT impacts would be less-than-significant for a project if the following screening criterion is met:

- Low-VMT Areas: The project meets map-based screening criteria by being located in an area that exhibits below-threshold VMT, or 15 percent or more below the regional average.

The City of Oakland uses the Metropolitan Transportation Commission (MTC) Travel Model to apply the Low-VMT Areas criterion. The MTC Travel Model assigns all predicted trips within, across, or to/from the nine-county San Francisco Bay Area region onto the roadway network and the transit system by mode (single-driver and carpool vehicle, biking, walking, or transit) and transit carrier (bus, rail) for a particular scenario. The MTC Travel Model estimates VMT per resident and VMT per worker for transportation analysis zones (TAZs) throughout the modeled area. TAZs are geographic areas that vary in size from a few city blocks in dense downtown areas, to larger geographic areas in lower-density areas.

The City of Oakland TIRG recommends treating educational land uses (K-12 schools and post-secondary institutions) as office uses for VMT screening and analysis. The VMT per worker, as estimated by the MTC Model, is applicable to both Project components (the Adult and Career Education Program and the Administrative Office).

Table 11 shows the estimated VMT per worker for TAZ 985, the TAZ in which the Project is located. This table also shows the applicable VMT threshold as being 15 percent below the regional average. The average daily VMT per worker in the Project TAZ (TAZ 985) is 17.8 miles. The regional average daily VMT per worker is 21.8 miles, and the threshold (15 percent below the regional average) is 18.5 miles. The average daily VMT per worker in the Project TAZ (17.8 miles) is more than 15 percent below the regional average, satisfying the Low-VMT Area criterion. In addition, the Adult and Career Education Program component of the Project would continue to serve primarily West Oakland and the surrounding areas. Since OUSD operates similar Adult and Career Education Programs at other sites throughout the City of Oakland, the Project is considered local serving.

Table 11: Project VMT Summary

Geographic Area	Total VMT per Worker (2020)[1]
Project TAZ (TAZ 985)	17.8
Bay Area Region Average	21.8
Bay Area Region Average minus 15% (i.e., threshold of significance)	18.5
Significant Impact?	***No***

Notes: 1. MTC Model results at www.arcgis.com/apps/webappviewer/index.html?id=98463b4f73ca43c5944a5c30648fd689 , accessed in March 2022

Source: Fehr & Peers, 2022

Since the Project would satisfy the City of Oakland's Low-VMT Area criterion, and the Adult and Career Education Program component of the Project is considered local serving, the Project is presumed to have a less-than-significant impact on VMT.

Conflicts with Plans, Ordinances or Policies Relating to Circulation System Safety or Performance

The Project would not cause a significant impact by conflicting with adopted plans, ordinances or policies addressing the safety and performance of the circulation system, including transit, roadways, bicycle lanes and pedestrian paths.

Various City of Oakland's plans and policies, such as the City's General Plan, the Equitable Climate Action Plan, and the Public Transit and Alternative Mode and Complete Streets policies, state a strong preference for encouraging the use of non-automobile transportation modes such as transit, bicycling and walking. The Project would encourage the use of non-automobile transportation modes by being located in a medium-density, walkable urban environment and within 0.5 miles of both local and regional transit. It is expected that more than half of the Administrative Office employees assigned to the Project would work remotely on typical weekdays, further reducing the automobile trips generated by the Project.

The Project would not make any modifications to the existing pedestrian or bicycle facilities in the surrounding areas, including the existing BayWheels bike-share station located on Union Street along the Project frontage just north of 10th Street. Although the 2017 City of Oakland Pedestrian Master Plan (Oakland Walks!) and the 2019 Oakland Bike Plan (Let's Bike Oakland) do not identify any future facilities along the streets adjacent to the Project, the Project would not adversely affect installation of any planned facilities. The Project would not make any major modifications to the public right-of-way or include features that would adversely affect installation of potential facilities in the future. The Project

would provide long-term bicycle parking for Project employees within the Project building, and short-term bicycle parking for students and visitors in the form of bike racks in the Project parking lot.

Project construction activities could potentially temporarily disrupt transportation, bicycle, and/or pedestrian movement, as well as reduce parking availability in the Project area.

Mitigation Measures

The following mitigation measures are recommended to address temporary disruptions in transportation during the construction and soil remediation process:

Mitigation Measure Transportation-1, Traffic Control Plan: The District shall prepare and implement a Traffic Control Plan during the construction and soil remediation process. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle and pedestrian accommodations (or detours, if accommodations are not feasible). These traffic control measures should include an overall construction logistics plan with designated construction access routes, construction worker parking plan and construction phasing plan, proposed truck routes, detour signage and lane closure procedures (if required), signs or cones for driver safety, and a pedestrian safety plan. The Traffic Control Plan shall be in conformance with the City of Oakland's Supplemental Design Guidance for Accommodating Pedestrians, Bicyclists and Bus Facilities in Construction Zones.

Resulting Level of Significance

Implementation of the above mitigation measure would ensure that the Project construction activities would not excessively disrupt motor vehicle, bicycle, and/or pedestrian circulation, and this impact would be reduced to a level of less than significant.

The Project is otherwise consistent with applicable transportation plans, ordinances and policies. The Project would have a less than significant impact pertaining to conflicts with other adopted transportation plans, ordinances or policies.

Substantially Induce Automobile Travel

The Project would not modify the roadway network surrounding the Project site. Therefore, the Project would not substantially induce additional automobile travel by increasing the physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes). The Project would not add new roadways to the network, and would have a less-than-significant impact on inducing additional automobile traffic.

Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	❒	❒	■	❒

Tribal Cultural Resources

The Project site is not listed or identified as eligible for listing in the California Register of Historical Resources or in a local register of historical resources as a known location of significant tribal cultural resources. The District (as Lead Agency) is not aware of any substantial evidence that would support a determination that the site is considered a significant resource to a California Native American tribe.

Pursuant to this CEQA documentation, the District's consultant requested a search of the Native American Heritage Commission's Sacred Lands File, and that search concluded with a positive result for the Project area (see **Appendix C**). If a Sacred Lands Inventory search has a positive result, the NAHC provides a list of California Native American Tribes that have traditional and cultural affiliation to the area, so that the CEQA lead agency may consult with the Tribes on the Project. Pursuant to AB 52, the District's consultant's conducted outreach (via letters dated February 12, 2020 – see Appendix C) to those Native American Tribes listed as traditionally and culturally affiliated to the Project area. Follow up calls were made on February 18, 2020, all with no response. To date, no requests for consultation have been received from the tribes, and no tribal concerns or tribal cultural resources have been identified. [33]

Mitigation Measures

In the unlikely event of tribal cultural resources being discovered during the Project's grading and construction period, the following mitigation measures would be required:

[33] PaleoWest Archaeology, "Archaeological Review in Support of the Central Administration Center at Cole Campus, Alameda County, California", March 9, 2020 (Appendix C)

Mitigation Measure Cultural-2: Inadvertent Discoveries (see Cultural Resource section of this Initial Study)

Mitigation Measure Cultural-3: Inadvertent Discovery of Human Remains (see Cultural Resource section of this Initial Study)

1. The County Coroner, upon recognizing any remains as being of Native American origin, is responsible to contact the NAHC within 24 hours. The Commission has various powers and duties, including the appointment of a Most Likely Descendant (MLD) to the Project. The MLD, or in lieu of the MLD, the NAHC, has the responsibility to provide guidance as to the ultimate disposition of any Native American remains.

Utilities and Service Systems

Would the Project	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	❒	❒	■	❒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	❒	■	❒	❒
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	❒	❒	■	❒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	❒	■	❒	❒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

Construction of New Utilities and Connections

Water

The Project would install a new 3" water service to provide domestic potable water to the new building. This water service line would be connected via an existing 4" water meter for domestic water point of connection to the existing 8" water main within the 10th Street right-of-way.

Water needed for fire service would include construction of a new 6" fire service water line providing fire service water to the new building, connected to the existing 8" water main within the 10th Street right-of-way. The Project would also include installation of 4 new fire hydrants. These new hydrants include 2 fire hydrants along Union Street connected to an existing 8" water main in Union Street, 1 hydrant connected to the existing 8" water main in 10th Street, and installation of a 6' water main extension from 10th Street to Poplar Street, to serve a new fire hydrant off Poplar Street.

Water service to provide outdoor irrigation needs for the Project would be provided via a connection to an existing 2" water meter, which is currently connected to the existing 8" water main within the 10th Street right-of-way.[34]

[34] Shah Kawasaki Architects and Siegfried Engineers, Utility Plan, Sheet C-105 of Central Administration Center at Cole Campus submittal to State Architects, February 19, 2021

Sanitary Sewer

The Project would install two sanitary sewer lines under the on-site sidewalk along Poplar Street, including a 6" sewer line from the south and a 3" sewer line from the north. Both of these new sanitary sewer lines would connect to an existing 10" sanitary sewer main within the Poplar Street right-of-way.

Storm Drain

Pursuant to NPDES c.3 requirements, the Project includes a stormdrain system that captures stormwater form rooftops and hardscape surfaces, and directs this stormwater through a series of biofiltration basins for water quality treatment prior to discharge into the existing storm drain mains. The stormdrain system flows in two separate directions based on the final grade of the Project site. One system serves the southerly portion of the site and another system serves the northerly portion of the site. After stormwater receives water quality treatment, flows from the southerly portion of the site will be routed via a new 12" stormdrain system to an existing 15" stormdrain main in the 10th Street right-of-way. Flows from the northerly portion of the site will be routed via new stormdrain lines to an existing 12" stormdrain main at the northeast corner of the site at Union and 12th Street.

Electrical and Communications Service

All electrical, telephone and cable service to the Project will be provided via new connections to existing underground lines, generally located below the Union Street right-of-way.

Regulatory Requirements

All work within the public right-of-way necessary to provide connections to existing utility services will require an encroachment permit, issued by the City of Oakland. Contractors will be required to obtain such permits prior to working within the public right-of-way. All of these new utility services will also require on-site trenching to route new underground pipes and conduits. Trenching must be conducted in compliance with the DTSC-approved Remedial Action Workplan to ensure protection of workers and the environment from contaminated soil and groundwater. All new water and firewater service shall conform to all applicable East Bay MUD specifications, and the contractors are required to coordinate with EBMUD prior to making connections to the existing water mains. All other on-site utilities would be designed and connected in accordance with applicable codes and current engineering practices.

With implementation of all regulatory requirements related to installation utilities and service systems, impacts associated with the relocation or construction of new or expanded utility service facilities would be less than significant.

Water Supply

CEQA Guidelines section 15155 requires preparation of a Water Supply Assessment for any "water-demand project", which is defined as any project that would demand an amount of water equivalent to or greater than the amount of water required by a 500 dwelling unit project, which generally can be assumed at about 95,000 gallons per day (gpd).[35]

Based on indoor water demand factors of 52 gallons/employee/day over 225 days per year for the Project's office space, and 8.8 gallons/student/day over 180 days per year for the Project's "other" school use, the total unmitigated indoor water demands of the Project can be calculated at

[35] Assuming a total water demand of 190 gallons per day per unit (citywide average) x 500 dwelling units, a "water-demand project" is calculated as a project with a water demand of approximately 95,000 gallons per day.

approximately 6,010 gpd averaged over a year period.[36] Added to that would be the outdoor irrigation demand, averaged at approximately 905 gpd.[37] With a total average daily water demand of approximately 6,915 gpd, the Project falls far short of meeting the definition of a "water demand project", and no Water Supply Assessment is required or has been prepared. Rather, the water demands of the Project are assumed included in the EMBUD Water Supply Management Program 2040 (2040 WSMP).

According to the EMBUD Urban Water Management Plan 2015 (UWMP), EBMUD was projected to have a year 2020 annual average demand of 267 million gallons per day (MGD), and a projected demand of 290 mgd by year 2030, or an increase of approximately 23 MGD over the course of that 10-year period.[38] The Project's estimated demand of 6,915 gpd represents only about 0.03% (three one-hundredths of a percent), or a very small fraction of EBMUD's projection of increased demand. Furthermore, EBMUD's existing 2020 water demands account for a baseline of nearly 2,000 gpd at the site. [39] With a net increase in daily water demand of approximately 5,100 gpd, the Project's water demands are well within the expected increase in water demands as presented in EBMUD's UWMP.

The EBMUD's UWMP concluded that, "*EBMUD must balance supply and demand to ensure that it meets customer water needs into the future. Both supply and demand can vary seasonally, and supply can decrease significantly during droughts which can last for several years. In order to have a diversified, robust water supply portfolio, EBMUD considers a variety of scenarios in its long-term planning. In spite of EBMUD's aggressive conservation and recycling programs, Mokelumne River and local watershed supply is not sufficient to meet 2040 customer demands during multi-year droughts without achieving potentially significant water use reductions. Depending on conditions, during such droughts, EBMUD may also need to acquire supplemental supplies to meet customer demands. However, with a combination of reductions in water use and acquisition of supplemental supplies, EBMUD can provide adequate water service in all year types*." [40]

Based on the above information, the Project will have sufficient water supplies available from EBMUD to serve its water demands and those of other reasonably foreseeable future development, during normal and multiple dry years.

Mitigation Measures

As noted above, the EBMUD 2040 WSMP concludes that a combination of rationing, conservation, and raw and recycled water, plus supplemental supply components, will be needed to keep rationing at a lower level and will satisfy cumulative customer water demands through the year 2040 in drought years. The following mitigation measures are identifies to address the Project's cumulative water demands in light of current and future drought-year conditions:

Mitigation Measure Utilities-1, Water Efficient Landscape: The Project applicant shall comply with California's Water Efficient Landscape Ordinance (WELO) in order to reduce landscape water usage,

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36 Based on "Modeled" water demand factors presented in: Pacific Institute, "*Waste Not, Want Not, The Potential for Urban Water Conservation in California*", Appendix E: Details of Commercial Water Use and Potential Savings, by Sector, November 2003, for indoor uses only

37 Project Application materials, as shown on Sheet L-102, Siegfried, February 2021, based on an average of 329,543 gallons per year/365 days per year

38 EBMUD, *Urban Water Management Plan*, July 2016, Table 4-1 on page 52

39 East Bay Municipal Utility District (EBMUD), *2040 Demand Study, Water Supply Management Program 2040*, February 2009, uses 703 gpd/acre for school uses, times the 2.6-acre site, or approximately 1,830 gpd

40 EBMUD, *Urban Water Management Plan*, July 2016, page 54

including compliance with a Project-specific calculation of the Project's Maximum Applied Water Allowance.

The Project sponsor has prepared a comparison of projected irrigation water demands of the Project (estimated at 329,543 gallons per year), as compared to a Maximum Applied Water Allowance for the Project of 353,336 gallons per year, demonstrating compliance with this mitigation measure. [41]

Mitigation Measure Utilities-2, Green Building Requirements: The Project sponsor shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures for water conservation.

The Project sponsor has prepared a compliance matrix of the Project against the criteria of the California Collaborative for High Performance Schools (CA-CHPS), which demonstrates that the Project will comply with CALGreen Sections 5.303.3 and 5.303.6 regarding water demand reductions for indoor use, including a water demand reduction of at least 20%.

Resulting Level of Significance

As demonstrated above, the water provider (EBMUD) will have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years. With implementation of the Project's water demand reductions as presented in their CA-CHPS Checklist and Water Efficient Landscape calculation, the Project will further reduce its contribution to cumulative water demands, in compliance with these existing regulations. This impact is less than significant.

Wastewater Treatment

The City of Oakland's 2008 *Sanitary Sewer Design Guidelines* include average daily flow rates for specific types of development. These design standards provide that an Office use can be expected to generate 200 gpd/1,000 square feet of gross building space.[42] Based on the different types of uses within the Project, this design standard was applied separately to the office component (27,350 square feet used 225 days per year), and to the Adult Ed component (28,826 square feet, used 180 days per year). The net result is an annualized average of approximately 6,250 gpd, which is comparable to the indoor water demands of the Project as calculated above.

The EBMUD MWWTP can provide primary treatment for up to 320 MGD, and secondary treatment for a maximum flow of 168 MGD. However, the latest (year 2020) NPDES permit issued to the RWQCB limits average dry weather influent flow to the MWWTP 120 MGD. As of 2015, discharge rates from the MWWTP were approximately 53.8 MGD, leaving a potential increase of up to 66.2 MDG of discharge capacity. An increase of approximately 6,250 gpd of wastewater as generated by the Project represents a very small fraction (approximately 0.01 percent) of the remaining discharge capacity of the MWWTP. Furthermore, the Cole building was used as a middle school until 2009, and has since been occupied by various OUSD programs. The wastewater demands of the Project are assumed for this analysis as the total increase over a zero-use baseline, whereas the Project site has had wastewater flows to the MWWTP in the past. The Project's minor net increase in wastewater flows can be accommodated at the MWWTP, and is not substantial in the context of total wastewater flows processed at the MWWTP and disposed of into the Bay. EBMUD has sufficient capacity to treat and dispose wastewater flows from the Project, and construction of new wastewater treatment facilities or expansion of existing facilities would

[41] Shah Kawasaki Architects and Siegfried Engineers, Sheet L-102, of Central Administration Center at Cole Campus submittal to State Architects, 2021

[42] City of Oakland Department of Engineering and Construction, Sanitary Sewer Design Standards, August 2008, Table 1

not be needed. As such, the Project would have a less than significant impact on wastewater treatment and disposal facilities.

Regulatory Requirements / Mitigation Measures

To ensure that the Project's contribution of wet weather inflow to the treatment plant is minimized, the Project comply with EBMUD's Regional Private Sewer Lateral (PSL) Ordinance and City of Oakland ordinance for sewer laterals, by replacing or rehabilitating sanitary sewer lateral lines that serve the Project, constructed to City standards to prevent inflow and infiltration (I/I).

Storm Drainage Conveyance

Under current conditions, only about 6,675 square feet (or about 6%) of the site is covered by pervious lawn (the landscape strips surrounding three sides of the existing Cole Building), and the remaining approximately 104,345 square feet (or 94%) of the site is currently covered by impervious surfaces (i.e., the Cole Building, the Cafeteria building, the modular shed and asphalt). Under Project conditions, 23,373 square feet (or about 21%) of the site will be covered by pervious surfaces (landscaping and biotreatment areas), and the remaining approximately 87,647 square feet (or 79%) of the site will be covered by impervious surfaces (i.e., the new Cole Administration/Education Building, surface parking and sidewalks). Since the Project will be decreasing total pervious surface area on the site, the volume of stormwater runoff leaving the site will not be increased.

Whereas the existing stormdrain system is adequately accommodating existing site runoff under current conditions, this same stormdrain system will have adequate capacity to accommodate the lesser volume of site runoff under Project conditions. The impact of the Project on the surrounding stormdrain collection system will be less than significant.

Solid Waste

During construction of the Project, the demolition of existing structures and the removal of existing asphalt will result in approximately 230 truckloads of waste material to be hauled off site. During operations of the Project, new employees and students will generate waste materials, recyclables and compostable waste.

CalRecycle provides estimated solid waste generation rates (the amount of waste created by different land use types), which can be used to estimate the impact of new developments on the local waste stream. These waste generation rates include all materials discarded, whether or not they are later recycled or disposed of in a landfill. This data is not official CalRecycle information, but is useful in providing a general level of information for planning purposes. According to these cited sources, schools and offices can be estimated to generate approximately 1 pound of waste per student per day.[43] Using this waste generation rate, The Project (at 150 administrative personnel and 277 students) may generate approximately 427 pounds of waste per day.

Within Oakland, California Waste Solutions (CWS) provides recycling services, and Waste Management collects solid waste and yard trimmings. All of these materials are taken to the Davis Street Transfer Station in San Leandro, which has an average output of 2,027 tons per day.[44] The Project's incremental contribution of perhaps 427 pounds per day represents a very small fraction of the transfer station's average daily outflow. Similarly, the Altamont landfill has a permitted maximum disposal capacity of

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[43] CalRecycle, https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates , sourced to: Draft Program EIR for Rye Canyon Business Park, Santa Clarita, citing SWANA Tech. Bull. 85-6; Recovery Sciences, 1987; and Santa Clarita SRRE 1990

[44] Alameda County Waste Management Authority (ACWMA), *Alameda County Integrated Waste Management Plan, Countywide Element*, as amended 2017, pg. II-26, -27

7,000 tons per day, and the Project's minimal contribution to landfill capacity is too small to calculate. The Project's impact on the capacity of local solid waste infrastructure would be less than significant.

Regulatory Requirements / Mitigation Measures

Irrespective of the Project's individual waste disposal demands, the Project will contribute to overall waste disposal and recycling demands within the City. To address these cumulative waste disposal and recycling demands, the Project will be subject to the following regulations and mitigation measures:

Mitigation Measure Utiities-3, Construction and Demolition Waste Reduction and Recycling: The Project sponsor shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by preparing and implementing a Construction and Demolition Waste Reduction and Recycling Plan. That Plan shall specify the methods by which the project will divert construction and demolition debris waste from landfill disposal.

According to the compliance matrix prepared by OUSD for the Project against the criteria of the California Collaborative for High Performance Schools (CA-CHPS), the Project intends to achieve a 75% diversion of construction site waste from landfill disposal through recycling and other landfill disposal alternatives. The Compliance Matrix also demonstrated the District's intent to use recycled materials as part of the Project's new construction. The Project intends to use at least 20% recycled materials (as measured by overall materials cost), use rapidly recyclable materials for at least 50% for either flooring, casework, acoustic ceiling tiles or wall coverings, and use at least 50% of its wood product as FSC-certified wood.

Mitigation Measure Utilities-4, Recycling Collection and Storage Space: The Project sponsor shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). For non-residential projects, at least two (2) cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten (10) cubic feet.

Project drawings reviewed and approved by the State Architect show a trash and recycle enclosure adjacent to the main parking lot, with a total enclosure of 319 square feet. Assuming a 4-foot high collection facility, the Project would provide as much as 1,276 cubic feet of collection space, at a ratio of 5.7 square feet per 1,000 square feet of building floor area, exceeding the City requirement.

Resulting Level of Significance

The Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. The Project would comply with federal, State and local management and reduction statutes and regulations related to solid waste, and this impact would be less than significant.

Wildfire

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	❒	❒	❒	■
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	❒	❒	❒	■
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	❒	❒	❒	■
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	❒	❒	❒	■

Wildfire Risk

The Project site, which is located within an urbanized area of the City of Oakland, is not identified as within, nor is it near a Very High Fire Hazard Severity Zone (see **Figure 18**).[45] The Project site falls within a Local Responsibility Area and is under the jurisdiction of the Oakland Fire Department. The Project would have ***no impact*** related to wildfire risk and emergency response for lands in or near state Responsibility Areas or classified as Very High Fire Hazard severity zones.

[45] California Department of Forestry and Fire Protection. Fire Hazard Severity Zones Maps. Website accessed 2.28.20 at https://osfm.fire.ca.gov/media/5606/oakland.pdf

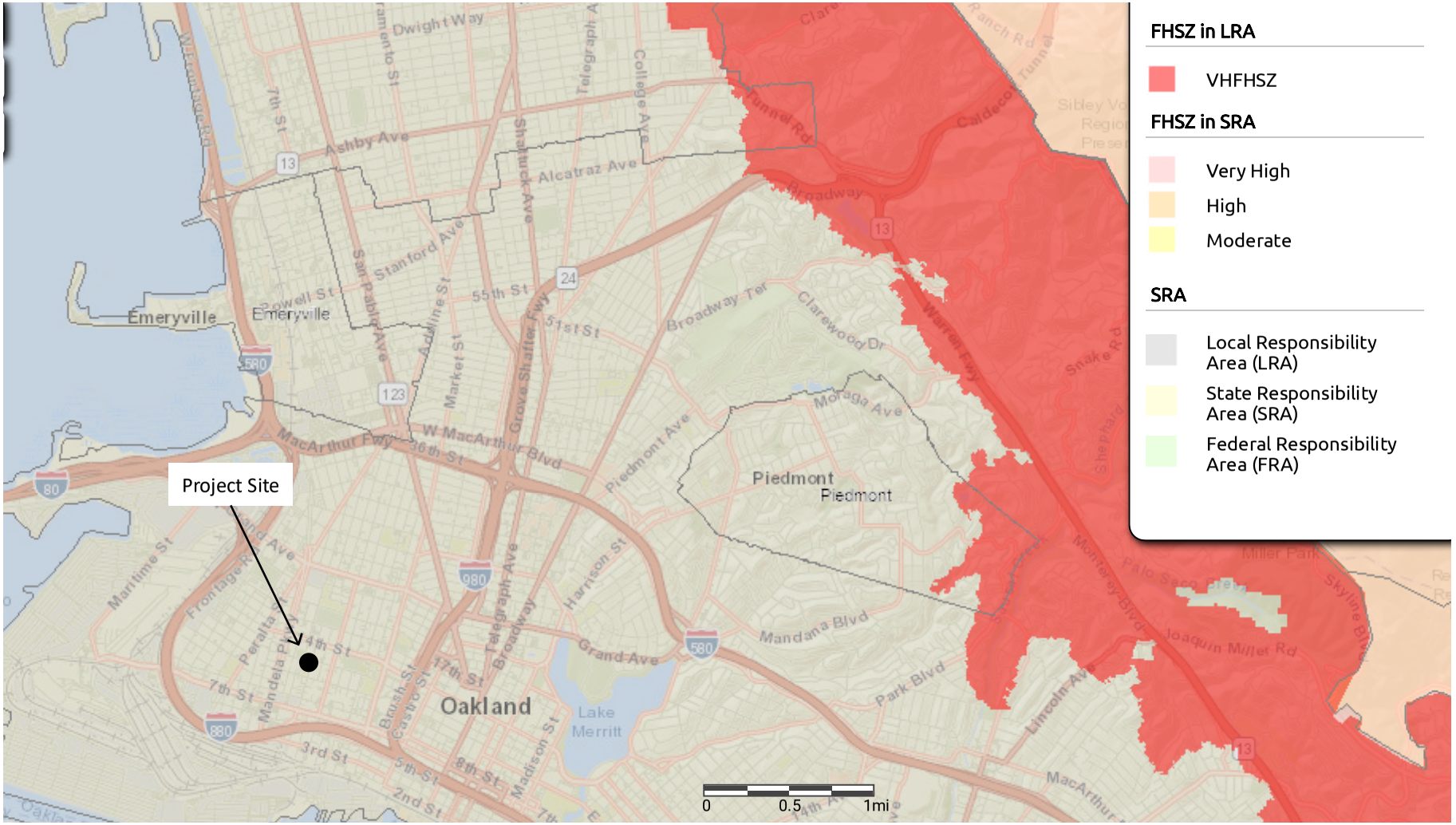


Figure 18
Fire Hazard Severity Zones in Relationship to Project Site

Source: CalFire, FHSZ Viewer, accessed at: https://egis.fire.ca.gov/FHSZ/

Mandatory Findings of Significance

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	❒	❒	■	❒
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	❒	■	❒	❒
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	❒	■	❒	❒

Degrade the Quality of the Environment

As addressed in the Air Quality, Biology, Hazards and Cultural Resources sections of this Initial Study Checklist:

- The Project site is located in an urban area that is fully developed. The site contains existing buildings and paved surface parking lots. On-site vegetation consists of shrubs and mature trees along the eastern perimeter of the site, and small grass-covered areas adjacent to boundary sidewalks. The potential for the Project to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species is less than significant. There are no riparian habitats, wetlands or other sensitive natural communities on the Project site or in the vicinity.
- Neither the Cole School building or the Cafeteria are listed in, nor do they appear to be eligible for the California Register. The subject property does not meet either of these criteria of the City of Oakland's definition of historical resources under CEQA. Development of the Project would not cause a substantial adverse change to an eligible historic resource, and the potential for direct or indirect impacts on historic resources would be less than significant.
- Construction-related subsurface disturbance of the Project site could potentially damage or destroy previously unidentified prehistoric archaeological resources. The potential to uncover Native American human remains exists in locations throughout California. Although not anticipated, cultural resources may be discovered during site-preparation and grading activities. With implementation of mitigation measures, potential adverse effects on as-yet undiscovered archaeological resources would be less than significant.
- The Project's construction-period emissions would not exceed the significance thresholds, and construction-period emissions of criteria pollutants would be less than significant. The Project's operational emissions would not exceed the significance thresholds for any of the identified

criteria air pollutants. Therefore, the Project's impact related to operational criteria pollutant emissions would be less than significant.

Based on these conclusions, the Project does not have the potential to degrade the quality of the environment. The Project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten or eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. The Project would not eliminate important examples of major periods of California history or prehistory.

Cumulative Impacts

As addressed in the Air Quality, GHG, Hydrology and Noise sections of this Initial Study Checklist:

- Construction activities associated with the Project would generate construction-related TAC emissions, specifically diesel particulate matter (DPM, as both PM10 and PM2.5) from on-road haul trucks and off-road equipment exhaust emissions. These emissions would contribute to ambient air quality emissions from nearby freeways, industrial sites, and the Port, potentially contributing to cumulative cancer risks and non-cancer health concerns at nearby sensitive receptors. With implementation of mitigation measures, the Project's emissions of toxic air contaminants would be reduced to levels of less than significant, and its contribution of toxic air contaminants would be a less than cumulatively considerable contribution to overall cumulative air quality.
- The City of Oakland's *2030 Equitable Climate Action Plan* (ECAP) sets forth a detailed, equitable path toward cost-effectively reducing Oakland's local GHG emissions by a minimum of 56% below baseline 2005 GHG emission levels by 2030, with the intent of ensuring that all of Oakland is resilient to the foreseeable impacts of climate change. Oakland's adopted 2030 reductions target of 56% below Oakland's 2005 GHG emissions reach beyond that of the State's 40% target. Based on the Project's general consistency with the City's ECAP Checklist criteria, as well as its CA-CHPS Scorecard that demonstrates the Project meets the criteria for CHPS-verified certification, the Project complies with applicable plans, policies and regulations adopted for reducing emissions of greenhouse gases, and this impact would be less than cumulatively significant.
- The Project will introduce new non-point sources of water pollutants such as automotive fluids, pesticides, fertilizers and herbicides used in landscaped areas, trash and excess irrigation water, and air pollutants deposited on rooftops and other impervious surfaces. These non-point sources of pollutants could enter the storm drainage system and eventually contribute to cumulative surface water-quality degradation. With implementation of a post-construction Stormwater Management Plan, the Project will provide adequate BMPs for the treatment of water quality in stormwater runoff from the Project site, and these BMPs will be installed, implemented and maintained in a manner that will reduce post-construction water quality impacts to acceptable, less than significant levels. The Project would be consistent with policies and regulations related to stormwater pollutants, reducing the potential for cumulative impacts to water quality to less than significant.
- Traffic resulting from daily operations of the Project would not measurably increase cumulative noise levels in the vicinity. The ambient noise conditions are dominated by industrial noise, and relatively small increases in roadway traffic attributed to the Project would not result in noise increases above the City's cumulative threshold of a 3-dBA increase.

Based on these conclusions, the Project would not have impacts that are individually limited, but cumulatively considerable.

Effects on Human Beings

As addressed in the Air Quality, Geology, Hazards, Noise and Wildfire sections of this Initial Study Checklist:

- Construction and soil remediation activities associated with the Project would generate construction-related TAC emissions, specifically diesel particulate matter (DPM, as both PM10 and PM2.5) from on-road haul trucks and off-road equipment exhaust emissions. Mitigation measures would be implemented to reduce the Project's contribution of toxic air contaminants during the construction period by ensuring that all off-road diesel equipment used during the construction period, and all haul trucks used for soil export and import for the Project, are equipped with the most effective Verified Diesel Emission Control Strategies (VDECS) available. Tier 4 engine standards have been found to reduce emissions of PM and NOx (including small PM emissions of DPM) by approximately 90%, as compared to Tier 2 and Tier 3 engines without such controls. With a 90% reduction in construction-period emissions of DMP, the Project's emissions of toxic air contaminants would be reduced to levels of less than significant.
- Based on detailed studies of the Project site, relatively high concentrations of lead and arsenic were detected in soil at the site that could pose a potential health hazard to future on-site receptors. Concentrations of organic chemicals were also detected in soil at the site that exceeds acceptable cancer risks. The preliminary approach for addressing these concerns at the site is anticipated to involve remediation of soil contaminated with lead and arsenic during the construction phase of the Project. Soil excavation and removal with off-site disposal is expected to be the preferred remedial action alternative. The District is required to enter into a Voluntary Cleanup Agreement or School Cleanup Agreement with DTSC, prepare a Removal Action Work Plan or Remedial Action Plan, including providing additional opportunities for public comment, and conduct all necessary cleanup activities pursuant to an approved Removal Action Work Plan or Remedial Action Plan. With full compliance with all DTSC-established procedures and protocols, threatened releases or potential releases of hazardous substance at or from the Project site will be fully investigated and remediated, such that the Project would not create a significant hazard to the public or the environment.
- The District will be required to prepare site-specific Health and Safety Plans and a Soil Management Plans (SMP) for DTSC approval prior to any work in Phase I and Phase II areas where contractors will be working in, or excavating soil. The SMP is to be implemented during future remediation excavation and construction activities to protect construction workers, site occupants and off-site receptors from potential exposure to lead and arsenic in the soil.
- The Phase I ESA conducted for the Project found a low likelihood that off-site properties present a recognized environmental concern to future occupants of the site. Pending any further analysis that may be required, there are no off-site contaminated sites or sources within one-quarter mile of the Project that would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste.
- The maximum noise levels generated at the Project's parking lot would be below the daytime threshold established by the City of Oakland Noise Ordinance. Parking lot noise generated during the evening hours would also be below the maximum allowable noise levels (in dBA Leq) established by the City of Oakland Noise Ordinance, which are 60 dBA L33 (or for 20 minutes) during a 1-hour period during the daytime between 7:00 a.m. and 10:00 p.m. This is a less than significant impact.
- The Project would have no impact related to exposure of people to wildfire risk for lands in or near state Responsibility Areas classified as Very High Fire Hazard severity zones. The Project

site, which is located within an urbanized area of the City of Oakland, is not identified as within, nor is it near a Very High Fire Hazard Severity Zone.

Based on these conclusions, the Project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

CEQA Findings

On the basis of this evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because mitigation measures to reduce these impacts will be required of the project. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that, although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Signature Date

Mitigation Measures

The CEQA Finding for the Project concludes that the Project will not have a significant effect on the environment because mitigation measures to reduce potential impacts of the Project will be required. Pursuant to CEQA Guidelines Section 15071 (e), the following is a list of all mitigation measures required of the Project to avoid potentially significant effects. These measures have been agreed to by the District (as both applicant and lead agency) and when implemented, would avoid or mitigate the effects of the Project to a point where no significant effects (as defined by CEQA) would occur.

Air Quality

Mitigation Measure Air-1, Basic Construction Mitigation:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Mitigation Measure Air-2, Additional Construction Mitigation Measures:

1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
2. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
3. Windbreaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Windbreaks should have at maximum 50 percent air porosity.
4. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
5. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
6. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.

7. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.
8. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
9. Minimizing the idling time of diesel powered construction equipment to two minutes.
10. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOX reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
11. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
12. Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM.
13. Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy-duty diesel engines.

Regulatory Requirement Air-3, Asbestos in Structures: The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM). These include but are not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health and Safety Code sections 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended.

Mitigation Measure Air-4, Diesel Particulate Matter Controls: The District shall ensure that all off-road diesel equipment used during the construction period, and all haul trucks used for soil export and import for the Project, are equipped with the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type, as certified by CARB. Methods to comply with this standard include, but are not limited to, new clean diesel trucks (Tier 4 engines automatically meet this requirement), higher-tier diesel engine trucks with added Particulate Matter (PM) filters, hybrid trucks, alternative energy trucks, or other methods that achieve the applicable CARB emission standard. This equipment must be properly maintained and tuned in accordance with manufacturer specifications, and verified through an equipment inventory submittal and Certification Statement.

Regulatory Requirement Air-5, Emergency Generator – TBACT: The Project's proposed diesel-powered emergency generator will be subject to CARB's Stationary Diesel Airborne Toxics Control Measure (ATCM), and will require permits from the BAAQMD. As part of the BAAQMD permit requirements, the engine emissions will have to meet Best Available Control Technology for Toxics (TBACT).

Biological Resources

Mitigation Measure Biology-1: Protect Nesting Birds. During construction of the Project, the removal of any trees and demolition of the existing buildings shall occur between September 1 and January 31. Tree removal and building demolition should be avoided from February 1 to August 31, which is the typical migratory bird's nesting period in this part of California. If no vegetation removal or building demolition is proposed during the nesting period, then no surveys are required.

1. If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work.
2. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based largely on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.

Regulatory Requirement Biology-1, Compliance with Tree Protection Ordinance: The Project will be required to obtain a tree permit from the City of Oakland for the removal of four trees from the Project's frontage along Union Street, and to abide by the conditions of that permit. Standard conditions that apply to the City's tree permit include the following:

1. Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the recommendations of an arborist.
2. Replacement tree plantings shall be required for tree removals for the purposes of erosion control, groundwater replenishment, visual screening, wildlife habitat, and preventing excessive loss of shade
3. No tree replacement shall be required for the removal of non-native species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered.

Cultural Resources

Mitigation Measure Cultural-1: Survey of the Project Area. An archaeologist should conduct a pedestrian archaeological survey of the Project area after building demolition and asphalt removal, and after soil excavation. Any newly discovered historic (over 45 years of age) or prehistoric archaeological sites identified during the survey must be recorded, as required, on appropriate Department of Parks and Recreation Primary Record (DPR 523) and associated (e.g., Building-Structure-Object) forms.

Mitigation Measure Cultural-2: Inadvertent Discoveries. If any previously unknown prehistoric resources are discovered during grading, trenching, or other on-site excavation(s), then earthwork within 25 feet of these materials shall be stopped until a qualified professional archaeologist has evaluated the potential significance of the find, and suggests appropriate steps to protect the resource.

1. According to CEQA Section 15126.4, avoidance is the preferred mitigation. Since CEQA provisions regarding the preservation of historic resources direct that adverse effects to historic resources shall be avoided, if feasible, the resource shall be protected from damaging effects through avoidance.
2. If avoidance of any previously undiscovered archaeological site is not feasible, data recovery shall be conducted in accordance with an approved Archaeological Data Recovery Plan (ADRP) to mitigate adverse effects to the significance of the site – the area of data recovery being limited to the area of adverse effect. This would fulfill CEQA requirements that the mitigation measure must be "roughly proportional" to the impacts of the project. A professional, qualified archaeologist shall conduct data recovery in compliance with CEQA Guideline Section §15064.5. Once the site has been properly tested, subject to data recovery, or preserved to the

satisfaction of the professional archaeologist in compliance with CEQA Guideline §15064.5, the site can be further developed.

Mitigation Measure Cultural-3: Inadvertent Discovery of Human Remains. Section 7050.5(b) of the California Health and Safety code will be implemented in the event that human remains, or possible human remains, are located during Project-related construction excavation. Section 7050.5(b) states, "In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code".

1. The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the NAHC within 24 hours. The NAHC has various powers and duties, including the appointment of a Most Likely Descendant (MLD) to the Project. The MLD, or in lieu of the MLD, the NAHC, has the responsibility to provide guidance as to the ultimate disposition of any Native American remains.

<u>Geologic Hazards</u>

Regulatory Requirement Geology-1, California Building Code: Because the Project site is located within a seismically active region, the building design and construction must consider the effects of seismic activity in accordance with the latest (2019) edition of the California Building Code (CBC).

The building design has already been reviewed by the California State Architect and the California Geological Survey, and those agencies have determined that the engineering geology and seismology issues at this site are adequately assessed with the mitigation measures listed below, and no further information is requested.

Mitigation Measure Geology-2, Seismic Design Parameters: According to the CEL Geology Study, the Project should be designed in accordance with local design practice to resist the lateral forces generated by ground shaking associated with a major earthquake occurring within the greater San Francisco Bay region. Based on the measured shear wave velocity at the site, CEL has estimated average shear wave velocity of 300 meter/second, and classified the site as Site Class "D". For design of the site structures in accordance with the seismic provisions of the CBC 2019 and American Society of Civil Engineers (ASCE) 7-16, the following design seismic ground motion values are recommended.

1. Mapped Spectral Response Accelerations: Short Period - 1.592 g, and 1-second Period - 0.6 g
2. Adjusted Maximum Spectral Response Accelerations: Short Period - 1.778 g, and 1-second Period - 1.650 g
3. Design Spectral Response Accelerations: Short Period - 1.185 g, and 1-second Period - 1.100 g
4. Site-Specific Peak Ground Acceleration (PGA): 0.700 g

Mitigation Measure Geology-3, Utility Penetrations at Building Perimeter: Flexible connections at building perimeters should be considered for utility lines going through perimeter foundations. This would provide flexibility during a seismic event. This could be provided by special flexible connections, pipe sleeving with appropriate waterproofing, or other methods.

Regulatory Requirement Geology-4, Notice of Intent: The project applicant shall submit a Notice of Intent (NOI) to comply with the requirements of the Construction General Permit issued by the State Water Resources Control Board (SWRCB)

Regulatory Requirement Geology-5, Stormwater Pollution Prevention Plan: Pursuant to the Construction General Permit, the project applicant shall prepare and implement during construction a Stormwater Pollution Prevention Plan (SWPPP), including Best Management Practices (BMPs) to reduce erosion, sedimentation and water quality impacts during construction to the maximum extent practicable.

Mitigation Measure Geology-6, Project Compaction Recommendations: The Project's grading plans should follow all recommended compaction requirements as presented in Table 6 of the CEL Geology Study.

Mitigation Measure Geology-7, Building Pad Grading. To reduce potential abrupt differential settlement of the near surface soils as well as to provide uniform bearing support, the buildings should be supported by a layer of reworked, engineered fill. The fill layer should extend to at least four feet below existing ground surface. It should be constructed by a combination of over-excavating the pad below the existing grade, scarifying the over-excavation subgrade to a depth of at least eight inches, and compacting the exposed surface to the project compaction requirements, and backfilling with compacted, engineered fill to the new building pad subgrades. Therefore, the scarified fill thickness can be considered part of the required minimum four-foot engineered fill thickness. The engineered fill layer should extend at least five feet horizontally beyond the perimeter of the building footprints or as feasible if limited by nearby structures.

1. Engineered fill should be placed and compacted to final pad subgrade in accordance with the detailed recommendations presented in the CEL Geology Study.
2. Due to the granular nature of the near-surface materials, excavating the edges of the over-excavations may require that slopes be cut back, as near-vertical slopes may not stand beyond the short-term.

Mitigation Measure Geology-7, Shallow Foundations: The proposed buildings can be supported on conventional continuous perimeter and interior spread footings bearing on the recommended engineered fill layer. Footings should have a minimum width of 18 inches and founded on a minimum of 24 inches below lowest adjacent finished grade (i.e., pad subgrade for interior continuous footings, exterior compacted surface grade for exterior footings, not including loose landscape or topsoil material).

Mitigation Measure Geology-8, Grading Flatwork/Pavement Areas: Areas to receive concrete hardscape or pavements should be scarified to a minimum depth of eight inches below existing grade or final subgrade, whichever is lower. Scarified areas should be moisture conditioned and compacted. Where required, engineered fill should be placed and compacted to reach design subgrade elevation. Rubber-tired heavy equipment, such as a full water truck, should be used to proof load exposed subgrade areas where pumping is suspected. Proof loading will determine if the subgrade soil is capable of supporting construction equipment without excessive pumping or rutting.

Mitigation Measure Geology-9, Interior Floor Slabs: Surficial onsite materials appears low to non-plastic; therefore, a non-expansive fill layer is not required for the proposed building. Slab reinforcing as well as slab construction joints should be designed by the structural engineer or slab designer to satisfy the anticipated use and loading of the slab. Slab-on-grade subgrade surfaces should be proof-rolled to provide a smooth, unyielding surface for slab support.

Mitigation Measure Geology-10, Positive Drainage: Final grading should be designed to provide drainage away from structures and the top of slopes.

1. Soil areas within 10 feet of proposed structures should slope at a minimum of 5% away from the buildings.
2. Adjacent concrete hardscape should slope a minimum 2% away from the buildings.
3. Roof leaders and downspouts should not discharge into landscape areas adjacent to buildings, and should discharge onto paved surfaces sloping away from the structures or into a closed pipe system channeled away from the structure to an approved collector or outfall.

Mitigation Measure Geology-11, Vapor Barrier: A vapor retarder or barrier should be placed directly under the slab. A sand layer is not required over the vapor retarder from a geotechnical standpoint. During construction, all penetrations (e.g., pipes and conduits,) overlap seams, and punctures should be completely sealed using a waterproof tape or mastic applied in accordance with the vapor retarder manufacturer's specifications. The vapor retarder or barrier should extend to the perimeter cutoff beam or footing.

Hazards and Hazardous Materials

Regulatory Requirement Hazards-1, Completion of the DTSC Environmental Review and Cleanup Process: Pursuant to Health and Safety Code requirements for projects under the regulatory review and oversight of DTCS's Brownfields Restoration and School Evaluation Branch, the Project must complete the DTSC-established protocols for site evaluation and cleanup. Pursuant to this process, remaining steps include, but are not limited to the following:

1. Approval and acceptance of a final Preliminary Environmental Assessment
2. Entering into a subsequent Voluntary Cleanup Agreement or School Cleanup Agreement
3. Preparation of a Removal Action Work Plan or Remedial Action Plan, including providing additional opportunities for public comment
4. Conducting all necessary cleanup activities pursuant to an approved Removal Action Work Plan or Remedial Action Plan
5. Obtaining a "No Further Action" letter from DTSC, once all cleanup activities are satisfactorily completed under DTSC oversight

Regulatory Requirement Hazards-2, Soil Management Plan: Pursuant to DTSC's review and approval of the Phase I and Phase II Removal Action Work Plans, these approvals will also require preparation and implementation of a Soil Management Plan (SMP). The SMP is to be implemented during future remediation excavation and construction activities to protect construction workers, site occupants and off-site receptors from potential exposure to lead and arsenic in the soil. The SMP will serve as the guidance document for evaluation of clean, contaminated and hazardous soils during soil disturbance activities. Sections of the SMP will include:

1. A program of participant roles and responsibilities, description of the physical setting, soil screening criteria, soil management objectives, remedial actions and notifications
2. Health and Safety plans, including a discussion of proper personal protective equipment (PPE) to mitigate direct contact exposure of contaminated soils to site workers
3. Delineation of exclusion work zones and hazard warning signage, best management practices (BMPs) for PPE and equipment decontamination, and site worker hygiene
4. Soil excavation and monitoring (including air monitoring of dust levels, and the requirement that all excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph (see Mitigation Measure Air-2)

5. Soil segregation, stockpiling soil and stockpile management, including proper storage of excavated soils to prevent cross contamination (e.g. stockpiling on plastic sheeting and covering), to prevent wind dispersal by requiring that stockpiled soil on-site be watered or treated with soil stabilizers, and covered (see Mitigation Measure Air-2), and to prevent inadvertent contamination from stormwater runoff (see Mitigation Measure Hydrology-2 pertaining to SWPPP requirements of the NPDES regulations)
6. Transport management, including the requirement that all trucks off-hauling soil maintain at least two feet of freeboard and employ covers (see Mitigation Measure Air-2)

Hydrology

Regulatory Requirement Hydrology-1, State Construction General Permit and SWPPP: The Project applicant shall file a Notice of Intent with the State Water Resources Control Board (SWRCB) for construction-period releases of stormwater to be covered under the State's Construction General Permit. Pursuant to the requirements of that at Permit, the Project sponsor shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) and other permit documents as may be required by the SWRCB. At a minimum, the SWPPP shall include:

1. Best Management Practices (BMPs) to minimize erosion and sediment (i.e. gravel bags, silt fence, straw wattle, sediment basin, soil stabilizers, etc.)
2. BMPs to minimize non-stormwater discharges (i.e. concrete waste management, material waste management, good housekeeping practices, etc.)
3. Site inspections and BMP maintenance

Regulatory Requirement Hydrology-3, Post-Construction Stormwater Management Plan: The Project shall be subject to compliance with the requirements of Provision c.3 of the Municipal Regional Stormwater Permit, including developing and implementing a Post-Construction Stormwater Management Plan (SWMP) subject to the review and approval of the City of Oakland (as the discharge permittee). The SWMP must identify the location and size of new and replaced impervious surfaces, the directional surface flow of stormwater runoff, and the location of proposed on-site storm drain lines, the site design measures to reduce the amount of impervious surface area, source control measures to limit stormwater pollution, and stormwater treatment measures to remove pollutants from stormwater runoff.

Noise

Mitigation Measure Noise-1, Construction Days/Hours: The Project's construction schedule should comply with the following restrictions concerning construction days and hours:

1. Construction activities should be limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that extreme noise generating activities greater than 90 dBA and soil import and export operations shall be limited to between 8:00 a.m. and 4:00 p.m. Use of concrete saws shall be limited to the hours between 8:00 am and 4:00 pm on weekdays.
2. Construction activities should be limited to between 9:00 a.m. and 5:00 p.m. on Saturday, but only within the interior of the building with the doors and windows closed.
3. No construction is allowed on Sunday or federal holidays.
4. Any construction activity proposed outside of the above days and hours for special activities (potentially such as the longer-duration soil export and import operations) shall be evaluated on a case-by-case basis by the District, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The District shall notify property owners and occupants

located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours.

Mitigation Measure Noise-2, Construction Noise Control Best Management Practices (BMPs): The District and the District's contractor should implement best management practices (BMPs) for noise reduction to reduce construction noise to the extent practical. Noise reduction BMPs include, but are not limited to the following

1. Equipment and trucks used for construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds), wherever feasible.
2. Impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. These types of mufflers can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.
3. Use electrical power instead of generators, where feasible.
4. Locate stationary noise sources as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers or use other measures to provide equivalent noise reduction. Stage large equipment, compressors or generators at least 25 feet from the site perimeters when work is not being done near these uses.
5. The noisiest phases of construction should be limited to less than 10 days at a time. Exceptions may be allowed if the District determines an extension is necessary and all available noise reduction controls are implemented.
6. Construction activities should be conducted in a manner that minimizes the noise impact at the adjacent property boundaries wherever possible. Construction equipment shall be positioned as far from noise sensitive receptors as possible.
7. Prohibit unnecessary idling of internal combustion engines.
8. Erect temporary plywood noise barriers around the construction site during the loudest construction phases (ground clearing and excavation).

Mitigation Measure Noise-3: Noise Monitoring and Complaint Response: The District should establish and implement a set of procedures for responding to complaints received pertaining to construction noise, and implement these procedures during construction. These procedures should include:

1. Notify property owners and occupants located within 300 feet of construction activities at least 14 calendar days prior to commencement of construction.
2. Designate an on-site construction complaint and enforcement manager for the project.
3. Post a large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures and phone numbers for the complaint manager.
4. Construction noise monitoring should be undertaken if reliable noise complaints are received during demolition, excavation and/or construction activities.

Transportation

Mitigation Measure Transportation-1, Traffic Control Plan: The District shall prepare and implement a Traffic Control Plan during the construction and soil remediation process. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle and pedestrian accommodations (or detours, if accommodations are not feasible). These traffic control measures should include an overall construction logistics plan with designated construction access routes, construction worker parking plan and construction phasing plan, proposed truck routes, detour signage and lane closure procedures (if required), signs or cones for driver safety, and a pedestrian safety plan. The Traffic Control Plan shall be in conformance with the City of Oakland's Supplemental Design Guidance for Accommodating Pedestrians, Bicyclists and Bus Facilities in Construction Zones.

Utilities and Services

Mitigation Measure Utilities-1, Water Efficient Landscape: The District shall comply with California's Water Efficient Landscape Ordinance (WELO) in order to reduce landscape water usage, including compliance with a Project-specific calculation of the Project's Maximum Applied Water Allowance.

Mitigation Measure Utilities-2, Green Building Requirements: The District shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures for water conservation.

Mitigation Measure Utilities-3, Construction and Demolition Waste Reduction and Recycling: The District shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by preparing and implementing a Construction and Demolition Waste Reduction and Recycling Plan. That Plan shall specify the methods by which the project will divert construction and demolition debris waste from landfill disposal.

Mitigation Measure Utilities-4, Recycling Collection and Storage Space: The District shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). For non-residential projects, at least two (2) cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten (10) cubic feet.

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Appendix A

CalEEMod (version 2020.4.0) results for the Cole Administration Education Building Project

Lamphier-Gregory, April 2022

Cole Admin Bldg with Remed - Alameda County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Cole Admin Bldg with Remed

Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	27.30	1000sqft	0.63	27,300.00	0
Junior College (2yr)	28.60	1000sqft	0.66	28,600.00	0
Parking Lot	93.00	Space	0.84	37,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	63
Climate Zone	5			**Operational Year**	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Remediation I assumes 9,160 CY export, at 8 CY/haul = 1,145 haul trips, at 60 haul trips per day = 19 days
Grading I assumes 9,160 CY import, ay 8 CY/haul = 1,145 haul trips, at 60 haul trips per day = 19 days
Remediation II assumes 2,560 CY export, at 8 CY/haul = 300 haul trips, at 60 haul trips per day = 5 days
Grading II assumes 4,860 CY import, at 8CY/haul = 608 haul trips, at 60 haul trips per day = 10 days
Trips and VMT - haul length for export of contaminated soils is estimated at 200 miles to licensed facility

Demolition -

Grading - 2.6 acre site
1.6 ac in Phase I
1.0 ac in Phase II
Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	3.00	19.00
tblConstructionPhase	NumDays	6.00	19.00
tblConstructionPhase	NumDays	6.00	5.00
tblConstructionPhase	NumDays	6.00	10.00
tblGrading	AcresOfGrading	19.00	1.60
tblGrading	AcresOfGrading	5.00	0.00
tblGrading	AcresOfGrading	10.00	1.00
tblGrading	AcresOfGrading	28.50	0.00
tblGrading	MaterialExported	0.00	2,560.00
tblGrading	MaterialExported	0.00	9,160.00
tblGrading	MaterialImported	0.00	9,160.00
tblGrading	MaterialImported	0.00	4,860.00
tblTripsAndVMT	HaulingTripLength	20.00	200.00
tblTripsAndVMT	HaulingTripLength	20.00	200.00

Cole Admin Bldg with Remed - Alameda County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1825	2.3211			0.1933	0.0714	0.2647	0.0681	0.0677	0.1358			582.5382			602.2320
2023	0.4306	1.2998			0.1245	0.0489	0.1734	0.0438	0.0464	0.0902			296.2080			303.2412
Maximum	**0.4306**	**2.3211**			**0.1933**	**0.0714**	**0.2647**	**0.0681**	**0.0677**	**0.1358**			**582.5382**			**602.2320**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1825	2.3211			0.1933	0.0714	0.2647	0.0681	0.0677	0.1358			582.5380			602.2318
2023	0.4306	1.2998			0.1245	0.0489	0.1734	0.0438	0.0464	0.0902			296.2078			303.2410
Maximum	**0.4306**	**2.3211**			**0.1933**	**0.0714**	**0.2647**	**0.0681**	**0.0677**	**0.1358**			**582.5380**			**602.2318**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-15-2022**	**9-14-2022**	1.8088	1.8088
2	**9-15-2022**	**12-14-2022**	0.5689	0.5689
3	**12-15-2022**	**3-14-2023**	0.5286	0.5286
4	**3-15-2023**	**6-14-2023**	1.2910	1.2910
		Highest	1.8088	1.8088

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2508	1.0000e-005				0.0000	0.0000		0.0000	0.0000			2.6600e-003			2.8300e-003
Energy	8.0400e-003	0.0731				5.5600e-003	5.5600e-003		5.5600e-003	5.5600e-003			137.0718			138.1132
Mobile	0.3569	0.4343			0.7139	5.1600e-003	0.7191	0.1907	4.8100e-003	0.1955			638.4986			649.5419
Waste						0.0000	0.0000		0.0000	0.0000			12.7011			31.4666
Water						0.0000	0.0000		0.0000	0.0000			7.3701			14.5475
Total	**0.6157**	**0.5074**			**0.7139**	**0.0107**	**0.7246**	**0.1907**	**0.0104**	**0.2011**			**795.6442**			**833.6720**

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Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2508	1.0000e-005				0.0000	0.0000		0.0000	0.0000			2.6600e-003			2.8300e-003
Energy	8.0400e-003	0.0731				5.5600e-003	5.5600e-003		5.5600e-003	5.5600e-003			137.0718			138.1132
Mobile	0.3454	0.4101			0.6580	4.8000e-003	0.6628	0.1758	4.4700e-003	0.1802			590.2949			600.7252
Waste						0.0000	0.0000		0.0000	0.0000			12.7011			31.4666
Water						0.0000	0.0000		0.0000	0.0000			7.3701			14.5475
Total	**0.6042**	**0.4832**			**0.6580**	**0.0104**	**0.6683**	**0.1758**	**0.0100**	**0.1858**			**747.4405**			**784.8552**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.86**	**4.78**	**0.00**	**0.00**	**7.84**	**3.36**	**7.77**	**7.84**	**3.28**	**7.60**	**0.00**	**0.00**	**6.06**	**0.00**	**0.00**	**5.86**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	demo I	Demolition	6/15/2022	7/12/2022	5	20	
2	remediation I	Site Preparation	7/13/2022	8/8/2022	5	19	
3	grading I	Grading	7/16/2022	8/11/2022	5	19	
4	Building Construction	Building Construction	7/26/2022	5/29/2023	5	220	
5	demo II	Demolition	4/3/2023	4/28/2023	5	20	
6	remediation II	Grading	4/29/2023	5/5/2023	5	5	
7	grading II	Grading	5/9/2023	5/22/2023	5	10	
8	Paving	Paving	5/23/2023	6/5/2023	5	10	
9	Architectural Coating	Architectural Coating	5/30/2023	6/12/2023	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.6

Acres of Paving: 0.84

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 83,850; Non-Residential Outdoor: 27,950; Striped Parking Area: 2,232 (Architectural

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OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
demo I	Concrete/Industrial Saws	1	8.00	81	0.73
demo I	Rubber Tired Dozers	1	8.00	247	0.40
demo I	Tractors/Loaders/Backhoes	3	8.00	97	0.37
remediation I	Graders	1	8.00	187	0.41
remediation I	Scrapers	1	8.00	367	0.48
remediation I	Tractors/Loaders/Backhoes	1	7.00	97	0.37
grading I	Graders	1	8.00	187	0.41
grading I	Rubber Tired Dozers	1	8.00	247	0.40
grading I	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
demo II	Concrete/Industrial Saws	1	8.00	81	0.73
demo II	Rubber Tired Dozers	1	8.00	247	0.40
demo II	Tractors/Loaders/Backhoes	3	8.00	97	0.37
remediation II	Graders	1	8.00	187	0.41
remediation II	Rubber Tired Dozers	1	8.00	247	0.40
remediation II	Tractors/Loaders/Backhoes	2	7.00	97	0.37
grading II	Graders	1	8.00	187	0.41
grading II	Rubber Tired Dozers	1	8.00	247	0.40
grading II	Tractors/Loaders/Backhoes	2	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
demo I	5	13.00	0.00	29.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
remediation I	3	8.00	0.00	1,145.00	10.80	7.30	200.00	LD_Mix	HDT_Mix	HHDT
grading I	4	10.00	0.00	1,145.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	36.00	15.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
demo II	5	13.00	0.00	200.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
remediation II	4	10.00	0.00	320.00	10.80	7.30	200.00	LD_Mix	HDT_Mix	HHDT
grading II	4	10.00	0.00	608.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

3.2 demo I - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.1500e-003	0.0000	3.1500e-003	4.8000e-004	0.0000	4.8000e-004			0.0000			0.0000
Off-Road	0.0169	0.1662				8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003			21.0777			21.2120
Total	**0.0169**	**0.1662**			**3.1500e-003**	**8.38E-03**	**0.0115**	**4.8000e-004**	**7.83E-03**	**8.31E-03**			**21.0777**			**21.2120**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	2.4200e-003			2.5000e-004	2.0000e-005	2.7000e-004	7.0000e-005	2.0000e-005	9.0000e-005			0.8877			0.9300
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	3.7000e-004	2.6000e-004			1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004			0.8315			0.8394
Total	**4.40E-04**	**2.68E-03**			**1.2800e-003**	**3.00E-05**	**1.30E-03**	**3.40E-04**	**3.0000e-005**	**3.70E-04**			**1.7192**			**1.7694**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.1500e-003	0.0000	3.1500e-003	4.8000e-004	0.0000	4.8000e-004			0.0000			0.0000
Off-Road	0.0169	0.1662				8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003			21.0777			21.2119
Total	**0.0169**	**0.1662**			**3.1500e-003**	**8.3800e-003**	**0.0115**	**4.8000e-004**	**7.8300e-003**	**8.3100e-003**			**21.0777**			**21.2119**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	2.4200e-003			2.5000e-004	2.0000e-005	2.7000e-004	7.0000e-005	2.0000e-005	9.0000e-005			0.8877			0.9300
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	3.7000e-004	2.6000e-004			1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004			0.8315			0.8394
Total	**4.4000e-004**	**2.6800e-003**			**1.2800e-003**	**3.0000e-005**	**1.3000e-003**	**3.4000e-004**	**3.0000e-005**	**3.7000e-004**			**1.7192**			**1.7694**

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3.3 remediation I - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.2000e-004	0.0000	5.2000e-004	8.0000e-005	0.0000	8.0000e-005			0.0000			0.0000
Off-Road	0.0131	0.1488				5.6500e-003	5.6500e-003		5.2000e-003	5.2000e-003			20.4697			20.6352
Total	**0.0131**	**0.1488**			**5.2000e-004**	**5.65E-03**	**6.17E-03**	**8.0000e-005**	**5.20E-03**	**5.28E-03**			**20.4697**			**20.6352**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0211	0.8626			0.0969	8.7600e-003	0.1057	0.0267	8.3800e-003	0.0350			337.1646			353.2174
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	2.1000e-004	1.5000e-004			6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004			0.4861			0.4907
Total	**0.0213**	**0.8627**			**0.0975**	**8.76E-03**	**0.1063**	**0.0268**	**8.38E-03**	**0.0352**			**337.6507**			**353.7081**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.2000e-004	0.0000	5.2000e-004	8.0000e-005	0.0000	8.0000e-005			0.0000			0.0000
Off-Road	0.0131	0.1488				5.6500e-003	5.6500e-003		5.2000e-003	5.2000e-003			20.4697			20.6352
Total	**0.0131**	**0.1488**			**5.2000e-004**	**5.6500e-003**	**6.1700e-003**	**8.0000e-005**	**5.2000e-003**	**5.2800e-003**			**20.4697**			**20.6352**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0211	0.8626			0.0969	8.7600e-003	0.1057	0.0267	8.3800e-003	0.0350			337.1646			353.2174
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	2.1000e-004	1.5000e-004			6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004			0.4861			0.4907
Total	**0.0213**	**0.8627**			**0.0975**	**8.7600e-003**	**0.1063**	**0.0268**	**8.3800e-003**	**0.0352**			**337.6507**			**353.7081**

Cole Admin Bldg with Remed - Alameda County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0586	0.0000	0.0586	0.0316	0.0000	0.0316			0.0000			0.0000
Off-Road	0.0146	0.1613				7.0500e-003	7.0500e-003		6.4900e-003	6.4900e-003			17.1976			17.3366
Total	**0.0146**	**0.1613**			**0.0586**	**7.05E-03**	**0.0656**	**0.0316**	**6.49E-03**	**0.0381**			**17.1976**			**17.3366**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.6300e-003	0.0957			9.7000e-003	8.8000e-004	0.0106	2.6700e-003	8.5000e-004	3.5100e-003			35.0504			36.7190
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	2.7000e-004	1.9000e-004			7.5000e-004	0.0000	7.6000e-004	2.0000e-004	0.0000	2.0000e-004			0.6076			0.6134
Total	**2.90E-03**	**0.0959**			**0.0105**	**8.80E-04**	**0.0113**	**2.8700e-003**	**8.50E-04**	**3.71E-03**			**35.6580**			**37.3324**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0586	0.0000	0.0586	0.0316	0.0000	0.0316			0.0000			0.0000
Off-Road	0.0146	0.1613				7.0500e-003	7.0500e-003		6.4900e-003	6.4900e-003			17.1976			17.3366
Total	**0.0146**	**0.1613**			**0.0586**	**7.0500e-003**	**0.0656**	**0.0316**	**6.4900e-003**	**0.0381**			**17.1976**			**17.3366**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.6300e-003	0.0957			9.7000e-003	8.8000e-004	0.0106	2.6700e-003	8.5000e-004	3.5100e-003			35.0504			36.7190
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	2.7000e-004	1.9000e-004			7.5000e-004	0.0000	7.6000e-004	2.0000e-004	0.0000	2.0000e-004			0.6076			0.6134
Total	**2.9000e-003**	**0.0959**			**0.0105**	**8.8000e-004**	**0.0113**	**2.8700e-003**	**8.5000e-004**	**3.7100e-003**			**35.6580**			**37.3324**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1058	0.8324				0.0400	0.0400		0.0384	0.0384			118.3777			118.9486
Total	**0.1058**	**0.8324**				**0.04**	**0.0400**		**0.0384**	**0.0384**			**118.3777**			**118.9486**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor	1.7400e-003	0.0468			5.6200e-003	4.8000e-004	6.0900e-003	1.6200e-003	4.5000e-004	2.0800e-003			17.2627			18.0402
Worker	5.7700e-003	4.1500e-003			0.0162	9.0000e-005	0.0163	4.3200e-003	8.0000e-005	4.4000e-003			13.1250			13.2494
Total	**7.51E-03**	**0.051**			**0.0218**	**5.70E-04**	**0.0224**	**5.9400e-003**	**5.30E-04**	**6.48E-03**			**30.3876**			**31.2897**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1058	0.8324				0.0400	0.0400		0.0384	0.0384			118.3775			118.9485
Total	**0.1058**	**0.8324**				**0.0400**	**0.0400**		**0.0384**	**0.0384**			**118.3775**			**118.9485**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor	1.7400e-003	0.0468			5.6200e-003	4.8000e-004	6.0900e-003	1.6200e-003	4.5000e-004	2.0800e-003			17.2627			18.0402
Worker	5.7700e-003	4.1500e-003			0.0162	9.0000e-005	0.0163	4.3200e-003	8.0000e-005	4.4000e-003			13.1250			13.2494
Total	**7.5100e-003**	**0.0510**			**0.0218**	**5.7000e-004**	**0.0224**	**5.9400e-003**	**5.3000e-004**	**6.4800e-003**			**30.3876**			**31.2897**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0908	0.7221				0.0325	0.0325		0.0312	0.0312			110.0821			110.6026
Total	**0.0908**	**0.7221**				**0.0325**	**0.0325**		**0.0312**	**0.0312**			**110.0821**			**110.6026**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor	8.0000e-004	0.0348			5.2200e-003	2.1000e-004	5.4300e-003	1.5100e-003	2.0000e-004	1.7100e-003			15.3787			16.0702
Worker	4.9900e-003	3.4200e-003			0.0151	8.0000e-005	0.0152	4.0100e-003	7.0000e-005	4.0900e-003			11.8937			12.0008
Total	**5.79E-03**	**0.0382**			**0.0203**	**2.90E-04**	**0.0206**	**5.5200e-003**	**2.70E-04**	**5.80E-03**			**27.2724**			**28.0709**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0908	0.7221				0.0325	0.0325		0.0312	0.0312			110.0820			110.6024
Total	**0.0908**	**0.7221**				**0.0325**	**0.0325**		**0.0312**	**0.0312**			**110.0820**			**110.6024**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor	8.0000e-004	0.0348			5.2200e-003	2.1000e-004	5.4300e-003	1.5100e-003	2.0000e-004	1.7100e-003			15.3787			16.0702
Worker	4.9900e-003	3.4200e-003			0.0151	8.0000e-005	0.0152	4.0100e-003	7.0000e-005	4.0900e-003			11.8937			12.0008
Total	**5.7900e-003**	**0.0382**			**0.0203**	**2.9000e-004**	**0.0206**	**5.5200e-003**	**2.7000e-004**	**5.8000e-003**			**27.2724**			**28.0709**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0217	0.0000	0.0217	3.2800e-003	0.0000	3.2800e-003			0.0000			0.0000
Off-Road	0.0147	0.1432				6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003			21.0866			21.2202
Total	**0.0147**	**0.1432**			**0.0217**	**6.77E-03**	**0.0284**	**3.2800e-003**	**6.33E-03**	**9.61E-03**			**21.0866**			**21.2202**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	0.0131			1.6900e-003	1.1000e-004	1.8100e-003	4.7000e-004	1.1000e-004	5.7000e-004			5.8270			6.1044
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	3.4000e-004	2.3000e-004			1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	0.0000	2.8000e-004			0.8104			0.8177
Total	**5.50E-04**	**0.0134**			**2.7200e-003**	**1.20E-04**	**2.84E-03**	**7.4000e-004**	**1.10E-04**	**8.50E-04**			**6.6373**			**6.9220**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0217	0.0000	0.0217	3.2800e-003	0.0000	3.2800e-003			0.0000			0.0000
Off-Road	0.0147	0.1432				6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003			21.0865			21.2202
Total	**0.0147**	**0.1432**			**0.0217**	**6.7700e-003**	**0.0284**	**3.2800e-003**	**6.3300e-003**	**9.6100e-003**			**21.0865**			**21.2202**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	0.0131			1.6900e-003	1.1000e-004	1.8100e-003	4.7000e-004	1.1000e-004	5.7000e-004			5.8270			6.1044
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	3.4000e-004	2.3000e-004			1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	0.0000	2.8000e-004			0.8104			0.8177
Total	**5.5000e-004**	**0.0134**			**2.7200e-003**	**1.2000e-004**	**2.8400e-003**	**7.4000e-004**	**1.1000e-004**	**8.5000e-004**			**6.6373**			**6.9220**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 remediation II - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0152	0.0000	0.0152	8.3000e-003	0.0000	8.3000e-003			0.0000			0.0000
Off-Road	3.3300e-003	0.0362				1.5100e-003	1.5100e-003		1.3900e-003	1.3900e-003			4.5260			4.5626
Total	**3.33E-03**	**0.0362**			**0.0152**	**1.51E-03**	**0.0167**	**8.3000e-003**	**1.39E-03**	**9.69E-03**			**4.5260**			**4.5626**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8600e-003	0.1847			0.0271	1.7800e-003	0.0289	7.4500e-003	1.7000e-003	9.1500e-003			89.6516			93.9204
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	7.0000e-005	4.0000e-005			2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005			0.1558			0.1572
Total	**1.93E-03**	**0.1847**			**0.0273**	**1.78E-03**	**0.0291**	**7.5000e-003**	**1.70E-03**	**9.20E-03**			**89.8074**			**94.0777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0152	0.0000	0.0152	8.3000e-003	0.0000	8.3000e-003			0.0000			0.0000
Off-Road	3.3300e-003	0.0362				1.5100e-003	1.5100e-003		1.3900e-003	1.3900e-003			4.5260			4.5626
Total	**3.3300e-003**	**0.0362**			**0.0152**	**1.5100e-003**	**0.0167**	**8.3000e-003**	**1.3900e-003**	**9.6900e-003**			**4.5260**			**4.5626**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8600e-003	0.1847			0.0271	1.7800e-003	0.0289	7.4500e-003	1.7000e-003	9.1500e-003			89.6516			93.9204
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	7.0000e-005	4.0000e-005			2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005			0.1558			0.1572
Total	**1.9300e-003**	**0.1847**			**0.0273**	**1.7800e-003**	**0.0291**	**7.5000e-003**	**1.7000e-003**	**9.2000e-003**			**89.8074**			**94.0777**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0309	0.0000	0.0309	0.0167	0.0000	0.0167			0.0000			0.0000
Off-Road	6.6700e-003	0.0723				3.0200e-003	3.0200e-003		2.7800e-003	2.7800e-003			9.0520			9.1252
Total	**6.67E-03**	**0.0723**			**0.0309**	**3.02E-03**	**0.0339**	**0.0167**	**2.78E-03**	**0.0194**			**9.0520**			**9.1252**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.3000e-004	0.0399			5.1500e-003	3.4000e-004	5.4900e-003	1.4200e-003	3.3000e-004	1.7400e-003			17.7139			18.5573
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	1.3000e-004	9.0000e-005			4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004			0.3117			0.3145
Total	**7.60E-04**	**0.04**			**5.5500e-003**	**3.40E-04**	**5.89E-03**	**1.5300e-003**	**3.30E-04**	**1.85E-03**			**18.0256**			**18.8718**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0309	0.0000	0.0309	0.0167	0.0000	0.0167			0.0000			0.0000
Off-Road	6.6700e-003	0.0723				3.0200e-003	3.0200e-003		2.7800e-003	2.7800e-003			9.0520			9.1251
Total	**6.6700e-003**	**0.0723**			**0.0309**	**3.0200e-003**	**0.0339**	**0.0167**	**2.7800e-003**	**0.0194**			**9.0520**			**9.1251**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.3000e-004	0.0399			5.1500e-003	3.4000e-004	5.4900e-003	1.4200e-003	3.3000e-004	1.7400e-003			17.7139			18.5573
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	1.3000e-004	9.0000e-005			4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004			0.3117			0.3145
Total	**7.6000e-004**	**0.0400**			**5.5500e-003**	**3.4000e-004**	**5.89E-03**	**1.5300e-003**	**3.3000e-004**	**1.85E-03**			**18.0256**			**18.8718**

Cole Admin Bldg with Remed - Alameda County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.9 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431				2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003			7.7564			7.8179
Paving	1.1000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**5.50E-03**	**0.0431**				**2.17E-03**	**2.17E-03**		**2.00E-03**	**2.00E-03**			**7.7564**			**7.8179**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	2.0000e-004	1.3000e-004			5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004			0.4675			0.4717
Total	**2.00E-04**	**1.30E-04**			**5.9000e-004**	**0.0000**	**6.00E-04**	**1.6000e-004**	**0.0000**	**1.60E-04**			**0.4675**			**0.4717**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431				2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003			7.7564			7.8178
Paving	1.1000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**5.5000e-003**	**0.0431**				**2.1700e-003**	**2.1700e-003**		**2.0000e-003**	**2.0000e-003**			**7.7564**			**7.8178**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	2.0000e-004	1.3000e-004			5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004			0.4675			0.4717
Total	**2.0000e-004**	**1.3000e-004**			**5.9000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**			**0.4675**			**0.4717**

Cole Admin Bldg with Remed - Alameda County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.10 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2992					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	9.6000e-004	6.5100e-003				3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004			1.2766			1.2785
Total	**0.3002**	**6.51E-03**				**3.50E-04**	**3.50E-04**		**3.50E-04**	**3.50E-04**			**1.2766**			**1.2785**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	9.0000e-005	6.0000e-005			2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005			0.2182			0.2201
Total	**9.00E-05**	**6.00E-05**			**2.8000e-004**	**0.0000**	**2.80E-04**	**7.0000e-005**	**0.0000**	**7.00E-05**			**0.2182**			**0.2201**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2992					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	9.6000e-004	6.5100e-003				3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004			1.2766			1.2785
Total	**0.3002**	**6.5100e-003**				**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**			**1.2766**			**1.2785**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker	9.0000e-005	6.0000e-005			2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005			0.2182			0.2201
Total	**9.0000e-005**	**6.0000e-005**			**2.8000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**			**0.2182**			**0.2201**

Cole Admin Bldg with Remed - Alameda County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3454	0.4101			0.6580	4.8000e-003	0.6628	0.1758	4.4700e-003	0.1802			590.2949			600.7252
Unmitigated	0.3569	0.4343			0.7139	5.1600e-003	0.7191	0.1907	4.8100e-003	0.1955			638.4986			649.5419

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	616.71	0.00	0.00	755,413	696,197
Junior College (2yr)	579.15	321.18	34.61	1,179,627	1,087,156
Parking Lot	0.00	0.00	0.00		
Total	1,195.86	321.18	34.61	1,935,041	1,783,353

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
Junior College (2yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government Office Building	0.569946	0.056495	0.180011	0.112201	0.020944	0.005169	0.013608	0.012941	0.000792	0.000570	0.024535	0.000337	0.002451
Junior College (2yr)	0.569946	0.056495	0.180011	0.112201	0.020944	0.005169	0.013608	0.012941	0.000792	0.000570	0.024535	0.000337	0.002451
Parking Lot	0.569946	0.056495	0.180011	0.112201	0.020944	0.005169	0.013608	0.012941	0.000792	0.000570	0.024535	0.000337	0.002451

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000			57.4961			58.0647
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000			57.4961			58.0647
NaturalGas Mitigated	8.0400e-003	0.0731				5.5600e-003	5.5600e-003		5.5600e-003	5.5600e-003			79.5756			80.0485
NaturalGas Unmitigated	8.0400e-003	0.0731				5.5600e-003	5.5600e-003		5.5600e-003	5.5600e-003			79.5756			80.0485

Cole Admin Bldg with Remed - Alameda County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government Office Building	522795	2.8200e-003	0.0256				1.9500e-003	1.9500e-003		1.9500e-003	1.9500e-003			27.8983			28.0641
Junior College (2yr)	968396	5.2200e-003	0.0475				3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003			51.6773			51.9844
Parking Lot	0	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total		**8.0400e-003**	**0.0731**				**5.5600e-003**	**5.5600e-003**		**5.5600e-003**	**5.5600e-003**			**79.5756**			**80.0485**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government Office Building	522795	2.8200e-003	0.0256				1.9500e-003	1.9500e-003		1.9500e-003	1.9500e-003			27.8983			28.0641
Junior College (2yr)	968396	5.2200e-003	0.0475				3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003			51.6773			51.9844
Parking Lot	0	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total		**8.0400e-003**	**0.0731**				**5.5600e-003**	**5.5600e-003**		**5.5600e-003**	**5.5600e-003**			**79.5756**			**80.0485**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government Office Building	328692	30.4118			30.7125
Junior College (2yr)	279708	25.8796			26.1355
Parking Lot	13020	1.2047			1.2166
Total		**57.4961**			**58.0647**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government Office Building	328692	30.4118			30.7125
Junior College (2yr)	279708	25.8796			26.1355
Parking Lot	13020	1.2047			1.2166
Total		**57.4961**			**58.0647**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2508	1.0000e-005				0.0000	0.0000		0.0000	0.0000			2.6600e-003			2.8300e-003
Unmitigated	0.2508	1.0000e-005				0.0000	0.0000		0.0000	0.0000			2.6600e-003			2.8300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0299					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2207					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3000e-004	1.0000e-005				0.0000	0.0000		0.0000	0.0000			2.6600e-003			2.8300e-003
Total	**0.2508**	**1.0000e-005**				**0.0000**	**0.0000**		**0.0000**	**0.0000**			**2.6600e-003**			**2.8300e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0299					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2207					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3000e-004	1.0000e-005				0.0000	0.0000		0.0000	0.0000			2.6600e-003			2.8300e-003
Total	**0.2508**	**1.0000e-005**				**0.0000**	**0.0000**		**0.0000**	**0.0000**			**2.6600e-003**			**2.8300e-003**

Cole Admin Bldg with Remed - Alameda County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	7.3701			14.5475
Unmitigated	7.3701			14.5475

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	5.42341 / 3.32403	5.5122			11.2113
Junior College (2yr)	1.4028 / 2.19413	1.8579			3.3363
Parking Lot	0 / 0	0.0000			0.0000
Total		**7.3701**			**14.5475**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	5.42341 / 3.32403	5.5122			11.2113
Junior College (2yr)	1.4028 / 2.19413	1.8579			3.3363
Parking Lot	0 / 0	0.0000			0.0000
Total		**7.3701**			**14.5475**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	12.7011			31.4666
Unmitigated	12.7011			31.4666

Cole Admin Bldg with Remed - Alameda County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government Office Building	25.39	5.1539			12.7687
Junior College (2yr)	37.18	7.5472			18.6979
Parking Lot	0	0.0000			0.0000
Total		**12.7011**			**31.4666**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government Office Building	25.39	5.1539			12.7687
Junior College (2yr)	37.18	7.5472			18.6979
Parking Lot	0	0.0000			0.0000
Total		**12.7011**			**31.4666**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

Appendix B

Cole Middle School 1011 Union Street, Historic Resource Evaluation (HRE)

Page & Turnbull, December 23, 2019



COLE MIDDLE SCHOOL
1011 UNION STREET
HISTORIC RESOURCE EVALUATION

OAKLAND, CALIFORNIA
[19216]

PREPARED FOR:
LAMPHIER-GREGORY

PAGE & TURNBULL
imagining change in historic environments through design, research, and technology

DECEMBER 23, 2019

DRAFT

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APPENDIX A: PREPARER QUALIFICATIONS

I. INTRODUCTION

This Historic Resource Evaluation (HRE) has been prepared at the request of Lamphier-Gregory for the former Cole Middle School campus located at 1011 Union Street (APN 4-53-7) in West Oakland's Oak Center neighborhood. The generally rectangular parcel is roughly 112,820 square feet in area and is located at the northwest corner of 10th and Union streets.[1] This report evaluates two educational buildings situated within the property: a classroom building (Cole School) originally constructed in 1925 and renovated 1936; and a cafeteria building constructed in 1949. Each of these buildings shares the address 1011 Union Street. The report does not address the ancillary building at the northeast corner of the site, which was built in 2011. The campus was originally used as an elementary or grammar school and was converted to a middle school in 1980. The school closed in 2009, and the campus has since been used as an Oakland Unified School District (OUSD) administrative facility, with one of OUSD's two Data Centers occupying space in the former Cole School. The Cole School building has also housed the headquarters for the OUSD police unit since 2009. Since 2015, OUSD's Special Education Department has occupied five classrooms spread across the two subject buildings for students with special needs.

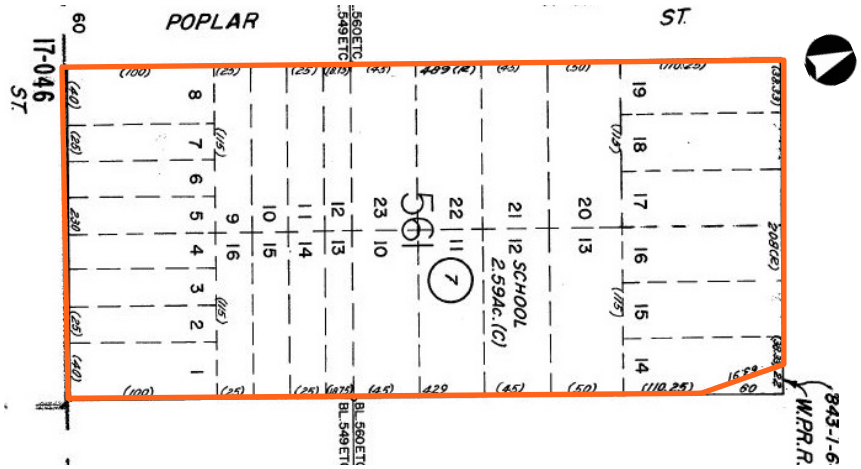


Figure 1: Assessor parcel map showing location of subject property (outlined in orange). Source: Alameda County Assessor's Office, Online. Edited by Page & Turnbull.

METHODOLOGY

Page & Turnbull prepared this report using research collected at various local repositories, including the Alameda County Office of the Clerk-Recorder, the City of Oakland Building Department and Oakland Public Library History Room, as well as various online sources including California Digital Newspaper Collection, Newspapers.com, and the David Rumsey Map Collection. Key primary sources consulted and cited in this report include Sanborn Map Company fire insurance maps, historic newspapers, building permit applications, city directories, and historic building plans provided to Page & Turnbull by OUSD. On October 29, 2019, Page & Turnbull visited the site with Lamphier-Gregory and completed architectural photography and field notes. All photographs in this report were taken by Page & Turnbull October 29, 2019, unless otherwise noted.

SUMMARY OF FINDINGS

This HRE finds that the Cole School classroom building and cafeteria at the Cole Middle School campus (1011 Union Street) **do not appear to qualify as eligible historic resources** for the purposes of review under the California Environmental Quality Act (CEQA).

[1] Area calculation provided at online at http://gisapps1.mapoakland.com/planmap/planmap.html?apn=004%20005300700. Accessed October 25, 2019.

II. EXISTING HISTORIC STATUS

The following section examines the national, state, and local historical ratings currently assigned to the property at 1011 Union Street.

NATIONAL REGISTER OF HISTORIC PLACES

The National Register of Historic Places (National Register) is the nation's most comprehensive inventory of historic resources. The National Register is administered by the National Park Service and includes buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

1011 Union Street is not currently listed in the National Register of Historic Places.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register of Historical Resources (California Register) is an inventory of significant architectural, archaeological, and historical resources in the State of California. Resources can be listed in the California Register through several methods. State Historical Landmarks and National Register-listed properties are automatically listed in the California Register. Properties can also be nominated to the California Register by local governments, private organizations, or citizens. The evaluative criteria used by the California Register for determining eligibility are closely based on those developed by the National Park Service for the National Register of Historic Places.

1011 Union Street is not currently listed in the California Register of Historical Resources.

CALIFORNIA HISTORICAL RESOURCE STATUS CODE

Properties listed or under review by the State of California Office of Historic Preservation are assigned a California Historical Resource Status Code (Status Code) of "1" to "7" to establish their historical significance in relation to the National Register of Historic Places (National Register or NR) or California Register of Historical Resources (California Register or CR). Properties with a Status Code of "1" or "2" are either eligible for listing in the California Register or the National Register or are already listed in one or both registers. Properties assigned Status Codes of "3" or "4" appear to be eligible for listing in either register, but normally require more research to support this rating. Properties assigned a Status Code of "5" have typically been determined to be locally significant or to have contextual importance. Properties with a Status Code of "6" are not eligible for listing in either register. Finally, a Status Code of "7" means that the resource has not been evaluated for the National Register or the California Register, or needs reevaluation.

"Cole School" is listed in the California Historic Resources Information System (CHRIS) database with a Status Code of 6Z (Found ineligible for NR, CR or Local designation through survey evaluation). In the case of the subject property, its 6Z status relates to a survey and evaluation undertaken in 1990, which evaluated the building for eligibility to the National Register but did not address eligibility for the California Register. The most recent update to the CHRIS database for Alameda County that lists the Status Codes was in March 2011.

CITY OF OAKLAND HISTORIC PRESERVATION

City of Oakland Thresholds of Significance Guidelines[2]
Per the City of Oakland's Thresholds of Significance Guidelines, an historical resource under the California Environmental Quality Act (CEQA) is a resource that meets any of the following criteria:

> 1) A resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources;
> 2) A resource included in Oakland's Local Register of historical resources, unless the preponderance of evidence demonstrates that it is not historically or culturally significant;[3]
> 3) A resource identified as significant (e.g., rated 1-5) in a historical resource survey recorded on Department of Parks and Recreation Form 523, unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
> 4) Meets the criteria for listing on the California Register of Historical Resources; or
> 5) A resource that is determined by the Oakland City Council to be historically or culturally significant even though it does not meet the other four criteria listed above.

Oakland Cultural Heritage Survey
The Oakland Cultural Heritage Survey (OCHS), established in 1981, evaluates individual properties according to a five-tiered alphanumeric system. The alphabetical portion, the Individual Property Rating, is based on evaluation of a property according to the following four criteria:

- Visual Quality/Design: Evaluation of exterior design, interior design, materials and construction, style or type, supporting elements, feelings of association, and importance of designer.
- History/Association: Association of person or organization, the importance of any event, association with patterns of history, and the age of the building.
- Context: Continuity and familiarity of the building within the city, neighborhood, or district.
- Integrity and Reversibility: Evaluation of the building's condition, its exterior and interior alterations, and any structural removals.

Evaluated properties are assigned an Individual Property Rating corresponding to their ability to meet these criteria as follows:

A. Highest importance (Outstanding architectural example or of extreme historical importance);
B. Major importance (Fine architectural example or of major historical importance);
C. Secondary importance (Superior or visually important architectural example, or very early);
D. Minor importance (Representative architectural example);
E. Of no particular interest; and
F. Less than 45 years old or modernized.

A building's rating in its existing condition is expressed as a capital letter. Contingency ratings, expressed after the rating as a lower-case letter, indicate a potential rating under certain conditions. Contingency ratings may be applied to buildings whose rating would change with restoration or increased age, or for which additional information is needed.

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[2] City of Oakland, CEQA Thresholds of Significance Guidelines, October 28, 2013. Website accessed January 2019 from: http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak051200.pdf.
[3] The City of Oakland's Local Register includes all designated historic properties (Landmarks, Heritage Properties, Study List Properties, Preservation Districts, and S-7 and S-20 Preservation Combining Zone Properties) as well as all Potential Designated Historic Properties that have an existing rating of "A" or "B" or are located within an Area of Primary Importance.

A property's relationship to an Area of Primary or Secondary Importance is expressed as part of its rating in numeric form as follows:

1. Located in an Area of Primary Importance, or National Register quality district;
2. Located in an Area of Secondary Importance, or district of local interest; and
3. Not located in a historic district.

Properties that are contributors to a district are assigned a "+", non-contributors a "-", and potential contributors are assigned a "*" as part of their numeric rating. Many of the preliminary ratings assigned as part of the Oakland Cultural Heritage Survey through the 1980s were based on reconnaissance level survey. These initial findings may be updated based on additional information about historic context and property integrity found through intensive surveys.

Designated Historic Properties
City of Oakland Historic Landmarks are the most prominent historic properties in the city. They may be designated for historical, cultural, educational, architectural, aesthetic, or environmental value. They are nominated by their owners, the City, or the public and are designated after public hearings by the Landmarks Board, Planning Commission, and City Council. This category also includes preservation districts and Heritage Properties. Since the program began in 1973, 145 individual landmarks, 9 preservation districts (designated S-7 or S-20 Preservation Zones), and 45 Heritage Properties have been designated, out of nearly 100,000 buildings in Oakland. Proposed alterations and demolitions that would affect landmarks and preservation districts require review by the Landmarks Preservation Advisory Board.

Potential Designated Historic Properties
Any property that has at least a contingency rating of "c" and/or is a contributor (+) or potential contributor (*) to a historic district but is not yet individually designated is considered a Potential Designated Historic Property (PDHP).

Local Register of Historic Resources
The Oakland City Council enacted the Historic Preservation Element (HPE) in 1994.[4] The HPE presents goals, policies, and objectives that guide historic preservation efforts in Oakland. It defines the criteria for legal significance that must be met by a resource before it is listed in Oakland's local register of historical resources and would therefore be considered a historical resource under CEQA. According to the HPE, for purposes of environmental review under the California Environmental Quality Act, the following properties will constitute the City of Oakland's Local Register of Historical Resources (Local Register).

1) All Designated Historic Properties (including Oakland Landmarks, S-7 and S-20 Preservation Districts, and Preservation Study List properties), and
2) Those PDHPs that have an existing rating of "A" or "B" or are located within an Area of Primary Importance.

City of Oakland Historic Preservation Status of 1011 Union Street

1011 Union Street was preliminarily documented by the Oakland Cultural Heritage Survey in 1990 and has been assigned an OCHS rating of "C3," indicating the property is of secondary importance (representative architecture example) and is not located within a historic district. 1011 Union Street is not a City of Oakland Landmark and is not currently listed in the Local Register.

[4] City of Oakland. 1994. Historic Preservation Element of the Oakland General Plan. Adopted March 8, 1994. Website accessed January 2019 at: http://www2.oaklandnet.com/Government/o/PBN/OurServices/GeneralPlan/DOWD009018

III. ARCHITECTURAL DESCRIPTION

The subject site is generally rectangular in shape, with a clipped northeast corner, due to a rail right-of-way. The Cole School classroom building is situated at the south end of the site, with its primary façade fronting Union Street (east), and secondary facades fronting 10th Street (south) and Poplar Street (west). The Cafeteria building is situated northwest of the Cole Schools' west wing, with its west façade fronting Poplar Street and is south façade facing the rear of the Cole School. A wood-frame modular building built in 2011 is located at the far northeast corner of the site. The remainder of the property is paved with asphalt. Parking areas and a playground occupy the northern end of the site **(Figure 2)**.



Figure 2: Aerial view of the subject property. The subject parcel is outlined in orange. A red dashed line indicates the perimeter of the OUSD police unit's parking lot within the property. Source: Alameda County Assessor Online. Edited by Page & Turnbull.

COLE SCHOOL BUILDING

The Cole School is a two-story, U-plan building of reinforced-concrete and wood-frame construction. The school was built in 1925 and designed in the Gothic Revival style, but was renovated and restyled in 1936, resulting in its current Moderne aesthetic. The building has a smooth cement plaster exterior and a flat roof with a parapet at all façades. A sheet metal beltcourse divides the first and second story, serving as a sill beneath most of the second story windows. The cornice is formed from a sheet metal fascia that is continuous across all facades. Fenestration consists primarily of banks of five aluminum-frame, one-over-one, single-hung replacement windows with individual transoms above; these windows will be referred to throughout this report as "standard windows." Most windows at the first story have metal security screens at the exterior **(Figure 3 and Figure 4)**. Second story windows above first story entrances (where bays are narrower) are typically of similar design but in a paired configuration. All doors at the exterior appear to be replacement flush doors of either wood or steel.



Figure 3: Typical first story windows with security screens.



Figure 4: Typical second story windows without security screens.

Exterior detailing includes overlapping concrete vertical elements with rounded edges and metal capitals that flank the main at the main entrance at the east façade and two entrances at the south facade **(Figure 5)**. The main entrance also features a curved canopy with a streamlined sheet metal fascia and vertical corrugated metal directly flanking the main doors. Concave stripes are visible at concrete walls adjacent to the main entrance. The side entrances at the west façade feature similar portals that feature a monumental stucco surround with fluted keystones and a scalloped frieze **(Figure 6)**. Doors are flush metal or flush wood, with minimal to no glazing. At the rear facade, fluted engaged concrete columns extend from ground level to the second story, dividing each auditorium window.



Figure 5: Scalloped capital details, visible at columns flanking main entrance, looking west.



Figure 6: Fluted keystone and scalloped details above each entrance at south facade.

Primary (East) Façade (Union Street)

The Cole School's primary façade is visible at the east wing of the school's U-plan, parallel to Union Street, and is set back from the street roughly 15 feet **(Figure 7)**. The façade has five bays, with two bays on either side of the central main entrance bay. The southernmost bay features similar banks of five standard windows at the first and second story. A fence enclosure surrounding HVAC equipment is visible at the base of the first story. The second to southernmost bay contains paired windows at the first and second stories; those at the first story being slightly narrower overall **(Figure 8)**. The building's main entrance is visible just south of mid-façade and has flush metal doors; each with a single, narrow rectangular lite **(Figure 9)**. The entrance is flanked on each side by four overlapping, engaged concrete columns that have decorative metal capitals with scalloped detailing. Letters reading "COLE SCHOOL" mounted to the façade above the canopy **(Figure 9)**.



Figure 7: Cole School, looking northwest from Union Street.



Figure 8: Two southernmost bays at the primary façade, looking west.



Figure 9: Primary entrance, looking west.

A fixed divided lite transom window with steel sash is visible above the main entrance doors. A curved canopy is visible above the transom and spans the width of the main entrance **(Figure 10)**. The central bay at the second story features a tripartite window **(Figure 11)**.



Figure 10: Divided-lite steel-frame window above main entrance, and curved entrance canopy, looking west.



Figure 11: Tripartite window at second story above main entrance, looking west.

To the north of the main entrance, the façade features a blank wall with streamline groove details at the first story **(Figure 12)**. A sill with molded sheet metal fascia extends northward from the entrance as a continuation of the curved entrance canopy, terminating after the second to northernmost bay. Above, the second story has a single standard window **(Figure 13)**. To the north, the first and second story each feature two bays of similar width containing banks of standard windows. The first story bays feature four windows with a single door inserted where a fifth window would typically be located **(Figure 15)**. The second story bays each contain five standard windows. Each of the doors are accessed by concrete steps with a wide landing and flat metal railing with a curved stair rail, that ties into the building's Moderne styling **(Figure 15)**.



Figure 12: Three westernmost bays at the primary façade, looking northwest.



Figure 13: Molded sheet metal fascia extending northward from the main entrance above the second to northernmost bay of the primary façade.



Figure 14: Secondary entrance within a bank of three windows at northernmost bay of primary façade, looking southeast.



Figure 15: Concrete steps and landing with metal railing at the north end of the primary façade, looking northwest.

South Façade (10th Street)

The south façade fronts 10th street and is set back from the street roughly 15 feet. The façade has five bays, including: two outer bays containing entrances at the first story and paired standard windows at the second story; and three central bays, each with a bank of five standard windows at the first and second story **(Figure 16)**. Each entrance is similar, with a set of flush metal double doors placed beneath a divided lite steel-sash transom. The entrances are recessed into a concrete surround with overlapping engaged columns at each side and a monumental flat surround. Keystones have fluting and the cornice of the entrance surround has metal scalloped detailing. Each entrance is accessed by two concrete steps with a landing **(Figure 17 and Figure 18)**.



Figure 16: South façade, view southwest.



Figure 17: East entrance at south façade, looking north.



Figure 18: West entrance at south façade, looking north.

West Façade (Poplar Street)

The west façade fronts Poplar Street and is set back from the street roughly 15 feet. The façade has four bays at each story, each containing a bank of five standard windows **(Figure 19)**.



Figure 19: Looking northeast at west façade.

Rear (North) Façade (Site Interior)

The rear façade overlooks parking areas within the property, and is deeply recessed between the east and west wings of the u-shaped plan. A two-story staircase and elevator shaft that was added to the building in 1973 is visible at the north façade of the east wing **(Figure 20)**. The staircase has a steel frame and steel railing and handrails. Steps are concrete set in steel beds **(Figure 21)**. Landings are visible at the first and second stories. The first-story bay to the east of the staircase contains two single standard windows. A first story entrance located beneath the staircase contains a wood-frame entrance with a central column dividing two flush wood replacement doors. Each door has a transom above that appears to be infilled with a painted panel. A remnant of a circular concrete detail within the entrance surround is visible just beneath the staircase landing above **(Figure 22)**. An additional entrance at the second story contains a similar replacement door **(Figure 23)**. The remainder of the north façade at the east wing is not fenestrated.



Figure 20: View of northeast wing at rear façade, looking southeast.

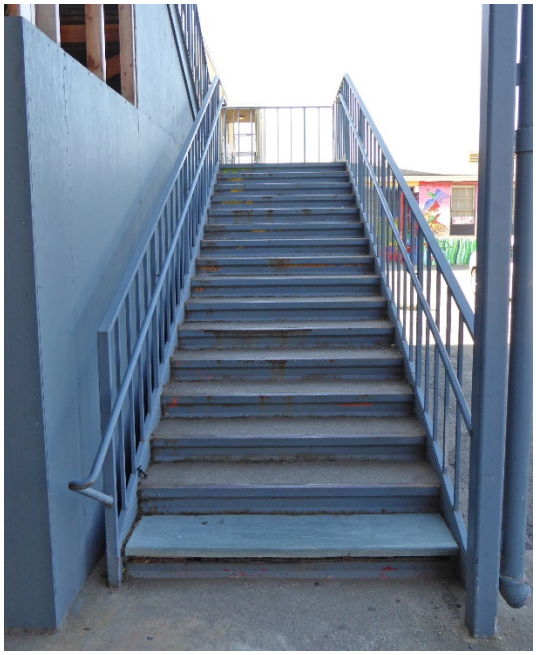


Figure 21: Looking west at steel-frame staircase at rear of the east wing.



Figure 22: Looking south at entrance at rear of east wing. Note concrete detail where staircase is attached to façade.

The west façade of the east wing features two bays with typical standard windows at each story. Entrances with single-entry flush doors and concrete steps are located within the two bays at the first story. The recessed central portion of the north façade features an entrance with flush double doors at the east side of the first story **(Figure 24)**. A similar entrance is located at the opposite, west side of the first story. The second story is fenestrated with five bays containing similar steel-frame windows with a grid of nine divided lites. Four pilasters with fluted details and no capitals are placed between each bay. The windows at the second story light the gymnasium/auditorium at the interior and are set at a height slightly below that of the second story windows visible at other locations **(Figure 25)**. The east façade of the west wing features similar fenestration to the west façade at the east wing, however, a single-entry door is set in the southernmost bay **(Figure 26)**.



Figure 23: Detail of staircase and second story landing, looking southeast.



Figure 24: Entrances and windows at rear façade.



Figure 25: Center, recessed portion of rear façade at auditorium/gymnasium, looking south.



Figure 26: East-facing windows along northwest wing of the rear façade, looking south.

An entrance with flush steel double doors is located at the first story of the west wing's north façade. A linear staircase extends from grade to the second story where an additional entrance is located. The staircase was built in 1973 and shares similar materials with the staircase located at the north façade of the east wing **(Figure 27 and Figure 28)**.



Figure 27: Looking southwest at first story entrance with double doors at rear facade, west wing.



Figure 28: Linear staircase at rear façade of the west wing, looking west.

CAFETERIA BUILDING

The Cafeteria Building was built in 1949 and is situated immediately north of the west wing of the Cole School building. The building has a rectangular footprint and a moderately pitched gabled roof with a projecting monitor near center. The roof is covered with asphalt shingles and has a molded wood cornice. The building features a cohesive fenestration pattern that reflects the division of classrooms and cafeteria spaces at the interior. The building is fenestrated with six-over-six, wood-sash, double-hung windows (referred to as "standard sash windows," hereafter) at most locations. These windows are primarily arranged in groups of four along the east and west façades. Additional standard sash windows are visible at the northwest corner of the building. Entrances are located at the center of the north and south façades and at the recessed southeast and northwest corners. Original doors are flush wood with four divided lites in the upper half (referred to as "original doors," hereafter). The southeast and northwest corners of the building are recessed, forming covered entries beneath the overhanging roof eaves **(Figure 29 and Figure 30)**.



Figure 29: Cafeteria Building viewed from second story of Cole School, looking northwest.

East and North Facades

The recessed southeast corner of the building contains an entrance with an original door set beneath a four-lite transom window. Three standard sash windows are visible immediately south of the door. The three northernmost bays in the façade contains groups of four standard sash windows. The north façade has a grouping of three standard sash windows divided by wood mullions at its east bay **(Figure 31)**. The central bay features a monumental entrance with a stucco surround, circular medallion and sheet metal cornice trim. The door at this location has been replaced by a contemporary flush steel door with a single rectangular lite. An original door surround of glass block, visible on original plans for the cafeteria, has been replaced by a plastered surround **(Figure 32)**. Paired standard sash windows and a single smaller wood window are visible to the west of the entrance **(Figure 33)**.



Figure 30: Recessed entrance at southeast corner, looking northwest.



Figure 31: Three standard sash windows divided my wood mullions at the north façade, looking southeast.



Figure 32: Entrance at center of north façade, looking southeast.



Figure 33: Paired and a smaller single wood-sash window at the west side of the north façade, looking south.

West and South Façades

At the northeast corner of the building the west façade is recessed. A flush wood door is set beneath a six-lite, wood transom window and is flanked by standard sash windows **(Figure 34)**. The remainder of the façade is divided into three similar bays with four standard sash windows each **(Figure 35)**. The south façade has a recessed entrance bay at center. The entrance has two similar original doors that are divided by a wood column. A single steel-sash window with four lites is located to the immediate east of the doors **(Figure 36)**.



Figure 34: Recessed northwest corner of building, looking east.



Figure 35: West façade, looking north.



Figure 36: Looking northwest at recessed entrance at south façade featuring two flush- wood doors with four divided lites each.

SITE FEATURES

The generally rectangular subject site is planted with grass to the southeast, south, and west of the Cole School building. A wood flagpole is set at the southeast corner of the site **(Figure 37)**. A fenced enclosure surrounds HVAC equipment at the southeast corner of the Cole School **(Figure 38)**. Beginning at the main entrance of the Cole School, the east perimeter of the site is paved with concrete, which extends to the parking lot area to the rear of the school that is paved with asphalt. Concrete steps with metal railings access the Cole School's main entrance **(Figure 39)**. To the north, several raised planting beds and movable planters occupy the portion of the site immediately east of the Cole School, south of the parking area **(Figure 40)**. The majority of the interior of the site to the north of the Cole School and the north/northeast of the Cafeteria building is paved with asphalt. Parking lots for OUSD and OUSD's Police Unit are divided by a chain-link fence **(Figure 41)**.



Figure 37: Wood flagpole at northwest corner of 10th and Union Streets (the far southeast corner of the site), looking east.



Figure 38: HVAC equipment enclosure at south end of primary façade, looking west.



Figure 39: Concrete steps and landing with metal railings at main entrance, looking northwest.



Figure 40: Wood fence at northwest property boundary, view northwest.



Figure 41: View of rear section of property and parking lots, looking north.

The area surrounded on three sides by the rear façade of the Cole School contains an outdoor storage area for various equipment such as filing cabinets, enclosed by a chain-link fence **(Figure 42)**. Additional raised planting beds are located to the immediate west of the Cafeteria Building **(Figure 43)**. A security gate is located along the west perimeter of the site and accesses a pathway located between the Cafeteria building and the west wing of the Cole School **(Figure 44)**. The area north of the Cafeteria building is paved with asphalt and leads to a basketball court. The north perimeter of the site is enclosed by chain-link fencing **(Figure 45)**.



Figure 42: Fenced equipment storage area to immediate north of rear façade, looking southwest.



Figure 43: Raised planting beds located between Cafeteria building's west façade and the west perimeter of the property, looking north.



Figure 44: Security fence with gate along west perimeter of property, looking east.



Figure 45: View looking north at north perimeter of the site from basketball court.

Several flat roof shade structures are visible at the rear of the, immediately south of the north perimeter fence **(Figure 46)**. An ancillary building constructed at the site in 2011 is visible at the northeast corner of the property. This building is not age-eligible for historic evaluation **(Figure 47)**.



Figure 46: Structures at rear of site near north perimeter, looking east.



Figure 47: Ancillary building at northeast corner of site, built in 2011.

SURROUNDING NEIGHBORHOOD

The subject property is situated at the southwest edge of Oakland's Oak Center neighborhood, where the Acorn neighborhood to the southeast, and the Prescott neighborhood to the west merge at 10th street **(Figure 48)**. The surrounding area is primarily residential, with a cluster of late 19th and early 20th century houses located on the five blocks between Union Street (west) and Filbert Street (east), between 10th and 12th streets. Residences designed in the Queen Anne, First Bay Tradition, and Neoclassical styles are visible along block faces joining at the northeast corner of 10th and Union streets, to the immediate east of the subject property. Most of the residences in this area predate the original construction of the subject building in 1925 and the façade reconstruction of the subject building in 1936 **(Figure 49 to Figure 53)**. Residences of more recent origin in the Acorn neighborhood are located to the south along Union Street and are vernacular in style **(Figure 52 and Figure 53)**. To the west and southwest, Peralta Villa Public Housing Community occupies blocks between Union Street (east) and Mandela Parkway (west) between 8th and 12th streets. This community was constructed during World War II **(Figure 54)**. An office building occupied by Oakland Housing Authority is located opposite 10th street, south of the subject property **(Figure 55)**. A public park with a playground is located immediately north of the subject property. An industrial facility operated by California Cereal Products is located to the north of the park **(Figure 56)**.



Figure 48: Area surrounding the subject property with boundary of subject property outlined in orange. Nearby neighborhood boundaries are indicated with yellow dashed line. Source: Microsoft, BingMaps, 2019. Edited by Page & Turnbull.



Figure 49: Residences along the north side of 10th Street, looking northeast.



Figure 50: View eastward along 10th Street toward downtown Oakland.



Figure 51: Looking east from subject property toward Queen Anne and Neoclassical residences located along the east side of Union Street.



Figure 52: Looking southeast toward vernacular houses of more recent origin located east of the subject property along the east side of Union Street.



Figure 53: Vernacular residences of more recent origin located southwest of the subject property along 10th and Union streets. View faces southeast.



Figure 54: Looking southwest along Poplar Street toward vernacular housing typologies within the Peralta Villa Public Housing Community located west and southwest of the subject property.



Figure 55: Looking southeast toward the City of Oakland Housing Authority building opposite 10th street from the subject property.



Figure 56: Looking north from interior of subject property toward public park and playground. California Cereal Products facility further north is visible in the background.

IV. HISTORIC CONTEXT

The following historic context focuses primarily on the West Oakland area within the City of Oakland and includes context specific to the vicinity of Oak Center neighborhood and subject property, which is located near the center of southern half of West Oakland **(Figure 57)**. This context is expanded upon in the Site Development History section of this report.



Figure 57: Map of West Oakland Planning Area. An orange arrow points to the subject property located within the Oak Center neighborhood, along its border with the Acorn (southeast) and Prescott (west/southwest) neighborhoods. Source: West Oakland Specific Plan, Draft EIR, prepared by JRDV Intl. Edited by Page & Turnbull.

EARLY OAKLAND

Native Americans known as the Ohlone were the first inhabitants of the Oakland area, with known settlements along the banks of Temescal creek dating from the 16th century. [5] The earliest documented European contact in the area occurred in 1772, when a Spanish expedition heading north from Monterey passed through.[6] Thereafter, the Spanish virtually ignored the East Bay region until 1820, when the government granted a large tract of land to Luis Maria Peralta upon his retirement from the Spanish military.[7] Peralta's grant extended from the shore of the bay to the crest of the Oakland hills, and from San Leandro Creek to "El Cerrito," or the little hill (most likely Albany Hill). The grant included the area that became Oakland, which was then known as Encinal (meaning Oak Grove in Spanish). It also included the future cities of Piedmont, Berkeley, Emeryville, Alameda, Albany, and part of San Leandro.[8] Peralta used the land as a cattle ranch, which he sub-divided and bequeathed to his four sons in 1842.[9] Most of what is now East Oakland was given to Antonio Peralta, and most of what is now North and West Oakland was given to Vicente Peralta.[10]

The 1849 Gold Rush that dramatically influenced San Francisco's development also brought fortune-seekers to Oakland.[11] Miners, lumbermen, businessmen, bankers, speculators, and opportunists settled across the bay in what was then known as Contra Costa, or "the other coast."[12] In 1850, three East Coast men arrived in Contra Costa: Horace W. Carpentier, Edson Adams, and Andrew J. Moon.[13] Each man leased 160 acres of land from Vicente Peralta and opened the area to squatters.[14] Swiss engineer Julius Kellersberger was hired to plat the land in a grid pattern starting at the shoreline. The lots were then sold, even though Carpentier, Adams, and Moon had no legal claim to the land.[15] Two years later, on March 25, 1852, the town of Oakland was incorporated.[16] Named for an oak grove that stretched from Lake Merritt to the bay, the city encompassed the present-day downtown area and West Oakland to 22nd Street.[17] The town's citizens, who numbered less than 100, elected Carpentier as the city's first mayor.[18] Oakland's first public school was established in 1853 at Clay and 5th streets.[19]

Oakland saw rapid growth and improvement after transportation connections were established with other communities.[20] Ferry service to San Francisco began in 1854, and the small settlements of San Antonio and Clinton east of Lake Merritt were connected with Oakland by a bridge built in 1856. Commercial and industrial businesses were established near the wharves, and the Central Pacific Railroad ran through downtown Oakland by 1863.[21] In 1868, Oakland was chosen as the western terminus for the Transcontinental Railroad. Beginning in 1869, the train brought tourists and workers to California and made Oakland a major port city and manufacturing center.[22] West Oakland became a shipping hub for western U.S. factories and a processing and manufacturing center for raw commodities such as agricultural products and lumber.

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[5] Lois Rather, *Oakland's Image: A History of Oakland, California,* (Oakland, CA: The Rather Press, 1972), 20, 22.
[6] *Ibid.,* 22.
[7] Beth Bagwell, *Oakland, The Story of a City,* (Oakland, CA: Oakland Heritage Alliance, 1982), 5.
[8] *Ibid.*, 10.
[9] Rather, 26.
[10] West Oakland Specific Plan Draft EIR, Page 4.3-3.
[11] Historic Preservation Element, Oakland General Plan, (Oakland: Oakland City Council, 1993), 1-4.
[12] Bagwell, 25.
[13] *Ibid.*
[14] Rather, 35.
[15] Bagwell, 27.
[16] *Ibid.*, 27.
[17] Historic Preservation Element, 1-4.
[18] Bagwell, 27.
[19] *History of Alameda County, California: Including Its Geology*, Vol. 2, (Oakland, CA: M. W. Wood, Publisher, 1883).
[20] Historic Preservation Element, 1-4.
[21] *Ibid.*, 1-5.
[22] Rather, 53-54.

GROWTH OF WEST OAKLAND

As Oakland became an increasingly popular industrial core, residential and commercial neighborhoods expanded within the city limits. In 1873, Oakland became the county seat of Alameda County.[23] By 1880, the city's population rose to 34,555, more than 20 times what it had been in 1860.[24] Many of the new residents were San Francisco commuters drawn by Oakland's relatively low density and the ferry service across the bay. A large demographic consisted of railroad workers, many of whom were African American.[25] Oakland Point, which included a ferry stop, was connected with central Oakland by the local rail line along 7th Street, with stations at Wood, Center, Adeline, and Market Streets. The entire length of west 7th Street became a major commercial, lodging, and entertainment center which survives today only in fragments (the Arcadia Hotel, the Lincoln Theater, the Brotherhood of Sleeping Car Headquarters, Esther's Orbit Room). The subject property was developed as part of this period of population growth, with the first Cole Grammar School building completed by 1880.

Regarding West Oakland's pattern of early settlement and demographics leading into the 20th century, the West Oakland Specific Plan describes:

> The railroad yards and local parish church at [Oakland] Point began with a reputation as an Irish enclave, but there were strong Scandinavian, German, and African-American presences from the beginning. From around the turn of the century large numbers of Italian, Portuguese, and Eastern European residents appeared in the neighborhood, many of them recent immigrants or San Francisco earthquake refugees, at first living together in groups of lodgers while working as laborers. By the late 1910s and 1920s many of these new immigrants had become property owners in the district, and increasingly had occupations like factory worker, driver, and a whole range of food-related jobs, reflecting the increasing amount and diversity of industry in West Oakland and in Oakland as a whole.[26]

Promotional materials advertised Oakland's "world-renowned" climate, the prosperity of its citizens, its paved streets, and extensive streetcar lines.[27] It was home to several colleges, including the College of California (the precursor of the University of California, Berkeley), Mills Seminary (later Mills College), and St. Mary's College, located at 30th and Broadway. By 1895, the city hosted four daily newspapers, 50 churches, 14 schools (including the first Cole Grammar School, housed in a wood-frame building at the subject property ca. 1880-1923), four theaters or opera houses, and a public library. The health of the city was served at this time by a variety of personal physicians, small benevolent institutions and medical associations, and one hospital.[28]

Oakland expanded by annexing existing settlements and developing new districts.[29] Clinton, San Antonio, and the small town of Lynn (or Brooklyn) were annexed in 1872, pushing Oakland's eastern city limits out to 36th Street.[30] The small Temescal community, located in north Oakland, expanded in the 1860s with the installation of a telegraph line down present-day Telegraph Avenue and the establishment of a streetcar line to the University of California, Berkeley. Klinknerville, later Golden Gate, developed around Stanford and San Pablo avenues in North Oakland. Recreational facilities

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[23] Historic Preservation Element, 1-5.
[24] Bagwell, 59.
[25] Historic Preservation Element, 1-5.
[26] West Oakland Specific Plan, Final EIR, Page 7-6. The preceding three sentences reflect revised text that was incorporated into the Final EIR. http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak049143.pdf.
[27] Rather, 63.
[28] Husted's Alameda, Berkeley, and Oakland City Directory, 1895.
[29] Bagwell, 59.
[30] Historic Preservation Element, 1-5.

like the Tubbs Hotel and Idora Park spurred expansion into areas such as East Oakland and North Oakland. Neighborhoods north of Lake Merritt were annexed in 1891, and Temescal, Golden Gate, and other north Oakland neighborhoods were annexed in 1897.[31] By 1900, Oakland's population numbered almost 67,000.

POST-EARTHQUAKE EXPANSION

The 1906 earthquake and fires displaced thousands of San Francisco residents to the East Bay for temporary and permanent housing. As described by author Robert Douglass, "The 1906 Earthquake left West Oakland virtually unscathed. By sparing the community, however, the quake affected it nonetheless…Many San Francisco businesses that had been wiped out by the quake and fire relocated to West Oakland or elsewhere in the East Bay."[32] Accordingly, West Oakland's demography showed a decrease in single-family households and an increase in the number of lodgers. Industries that West Oakland received included milling, canning, iron works, and light-manufacturing.[33]

On the whole, Oakland continued to grow geographically, increasing to nearly its present size by 1909, with the annexation of the hills area, Fruitvale, Melrose, Elmhurst, and the area south to San Leandro.[34] With those additions, the city's area nearly tripled to 60 square miles. Meanwhile, private developers saw an opportunity to plan communities for both the affluent and working classes in the North Oakland, West Oakland, and East Oakland neighborhoods, and parts of these areas became thoroughly family-friendly residential enclaves, including a cluster of turn of the 20th century residential properties on blocks east of Cole School property.

In 1910, the City of Oakland assumed control of its waterfront, which previously was held by private entities. The change of ownership prompted the expansion of the Port of Oakland.[35] As described in the West Oakland Specific Plan:

> The construction of the Shredded Wheat plant [(currently California Cereal Products)] at 14th and Union [streets, one block north of the subject property,] in 1915 was said to mark the end of today's Oak Center-Ralph Bunche neighborhood as a desirable residence district, and those who could afford it and found the changes in the old neighborhoods objectionable were beginning to move to the new tracts of bungalows and larger houses which developed in the lower hills in the building boom that followed the 1906 earthquake.[36]

[31] Ibid., 1-7.
[32] Robert Douglass, "Chapter 2: A Brief History of West Oakland," in Putting "There" There: Historical Archaeologies of West Oakland, online. Sonoma State University Anthropological Studies Center, 40. Accessed November 27, 2019. http://web.sonoma.edu/asc/cypress/finalreport/chapter02.pdf.
[33] Ibid.
[34] Historic Element, 1-7.
[35] Ibid.
[36] West Oakland Specific Plan, Final EIR, Page 7-6. The preceding three sentences reflect revised text that was incorporated into the Final EIR. http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak049143.pdf.

WARTIME REDEVELOPMENT AND POST-WAR GROWTH

During World War I, Oakland's shipyards provided a "fleet of steel and concrete ships that…within the short space of a year put the Oakland estuary in the national limelight."[37] Development slowed during the Great Depression, but Oakland grew into a major shipbuilding center in the decade prior to World War II.[38] Beginning in 1936, the City of Oakland and Works Progress Administration (WPA) undertook studies related to the siting of a federal public housing project in Oakland. Two West Oakland sites including Peralta Villa, immediately west and southwest of the subject property, and Campbell Village at Oakland Point, were selected for redevelopment. Plans to redevelopment each neighborhood were met with protest from citizens that believed they resided in healthy neighborhoods of owner-occupied housing, while authorities were suspected of targeting African-American residents for removal. The public housing projects were completed at the dawn of World War II and converted to defense worker housing. Through labor recruitment efforts of both white and black workers from the South, Oakland's population grew, with the city's African-American population growing more than five-fold during the war years, with many newcomers settling in West Oakland.

> In the mid-1950s industrially zoned, largely minority West Oakland was cut in half by a major public works project, the Cypress Freeway. In the following decades, several more housing projects were built in West Oakland: the Acorn and neighboring projects south of Oak Center, Westwood Gardens in Prescott, and Chestnut Court in McClymonds.

Transportation systems played a major role in the development of West Oakland. The Bay Bridge, which opened in 1936, eased the commute between Oakland and San Francisco and likely attracted more residents to Oakland. In 1945, the city's population was 405,301. Transportation also directly impacted Oakland's physical development. The postwar emphasis on the automobile resulted in a high concentration of automobile dealerships, garages, and other automobile-related businesses established along the Broadway corridor between Grand Avenue and what is now I-580.[39] In the mid-1950s West Oakland, a largely-minority neighborhood with much industrial zoning, was divided by a major public works project, the Cypress Freeway.[40] The rise of the automobile also led to increased development in the suburbs and new freeways to reach these outlying areas.[41] As described by Douglass:

> As the system of freeways grew around the Bay Area and the rest of the nation, the original Cypress Freeway was designed as an efficient connector between the Bay Bridge and the Nimitz Freeway. It was completed in 1957, resulting in demolition of buildings [along Cypress Street, roughly two blocks west of the subject property,] physically dividing West Oakland. At the same time, as the de facto western limit of area "slum clearance," it acted to partially protect the neighborhoods between it and the bay.[42]

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[37] Florence B. Crocker, *Who Made Oakland?* (Oakland: Clyde Dalton, 1925), quoted in Rather, 87.
[38] Ibid., 1-9.
[39] "All About Auto Row: A Brief History." City Homestead, (July 8, 2009). Website accessed January 2019 from: https://cityhomestead.wordpress.com/2009/07/08/all-about-auto-row/
[40] West Oakland Specific Plan, Final EIR, Page 7-6. The preceding three sentences reflect revised text that was incorporated into the Final EIR. http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak049143.pdf.
[41] Historic Preservation Element, 1-9.
[42] Douglass, 44.

While freeway construction and redevelopment enticed some businesses and residents away from the city center, in many cases businesses and residents were forced into relocation as historic commercial and residential fabric in downtown and West Oakland disappeared. Increased economic and racial segregation were byproducts of this freeway and redevelopment orientation, and through the 1960s and 1970s Oakland experienced infrastructure decline associated with entrenched poverty, deindustrialization, and a weak urban tax base.[43]

In 1965, the Oak Center Urban Renewal Plan prepared by the Redevelopment Agency of the City of Oakland was adopted by the Oakland City Council.[44] This neighborhood redevelopment plan, combined with urban renewal in the neighboring Acorn redevelopment area to the southeast, brought extensive change to the immediate vicinity of the subject property during the late 1960s and 1970s. The subject property was within the Oak Center plan area, which spanned an approximately 500-acre section of West Oakland between 10th and 18th streets, bound by Brush Street to the east and Cypress Street (now Mandela Parkway) to the west. As of 1965, the project was reported to be the largest rehabilitation project ever attempted in the Western United States.[45]

Between 1969 and 1972 the new main Post Office and West Oakland BART Station heavily impacted West Oakland's 7th Street commercial strip and the entire Gibbons Tract west of South Prescott. A tight real estate market in San Francisco in the early 1980s sparked new development and preservation projects in Oakland, especially downtown.[46] Homebuyers began seriously considering Oakland neighborhoods, many of which retained strong local character.[47] In 1989 the Loma Prieta earthquake damaged many of the area's historic buildings, brought down the Cypress Freeway, and prompted a new look at West Oakland.[48] The city's population has remained steady throughout the 1990s and 2000s and was recorded as 425,195 in 2017.[49]

[43] Robert O. Self, *American Babylon: Race and the Struggle for Postwar Oakland*, (Princeton, NJ: Princeton University Press, 2003).
[44] *Oak Center Urban Renewal Plan*, Adopted November 30, 1965 as amended February 7, 2006. Accessed online November 26, 2019. http://www2.oaklandnet.com/oakca1/groups/ceda/documents/marketingmaterial/dowd007635.pdf; and, "The Meaning of 'HUD 6230'," *Oakland Tribune*, June 11, 1967.
[45] "Oak Center Clears Next to Last Hurdle," *Oakland Tribune*, November 17, 1965.
[46] Bagwell, 260-262.
[47] Ibid., 263.
[48] West Oakland Specific Plan, Final EIR, Page 7-6. The preceding three sentences reflect revised text that was incorporated into the Final EIR. http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak049143.pdf.
[49] United States Census.

V. PROJECT SITE HISTORY

The existing Cole School stands on a site that was acquired by the City of Oakland's Board of Education (Board of Education) in 1875, and which appears to have been a vacant parcel prior to 1878 **(Figure 58)**.[50] Between 1877 and 1880, the original Cole Grammar School Building was built at the site, based upon research of city directories for Oakland that began listing the school in 1880 and one secondary source that provides the 1877 date of construction.[51] The original school was a two-story, Gothic Revival style building with a hipped roof and tall narrow windows, based upon a rendering published in 1885. The school was named in honor of Rector E. Cole, a prominent dentist and City Council member who was at the time of the school's founding president of the Oakland Board of Education **(Figure 59)**.[52]

Between 1892 and 1922, the Board of Education acquired several lots located to the north of the Cole School with the block bound by Union, 10th, Poplar, and 12th streets **(Figure 60)**. Acquisition of two residential lots immediately north of the original property resulted in the Cole School property's growth to roughly half the block's area.[53] In 1896, the Cole School served over 600 students.[54] The 1902 Sanborn map was the first to record the subject property and shows the original Cole School building had an L plan with a secondary, one-story rear volume. The map also shows the school property occupied the south half the block, with residential properties and five vacant lots within the northern half of the block **(Figure 61)**.



Figure 58: Thompson & West's *Map of Oakland and Vicinity*, 1878. An orange line shows the current boundary of the Cole School Property. Orange shading shows the original property dimension as of 1878. Source: David Rumsey Map Collection.

[50] Deed on file with Oakland Unified School District; and, Joseph E. Baker, *Past and Present of Alameda County,* (North Charleston, SC: Createspace, n.d.), 262. Google Books. https://books.google.com/books?id=yDIuDwAAQBAJ&pg=PA270&dq=cole+school+oakland&hl=en&newbks=1&newbks_redir=0&sa=X&ved=2ahUKEwj9-cap_PzlAhVPJDQIHdyrCqoQ6AEwBXoECAUQAg#v=onepage&q=cole%20school%20oakland&f=false. Accessed November 26, 2019.
[51] Thompson & West, *Map of Oakland and vicinity*, (Oakland, CA: Thompson & West, 1878). David Rumsey Map Collection.
[52] The Knave, "Original Cole School," June 24, 1951. Cole School file, Oakland Public Library.
[53] Deeds referenced herein relating to acquisition of parcels between 1892 and thereafter were provided to Page & Turnbull by OUSD.
[54] "Schools Largely Attended," *San Francisco Call*, Vol. 80-, No. 59, July 29, 1896.

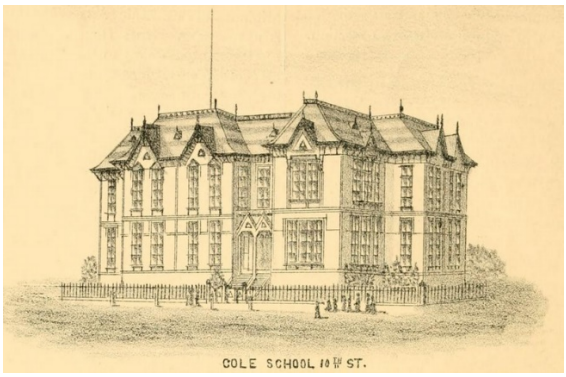


Figure 59: The original Cole School building as rendered in 1885. Source: *Oakland and Surroundings*.[55]

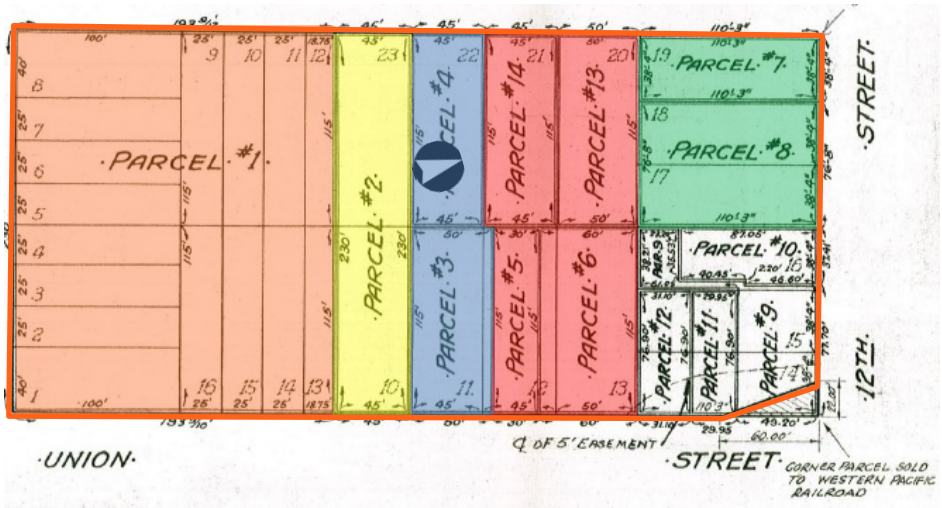


Figure 60: Diagram showing parcels acquired by Board of Education ca. 1892 to 1922. Current property boundary shown with orange line. Shading shows properties acquired in: 1892 (yellow); 1905-1907 (blue); 1912 (red); 1922 (green); after 1922 (white). Source: OUSD. Edited by Page & Turnbull.



Figure 61: Sanborn-Perris Map Co.'s 1902 fire insurance survey map illustrating the first Cole School building, which occupied a parcel (shaded orange) spanning roughly half the area of the subject property. Approximate area acquired in 1892 is shaded yellow. Properties acquired in 1905 and 1907 are shaded blue. Source: San Francisco Public Library. Edited by Page &Turnbull.

[55] W.W. Elliot, *Oakland and Surroundings*, (Oakland, CA: W.W. Elliot, 1885). Library of Congress.

By 1911, the subject site expanded slightly further northward through acquisition of the two more residential lots to the immediate north in 1905 and 1907.[56] A Manual Training building was built between 1902 and 1911 and stood near the center of the northern perimeter of the campus. A small one-story building with a triangular plan and an unknown use was illustrated to the west of the Cole School **(Figure 62)**. In 1912, four additional lots were acquired by the Board of Education, resulting in the school property's expansion to roughly 75 to 80 percent of the block's area. Around 1917, the Cole School's student population of around 700 students included relatively large groups of Italian- and Portuguese-American students.[57]

After World War I, the Board of Education acquired two additional parcels near the northeast end of the block, situated near the southeast corner of Poplar and 12th streets. These parcels were recorded on the 1911 Sanborn map as having an apartment or flats building and an adjacent residence. The Board of Education was permitted to alter the two-story flats building for Cole School use in 1922. The work was related to conversion of the residential building to use as a kindergarten facility.[58]



Figure 62: Sanborn-Perris Map Co.'s 1911 fire insurance survey map. Between 1902 and 1911 a Manual Training Rooms building was built near the rear of the school property. Properties acquired in 1912 are shaded red. Properties acquired in 1922 are shaded green. Source: San Francisco Public Library. Edited by Page & Turnbull.

In late December 1923, the original Cole Grammar School building was destroyed by arson, occurring shortly after arson destroyed the Lincoln School in Alameda and Woodland High School in Yolo County.[59] In the immediate days after, schools in Oakland were patrolled by fire department personnel and police.[60]

Between 1924 and 1925, the first iteration of the existing, subject Cole School building was designed and constructed, while temporary school buildings were placed at the subject site. The cornerstone for the Cole School building that currently stands at the subject property was laid in May 1925.[61] Funding provided by a school bond building program that enabled over 300 classrooms to be added throughout Oakland's school district.[62] An architect or designer was not identified on original plans

[56] Ibid.
[57] Oakland Public School Board of Education, Report of the Superintendent of Schools, 1917-1918, (Oakland California: Tribune Publishing Company, February 1, 1919).
[58] "Cole School Alterations," *Building and Engineering News*, June 3, 1922, 15. See building permit table for building permit reference.
[59] "Mystery Fire Destroys School," *Santa Cruz Evening News*, December 31, 1923. "Arsonists Burn School Houses," *Petaluma Daily Morning Courier*, January 1, 1924.
[60] "Structures Guarded to Save Them From Arson," *The Bakersfield Californian*, January 2, 1924.
[61] "Cornerstone of New School laid by Mason Body," *Oakland Tribune*, May 29, 1925.
[62] "Cole School Plans Given Body's O.K.," *San Francisco Chronicle*, March 29, 1925.

prepared for the City of Oakland Board of Education, which presented a Late Gothic Revival design with a brick exterior and cast cement exterior ornamentation, across a U-shaped plan **(Figure 63 to Figure 66)**. Key features of the 1925 design included a cast cement beltcourse at the sill line of the first story windows, two-story main body, and parapet. The building also featured pointed arch entrances and projecting oriel windows over the entrances along the south façade. Windows were arranged in groups of five within each bay and were six-over-six, divided-lite, wood-sash windows with individual three-lite transoms above. Recessed spandrel panels quatrefoils were recessed slightly behind the brick exterior walls, creating a horizontal division between the first and second stories. The brick exterior walls between each grouping of windows featured quoins.

The builder of the school in 1925 was identified as Alfred Olson.[63] Plans for the school were confirmed in March 1925, but one year later, the Superintendent of buildings and grounds for Oakland schools recommended that the nearly complete building's as-built design be rejected, due to Olson's failure to comply with the material specifications".[64]

In 1936, following the passage of the Field Act of 1933, and likely stemming further from previously determined deficiencies in the Cole School's design including major water infiltration problems, the school was renovated with a Moderne style exterior **(Figure 67 to Figure 71)**. Exterior brick and cast concrete ornamentation and window mullions were removed and replaced with cement plaster exterior surfaces and wood, respectively. Based upon plans prepared under the supervision of architect and engineering consultant William G. Corlett, most window openings retained their original locations and dimensions. A similar approach was undertaken with entrances throughout the building, resulting is a very similar overall massing, fenestration pattern, and building footprint, yet very different exterior materials.

During the decade between 1936 and 1946, the subject site featured the Cole School building at its south end, with open land along the remainder of the block. An aerial photograph taken in 1946 shows several trees were standing along the east and west sides of the property **(Figure 72)**. Peralta Villa, a segregated public housing community constructed in the early 1940s was to the west and southwest of the Cole School property. The area immediately east of the subject property contained older residential properties developed around the turn of the 20th century. The property north of the subject property, opposite 12th street was developed in 1915 as a food production facility, and introduced industrial use into the vicinity. A railroad spur located immediately west of the facility would later be extended southward, clipping the northeast corner of the subject property, with rail tracks extending southward along Union Street.

[63] Board Asked to Reject Cole School," March 2, 1926. Cole School file. Oakland Public Library.
[64] "Cole School flaws Laid to Builder," March 2, 1926. Cole School file. Oakland Public Library.

Elevations of Cole School as Designed in 1925

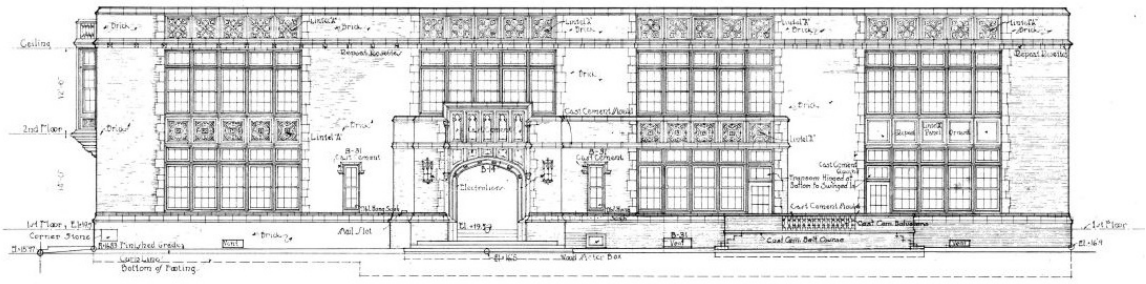


Figure 63: Primary (east) façade, as designed in 1925. Source: OUSD.

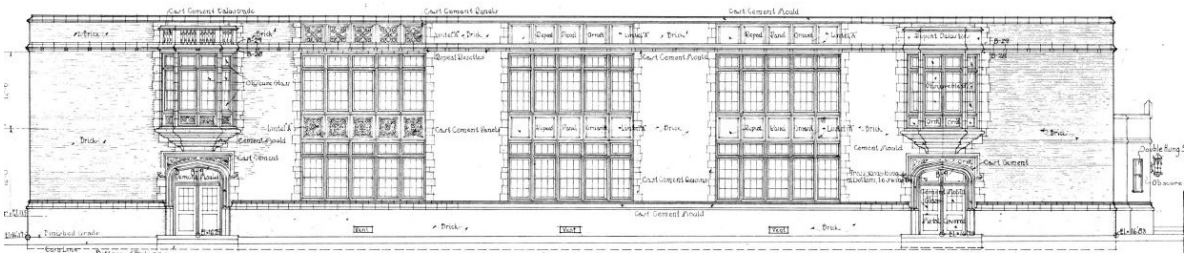


Figure 64: South façade, as designed in 1925. Source: OUSD.

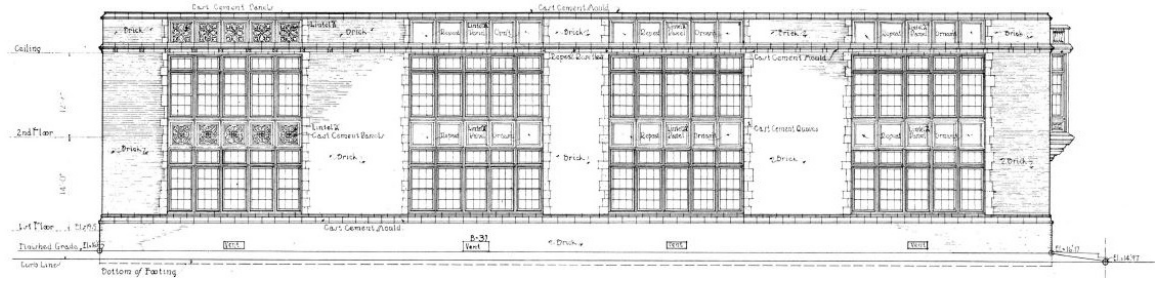


Figure 65: West façade, as designed in 1925. Source: OUSD.

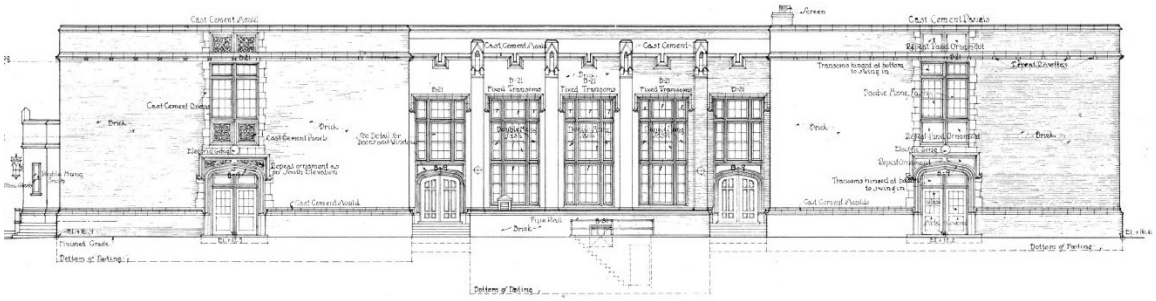


Figure 66: North façade, as designed in 1925. Source: OUSD.

Elevations of Cole School Façade Renovation, 1936

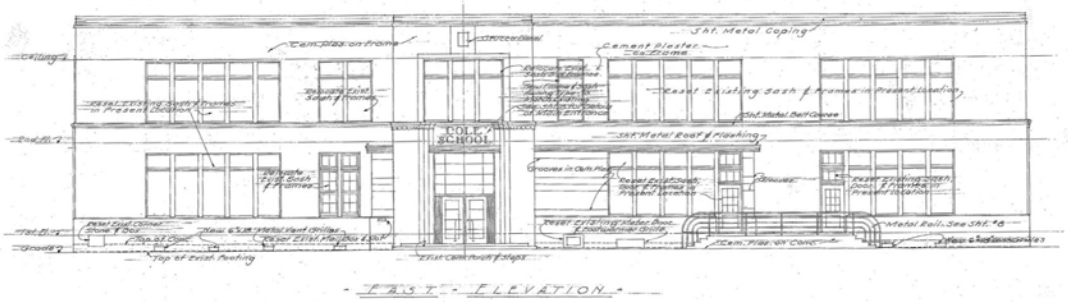


Figure 67: Primary (east) façade, as designed in 1936. Source: OUSD.

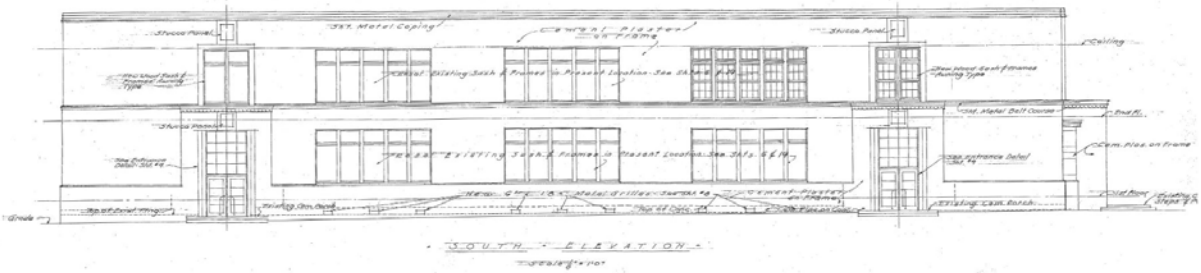


Figure 68: South façade, as designed in 1936. Source: OUSD.

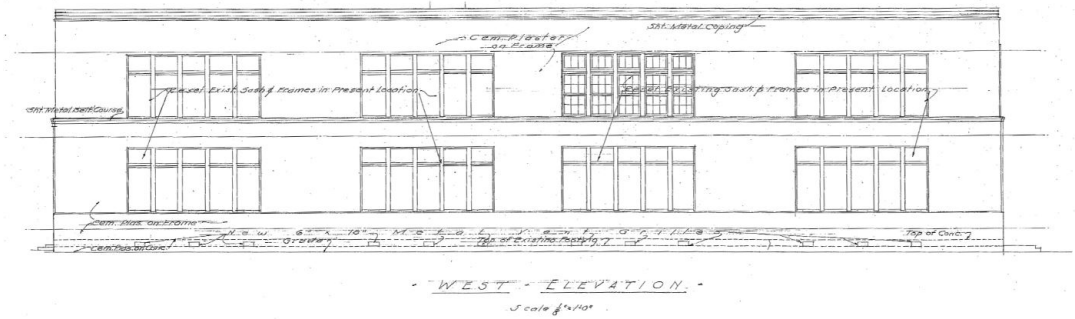


Figure 69: West façade, as designed in 1936. Source: OUSD.

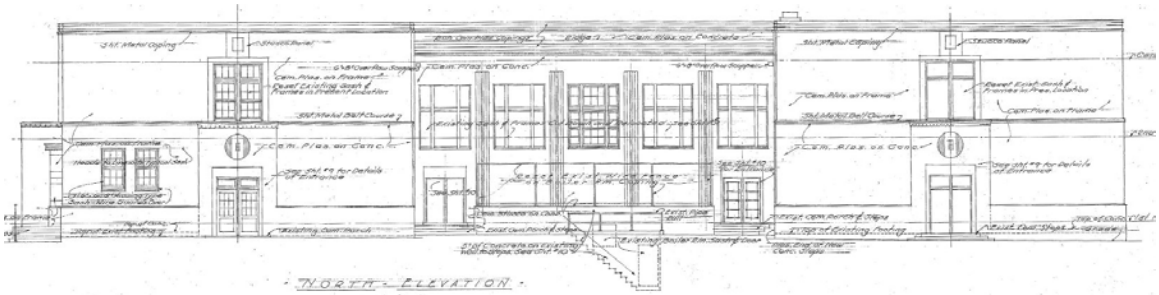


Figure 70: North façade, as designed in 1936. Source: OUSD.

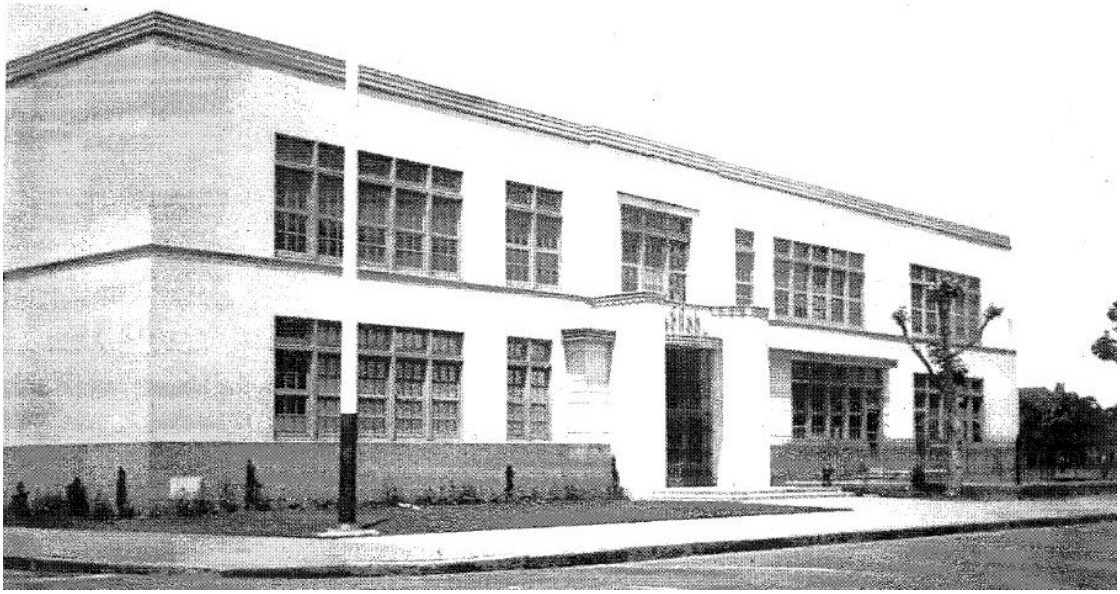


Figure 71: Cole School, 1938. Source: Oakland Cultural Heritage Survey.



Figure 72: Aerial photograph of subject property and vicinity, 1946. Source: UC Santa Barbara Library Special Collections, Jack Ammann Photogrammetric Engineers, Flight GS-CP, Frame 1-17.

In 1949, the Cafeteria building was designed by Oakland-based architect, Edward O. Blodgett. The one-story, hybrid reinforced-concrete and wood-frame building was described as a new "wing" to the Cole School when it was dedicated in March of 1950 **(Figure 73 to Figure 76)**. The Cafeteria building was also designed to house the school's music program and had one additional classroom and an overall capacity for 214 students.[65] Plans prepared by Blodgett specified two skylights that do not appear on the existing building. At the north façade, the entrance at the center of the façade was specified to be surrounded by glass block, which has since been replaced.

[65] "Cole School Dedicates $76,176 New Wing," *Oakland Tribune*, March 21, 1950.

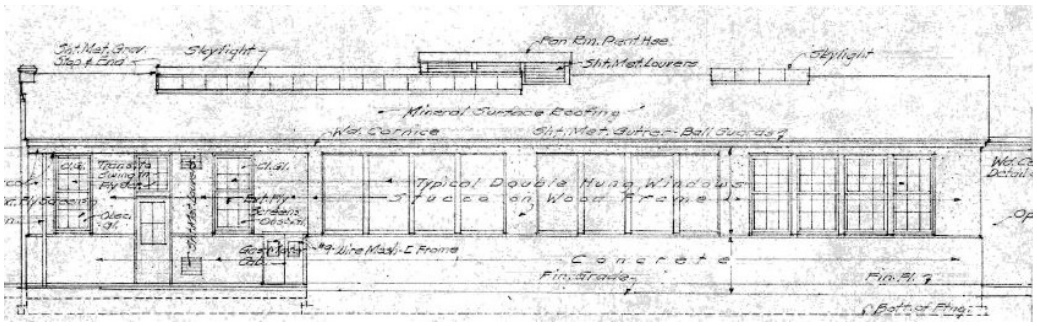


Figure 73: West façade of Cafeteria building as designed in 1949. Source: OUSD.

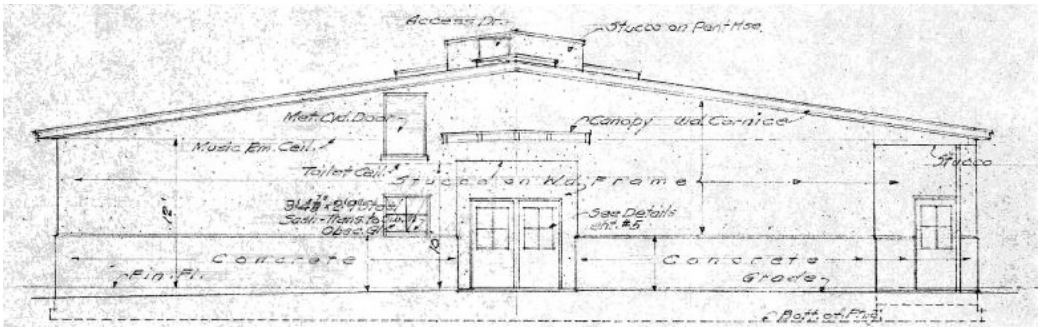


Figure 74: South façade of Cafeteria building as designed in 1949. Source: OUSD.

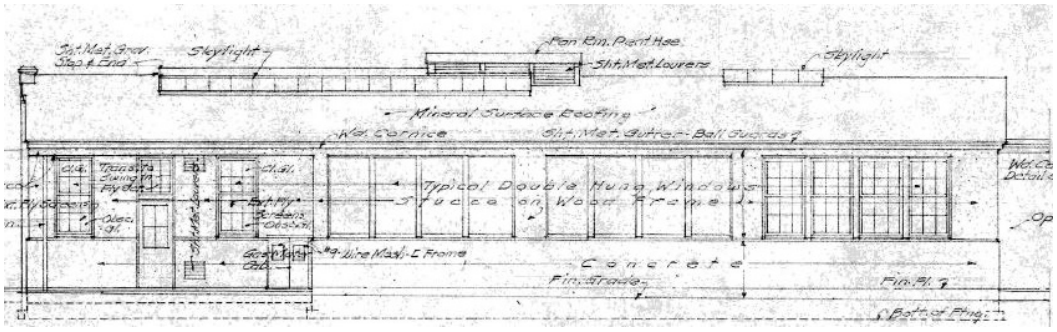


Figure 75: East façade of Cafeteria building as designed in 1949. Source: OUSD.

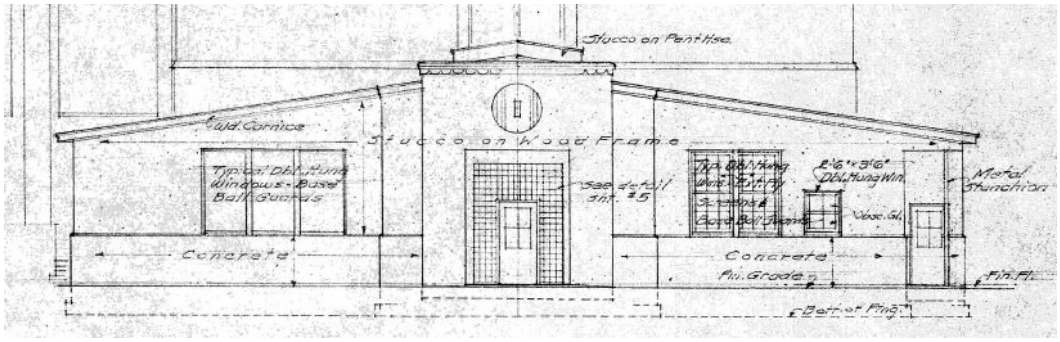


Figure 76: North façade of Cafeteria building as designed in 1949. Source: OUSD.

In 1952, an updated Sanborn map was published and is the first available Sanborn map to record the subject the Cole School building following its façade reconstruction in 1936, and the Cafeteria building for the following its original construction in 1949. Five detached, one-story classroom buildings were aligned north to south along the east perimeter of the site. No additional buildings or structures were recorded at the property **(Figure 77)**.

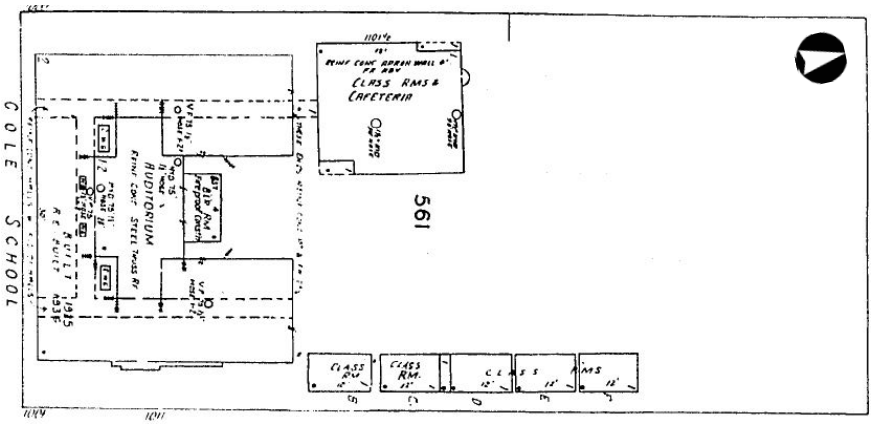


Figure 77: Sanborn-Perris Map Co.'s 1952 fire insurance survey map illustrating the second Cole School building following its façade reconstruction in 1936. The Cafeteria building (1949) and several one-story classroom buildings near the east perimeter of the site were also illustrated on the map. Source: San Francisco Public Library.

By 1961, three additional detached classroom buildings were built along the west perimeter of the site. These buildings featured a similar height and dimension to the five classroom buildings situated along east perimeter, recorded in 1952. No changes were illustrated at the Cole School or Cafeteria buildings **(Figure 78)**. The aforementioned railroad track wrapping around neighboring property to the north of the Cole School was extended southward. This was enabled by sale of a small corner parcel containing roughly 660 square feet of area to the Western Pacific Railroad by around 1956.[66] Within the subject site, the Cole School, Cafeteria building, and single, detached classroom building along the east perimeter of the site were recorded. By this time, it appears that he majority of the site's surface was paved, rather than grass **(Figure 79)**.

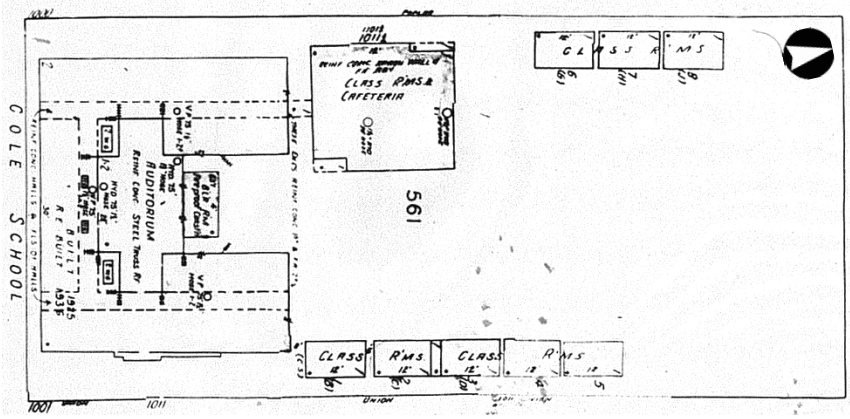


Figure 78: Sanborn-Perris Map Co.'s 1961 fire insurance survey map illustrating the subject property. The Cafeteria building (1949) and eight (8) one-story classroom buildings situated along the east and west perimeters of the site were also illustrated on the map. Source: San Francisco Public Library.

[66] Cole Diagram, October 9, 1956. This document illustrates parcels within the Cole School property by 1956. Provided to Page & Turnbull by OUSD. See also, excerpts of Board Minutes of November 20, 1956. Provided to Page & Turnbull by OUSD.

During the 1960s period of redevelopment, Cole School continued to operate as an elementary school and served a primarily African American student body, according to a newspaper report.[67] As of 1965, the property had its current dimension and featured the two subject buildings along with a single temporary school building at the east perimeter of the site, just north of the Cole School's east wing **(Figure 79)**.



Figure 79: Aerial photograph of subject property and vicinity, 1965. Source: UC Santa Barbara Library Special Collections, Cartwright Aerial Surveys, Flight CAS_65_130, Frame 15-117.

As part of the redevelopment plan, the Board of Education argued a new model school should be constructed to induce middle class whites to move back into West Oakland.[68] Some funding was to be set aside to renovate the Cole School which was described as "outmoded".[69] The redevelopment plan proposed to close or abandon the section of 12th street bordering the Cole School property to the north as part of an effort to expand the school property. This led to controversy regarding the impact of the closure of the street on the ability for police and fire departments to maintain accessibility to the area, in addition to concerns over traffic loads along 10th Street.[70]

By September of 1968, over 1,700 units of pre-existing housing were demolished in the Acorn redevelopment area to be replaced with 1,000 units in what was described in the *Oakland Tribune* as a "slum clearance program."[71] Within the Oak Center plan, roughly 650 to 1,500 new housing units were planned as renewal efforts in the area were said to be focused on rehabilitation of existing housing rather than clearance.[72] In 1967, the first private residential rehabilitation project began, and the Oakland Redevelopment Agency hoped that another 600 homeowners would participate in the rehabilitation program over the next three years. Nonetheless, the area plan still called for a displacement of around 4,000 residences "living either in areas that are too far gone to rehabilitate or are in areas slated for "public taking" for parks and schools.

[67] "Tax Would Help Integrate School," *Oakland Tribune*, March 29, 1968.
[68] Oak Center School 5-Cent Tax Sought," *Oakland Tribune*, September 22, 1967.
[69] "Tax Would Help Integrate School," *Oakland Tribune*, March 29, 1968.
[70] "Oak Center Clears Next to Last Hurdle," *Oakland Tribune*, November 17, 1965.
[71] "Loans to Fix Homes Needed," *Oakland Tribune*, September 1, 1968.
[72] Ibid.

At the subject property, several temporary school buildings were relocated to the property between 1963 and 1968, however, these structures were removed from the site by 1980, based on review of historic aerial photography.

In 1973, the Cole School was closed for renovation in lieu of replacement by a new school building, and appears to have remained closed until ca. 1975 as the Oakland Redevelopment Agency and the Board of Education worked through funding issues related to the school's renovation.[73] During this time the exterior staircases and elevator at the rear wings of the building were constructed.[74] By 1980, 12th Street was closed between Union and Poplar Streets, and replaced with green space **(Figure 80)**. The Cole School converted from original use as an elementary school to that of a middle school in 1980, and continued to operate as such until 2009, when it was closed as a school. The building began its present use housing administrative offices for OUSD and the OUSD Police Unit.



Figure 80: 1980 aerial photograph of subject property and vicinity. Source: UC Santa Barbara Library Special Collections, Western Aerial Photos, Flight GS-VEZR, Frame 1-25.

Review of available aerial photographs shows the existing fence separating the OUSD Police Unit's parking area was installed ca. 2009 to 2010. The existing playground area with a basketball court was installed at the north end of the site ca. 2010 to 2012 **(Figure 81 and Figure 82)**.

[73] "Redevelopers In School Dilemma," *Oakland Tribune*, November 1, 1974.
[74] "Renewal Agency May Help School," *Oakland Tribune*, November 15, 1974.



Figure 81: 2010 aerial photograph of subject property and vicinity. Source: HistoricAerials.com. Edited by Page & Turnbull.



Figure 82: 2012 aerial photograph of subject property and vicinity. Source: HistoricAerials.com. Edited by Page & Turnbull.

CONSTRUCTION CHRONOLOGY

The following provides a timeline of construction and alterations to 1011 Union Street based on available building permits and plans on file with the City of Oakland or included in the Oakland Cultural Heritage Survey property files. Some permits available on microfiche were poorly scanned and are illegible. Some permits are incomplete and do not include full date information or permit number information. The following table includes only those for which the microfiche permits can be deciphered, and those which are digitized and appear to have been implemented. Copies of the digitized permits are appended to this report **(see Appendix B)**.

Date	Permit	Owner	Builder/Contractor	Description
1/3/1924	86959	City of Oakland	J.R. Faulkes, Builder	Eight portable classrooms.
3/12/1924	70525	City of Oakland	F.J. Maurie, Builder	Partitions at two-story flats building at 12th and Poplar streets to be used as a kindergarten.
3/2/1925	Original Plans on file with OUSD Permit A2200.	Board of Education	Oakland Public Schools Buildings and Grounds Department Contractor, Alfred Olson	Cole School, Polar, 10th, and Union Streets for the Oakland School District. Original Construction. Two-story brick and concrete school.
4/27/1936	A64176	Board of Education	William G. Corlett, Architectural and structural consultant Carl N. Swenson, Building Contractor	Façade Reconstruction of Cole School.

Date	Permit	Owner	Builder/Contractor	Description
7/27/1943	A99397	Board of Education	Oakland Public Schools, Architect H.J. Christensen Co. & W.E. Lyons Construction Co., Contractor	Portable classrooms. Notes size of each building as 22 feet by 35.5 feet.
7/27/1943	A99398	Board of Education	Oakland Public Schools, Architect H.J. Christensen Co. & W.E. Lyons Construction Co., Contractor	Portable classrooms.[75]
8/9/1949	B28435	Board of Education	Edward O. Blodgett, Architect Hall & Pregnoff Structural Engineers G.M. Simonson Mechanical Engineer	Construct Cole School Cafeteria building.
6/12/1952	B42552	Board of Education	George B. Green, Contractor	Permit to erect a building 22 feet by 35 feet in size for public school use.
6/19/1952	B42[illegible]	Board of Education	George B. Green, Contractor	Permit to erect a building 22 feet by 35 feet in size for public school use.
2/17/1964	HM474	Oakland Public School	Ayen House Movers	Relocate a portable classroom from Rear of 920 Campbell Street Foothill Boulevard to the 1011 Union Street.
6/26/1968	HM781	Oakland Public Schools	Ayen House Movers	Relocate a portable classroom from 915 Foothill Boulevard to the 1011 Union Street.
7/28/1969	2512	Oakland City School	Newton Bros., House Moving	Move portable school building from 824 29th Avenue (Lazear School) to Cole School property.

[75] All former portable classroom buildings constructed at or relocated to the subject property between 1943 and 1969 were detached buildings and are no longer extant.

Date	Permit	Owner	Builder/Contractor	Description
8/3/1973	N/A	Board of Education	Van Bourg/Nakamura & Associates architecture and planning	Cole School remodeling. New staircases at rear wings. Replacement Hollow metal doors and some solid-core doors installed. Reroof entire 2nd floor roof except for roof at auditorium and boiler room.
7/26/1983	3182	Not listed	Roto Rooter Sewer, Contractor	Permit to excavate in streets or other work as specified: sewer repair.
7/22/1998	X9800536	Not listed	Not listed	Trenching for tank removal.
8/2/2010	X1001020	Not listed	PG&E	Trench on Union Street for PG&E primary line service upgrade.
2/22/2013	ZC130458	Not listed	Not listed	Zoning clearance for relocated café within School District Headquarters.
5/6/2015	CGS15053	Not listed	Not listed	New driveway per approved plans per City Standard.
9/29/2016	ENMI16214	Not listed	Note listed	Bike Share Program bike rack.

A building permit application or project plans relating to replacement of windows within the Cole School building was not found. The windows appear to have been replaced ca. 1973-1990 as the current windows were documented by the Oakland Cultural Heritage Survey in 1990, while the original windows were described on plans for remodeling the school in dating to 1973.

OWNERSHIP/OCCUPANCY HISTORY

As described above, the site upon which the Cole School building stands (Parcel 1) has been owned by the City of Oakland Board of Education or OUSD since 1875. Parcels 2-8, 13, and 14 were acquired between 1892 and 1922, expanding the area of the property northward. Parcels 9 through 12 were acquired between 1922 and 1956. In 1956, a portion of Parcel 9 was conveyed to the Western Pacific Railroad, giving the subject property its distinct clipped northeast corner **(Figure 83)**.[76]

Between 1875 and 1993, the property was owned by the City of Oakland's Board of Education, as listed on deeds and building permit records. In 1993, the Board of Education conveyed its interest in the property to OUSD.

[76] Deed records and the Diagram of the Cole School property were provided to Page & Turnbull by OUSD, November 2019.

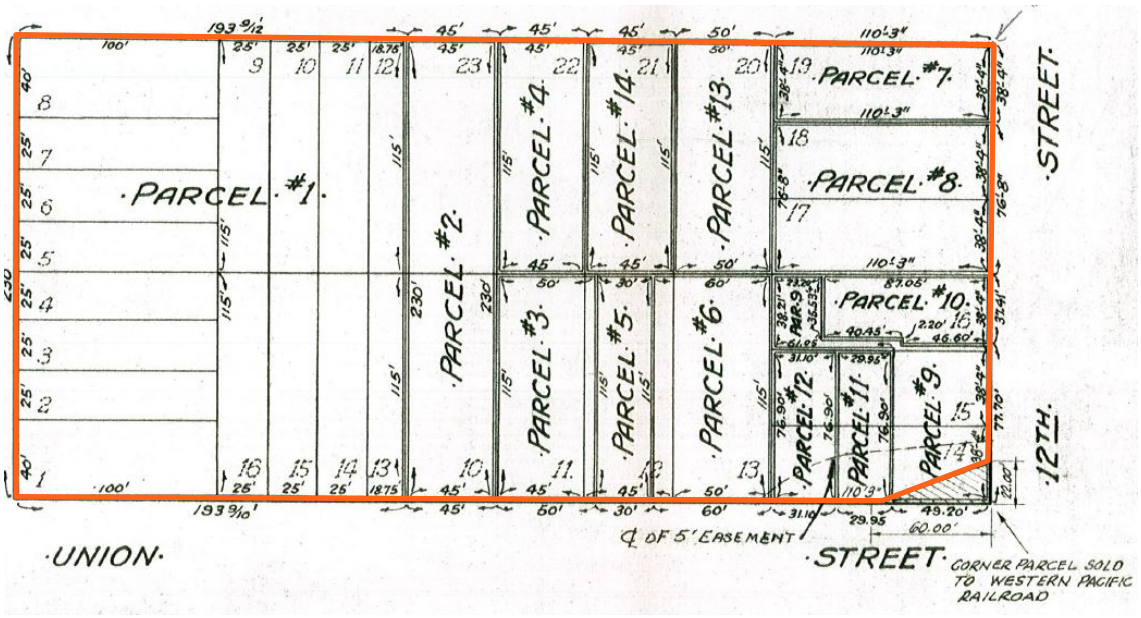


Figure 83: Diagram of Cole School property, listing parcels as categorized by OUSD, superimposed over an Assessor's Block Map, 1956. The current approximate boundary of 1011 Union Street is outlined with orange. Source: OUSD. Edited by Page & Turnbull.

FIELD ACT 1933

Passed shortly after the devastating Long Beach Earthquake of 1933, which destroyed seventy schools, the Safety of Design and Construction of Public School Buildings Act, or Field Act, of 1933 (Education Code §§17280-17317 and 80030-81149) required that school buildings in California meet high standards for safety. Adopted by the State of California, the act was enforced through plan review and inspection. While the original Field Act only applied to new construction, subsequent related acts would require some existing buildings to adhere to Field Act standards.[77] The subject Cole School building was subject to reconstruction at the exterior in 1936, three years after the enactment of the Field Act.

MODERNE ARCHITECTURAL STYLE

The Moderne style, also referred to as Art Moderne and Steamline Moderne, is a late Art Deco architecture style that appeared in commercial buildings, public buildings, theaters, gas stations, and residential buildings between ca. 1930 and ca. 1950.[78] It emerged in Germany in the work of the New Objectivity artists and in the buildings by architects involved in the German Werkbund, led by Hermann Muthesius. Taking cues from the Werkbund, American designers were similarly interested to strip Art Deco of its excessive ornamentation and focus on its streamlined aesthetic, especially during the Great Depression in the 1930s. The concepts of efficiency and speed, as well as aerodynamic form, took precedence over unnecessary decoration and espoused technological achievement and faith in the future.[79] The Streamline variant of the style is characterized by curving, often cylindrical, forms; rounded edges; flat roofs; subdued colors; and long, horizontal lines, as opposed to the vertical emphasis of Art Deco.[80] Occasionally, it also features nautical elements. The

[77] Robert A. Olson, "Legislative Politics and Seismic Safety: California's Early years and the "Field Act," 1925-1933," *Earthquake Spectra*, Vol. 19, No. 1., pages (111-131).
[78] Mary Brown, *San Francisco Modern Architecture and Landscape Design 1935-1970 Historic Context Statement*, (San Francisco, CA: San Francisco Planning Department, January 12, 2011), 117-118.
[79] Marcus Whiffen, *American Architecture Since 1780: A Guide to the Styles, Rev. Ed,* (Cambridge, MA: MIT Press, 1992), 241.
[80] "Moderne Style 1930 – 1950," Pennsylvania Historical and Museum Commission, online. Accessed November 21, 2019. http://www.phmc.state.pa.us/portal/communities/architecture/styles/moderne.html.

style became popular in both architecture and the design of everyday objects and was "inspired by America's love affair with machines---the airplane, the car, the train, and the toaster," as described by architectural historian Lester Walker.[81] Marcus Whiffen describes the style as follows:

> Streamline Moderne is a horizontal style. In the overall form of the building as a rule, and always in the main elevations, horizontality prevails, with vertical features (if employed at all) reserved for the entrance. Secondly, it is a style of curved surfaces - curved end walls, curved corners, curved bays, and cylindrical projections. Thirdly, it is a style quite without ornament, apart from stringcourses and other trim emphasizing the horizontality of the design. In larger buildings the upper stories are often set back. Roofs are flat and parapeted. The parapets are often surmounted by pipe railings, producing a nautical effect that may be intensified by pipe railings on balconies and outside stairs, by round windows like portholes, and even by imitation rivets. Walls, brick or concrete, are usually plastered. Glass block is much used for translucency and textural contrast. [82]

Prominent Bay Area examples of the application of the Moderne style include: Swan's Market in Oakland, built 1917 with Moderne style alterations; San Francisco Maritime Museum, built ca. 1949; and the Mayway Corp. building at 1340 Cypress Street (now Mandela Parkway), built 1939-1940 **(Figure 84 to Figure 87)**.



Figure 84: Swan's Market, Oakland, a 1917 building was partially remodeled with a Moderne style corner. Source: BARTable.



Figure 85: San Francisco Maritime Museum, built ca. 1949 in the Streamline Moderne style, with nautical elements. Source: *San Francisco Chronicle*, online.



Figure 86: Mayway Corp. building at 1340 Cypress Street (Mandela Parkway), West Oakland. Source: OaklandWiki.


OAKLAND PLANT IS ARCHITECTURAL MODEL

The Oakland plant of the Coca-Cola Bottling Company at 1340 Cypress Street, is considered by architects to be one of the most attractive and modern industrial establishments of the Pacific Coast, exemplifying the principle of daylight lighting in modern architecture. The structure occupies approximately one city block.

Figure 87: Mayway Corp. building (originally Coca Cola bottling facility), pictured in 1942. Source: *Oakland Tribune* via OaklandWiki.

[81] Lester Walker, *American Homes: The Landmark Illustrated Encyclopedia of Domestic Architecture*, 219-220.
[82] Whiffen, 241.

WILLIAM GREENFIELD CORLETT, JR., ARCHITECT

William Greenfield Corlett, Jr. (1887-1954) (William G. Corlett) designed alterations relating to the façade reconstruction and restyling of the Cole School in 1936. Corlett was born in the Bay Area in 1887 became a second-generation architect, after his graduation from University of California, Berkeley in 1910. His father, William H. Corlett (1856-1937), was a prominent lumber mill owner and prolific architect in Napa County, who designed notable buildings including the Noyes Mansion (1902) and Napa Franklin Station Post Office (1933), among many others.[83] William G. Corlett received his Bachelor of Architecture from University of California, Berkeley in 1910, and was also a licensed structural engineer.[84] In 1912, Corlett partnered with Walter D. Reed as the firm Reed & Corlett, which lasted until Reed's death in 1933. Subsequently, Corlett maintained an individual practice in Oakland until his retirement in 1944. Corlett's *Oakland Tribune* obituary noted that Henry Gutterson was his "long-time partner" in architecture.[85] While in independent practice, Corlett worked as the consulting architect and engineer for Oakland Public Schools from 1933 to 1938, and is credited with the designs for Oakland High School (non-exant), McClymonds High School (extant), the subject Cole School, and a circular building for Berkeley High Community Theater (extant) **(Figure 88)**. Corlett lectured at University of California, Berkeley in 1924-25, and served as the chairman of the advisory board for the State Department of Public Works, division of architecture from 1933 to 1938.[86]

Corlett was a member of the American Institute of Architects, American Society of Civil Engineers, and American Society of Structural Engineers.[87] When Corlett died in 1954, his *Oakland Tribune* obituary stated that Corlett was "an architect whose fame rests securely in the Oakland skyline."[88]



Figure 88: McClymonds High School, Oakland, built 1938 with design consultation by William G. Corlett. Source: Google Street View, 2019.

[83] California, Death Index, 1940-1997; and "Will G. Corlett, Noted Oakland Architect, Dies," *Oakland Tribune*, October 10, 1954.
[84] "William G. Corlett Jr. (Architect)," Pacific Coast Architecture Database (PCAD), accessed March 5, 2019, http://pcad.lib.washington.edu/person/3526;
[85] "Will G. Corlett, Noted Oakland Architect, Dies," *Oakland Tribune*, October 10, 1954, 1.
[86] Ibid.
[87] AIA Historical Directory of American Architects; and "Will G. Corlett, Well-Known Architect, Dies," *San Francisco Chronicle*, October 29, 1954, 34.
[88] "Will G. Corlett, Noted Oakland Architect, Dies," *Oakland Tribune*, October 10, 1954, 1.

EDWARD O. BLODGETT, ARCHITECT

Edward Oscar Blodgett (1893-1962) was born in Woodland, California in 1893 and grew up in Oakland, California, where he based his career. By 1918, Blodgett began employment as a draftsman for the Hanlow Dry Dock & Shipbuilding Co. in Oakland. Between 1916 and ca. 1922, Blodgett also served as a private in the military reserve and had trained as a military cadet at a California institution, according to his Draft Registration Card for World War I.[89] Blodgett listed his occupation as architect in 1923, and by 1926 became employed as a draftsman with the City of Oakland's Board of Education.[90]

In 1930, the Oakland City Directory listed Blodgett as an architect with the prominent firm of Reed & Corlett, led by William G. Corlett and Walter G. Reed. Around 1934, Blodgett began a 15-year tenure as a draftsman and architect working for Oakland's public school system.[91] The initials E.O.B appear on approved plans for the Cole School's 1936 façade reconstruction and exterior redesign, indicating Blodgett served in a draftsman capacity for the project, and likely others, that were supervised by Corlett. By 1938, Blodgett sat on a board of advisors for the State Association of California Architects' Northern Section and was Eastbay adviser of the same association.[92] Blodgett retired from his position with the City of Oakland in 1949 and moved to Ventura, California around 1955. Design of the Cafeteria building at the Cole School property appears to have been among the last projects of Blodgett's career. By 1949, when Blodgett designed the Cafeteria building at the subject property, he resided at 1989 Hoover Avenue in Oakland. Blodgett died in 1962 while residing in Ventura.[93]

[89] Selective Service System. *World War I Selective Service System Draft Registration Cards, 1917-1918*. Washington, D.C.: National Archives and Records Administration. Accessed at Ancestry.com.
[90] Oakland City Directory, 1926.
[91] "Ex-School Architect Here Dies," *Oakland Tribune*, October 31, 1962.
[92] *Architect & Engineer*, September 1938, 55.
[93] "Ex-School Architect Here Dies," *Oakland Tribune*, October 31, 1962.

VI. EVALUATION

CALIFORNIA REGISTER EVALUATION CRITERIA

The California Register is an inventory of significant architectural, archaeological, and historical resources in the State of California. Resources can be listed in the California Register through a number of methods. State Historical Landmarks and National Register-listed properties are automatically listed in the California Register. Properties can also be nominated to the California Register by local governments, private organizations, or citizens. The California Register of Historical Resources follows nearly identical guidelines to those used by the National Register but identifies the Criteria for Evaluation numerically. In order for a property to be eligible for listing in the California Register, it must be found significant under one or more of the following criteria.

- *Criterion 1 (Events)*: Resources that are associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

- *Criterion 2 (Persons)*: Resources that are associated with the lives of persons important to local, California, or national history.

- *Criterion 3 (Architecture)*: Resources that embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master, or possess high artistic values.

- *Criterion 4 (Information Potential)*: Resources or sites that have yielded or have the potential to yield information important to the prehistory or history of the local area, California, or the nation.

Criterion 1 (Events)

The Cole School property at 1011 Union Street in West Oakland does not appear to be individually eligible under Criterion 1 (Events), as the property is not associated with significant events nor does it appear to have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States. The property originated as parcel roughly one-third its current size in 1875, when acquired by the Board of Education of the City of Oakland as an apparently vacant site. The site's original development ca. 1880 occurred more than two decades after the City of Oakland's first school was established in 1853 and does not appear to stand out individually within the context of the development of public education in Oakland, the State, or the nation.

By 1880, the Cole Grammar School, a two-story Gothic Revival style building stood at the site. Until 1923, when the original school building burned, the Cole Grammar School educated numerous children, perhaps most notably famed author, Jack London. The existing building was originally constructed in 1925 and renovated in 1936 in a Moderne style. The building does not date to the earliest school development of the property in 1875; rather it reflects widespread changes in the design of educational buildings that took place in the 1930s in association with the Field Act of 1933, which resulted in reconstruction or heavy alteration of many schools throughout the State to meet updated seismic safety standards. Although the Cole School building reflects changes likely brought on by the Field Act, it does not possess individual significance relative to other educational buildings that were reconstructed or altered under similar auspices.

During the mid-20th century, and particularly after 1965, the Oak Center neighborhood and the nearby vicinity in West Oakland was greatly impacted by urban renewal planning efforts. The Cole School property, inclusive of the Cole School, Cafeteria building, and several portable classrooms on the property, were located within the Oak Center Redevelopment Plan area, considered among the largest on the West Coast as of 1965. However, the Cole School property and associated buildings were completed prior to the creation of the plan, and do not bear significant individual association to the plan effort as no major alterations to the property provide a strong representation of that particular period. Rather than the Cole School having been constructed as part of the plan, the plan was set in place in the nearby blocks around the existing school property.

The existing Cole School building is not known to have been the location of any singular events with significance to the history of Oakland, the State, or the nation. The Cafeteria was designed and built as a secondary or supplementary building within the campus. Research did not find information to support a finding of significance under this criterion.

Criterion 2 (Persons)

1011 Union Street does not appear to be individually eligible under Criterion 2 (Persons). The Cole Grammar School (non-extant) was named for a prominent Oakland dentist and president of the Board of Education, Rector E. Cole. Although the school's name carried on after the destruction of the original school building in 1923, the existing buildings and property do not bear significant association to Cole, as they do not represent Cole's achievements in dentistry or as a member of the Board of Education, and were built after Cole's professional, productive life occurred. Archival research did not find that any past staff employed by the Cole School ca. 1925 or later made significant contributions to local, State, or national history. The school's notoriety as having been the Jack London's elementary school is not reflected by the existing buildings and property which were developed after London attended the Cole Grammar School.

Criterion 3 (Architecture)

1011 Union Street does not appear to be individually eligible under Criterion 3 (Architecture). The subject property was originally developed ca. 187-1880 with a two-story, Gothic Revival school building, which stood at the site and operated as the Cole Grammar School until it was destroyed by fire in 1923. In 1925, the existing building known as the Cole School was built with a Late Gothic Revival style aesthetic but suffered from material deficiencies. After the passing of the Field Act of 1933, the school building was heavily renovated and restyled in the then emergent Moderne aesthetic, by noted Oakland-based architect and engineer, William G. Corlett, who served contemporaneously as a consulting design professional to the City's Board of Education. Corlett's association to the Cole School's alterations is notable, however, the building does not appear to be among the most important works of his career, which included other City of Oakland public school buildings and several prominent institutional buildings across the Bay Area region. The Cole School does not bear the same strength of association with Corlett's career as buildings that were designed in their entirety by Corlett. Rather, the Cole School building represents Corlett's role in redesigning a pre-existing work of architecture.

The Cole School building embodies the horizontal emphasis and massing commonly seen in Moderne style buildings ca. 1936 and features a modest exterior material palette and limited ornamentation. The building lacks the fusion of curvilinear forms across its massing, such as curved bays and corners, that would enable it to stand out as a very strong local representation of the style's application to an education building. Rather, the Cole School is representative of the application of the Moderne style, to a pre-existing, formerly Late Gothic Revival school. The building's fenestration pattern largely reflects its originally design, despite alterations, but does not stand out as a particularly important example of an education building designed in 1925, and renovated and restyled in 1936.

The Cafeteria building was designed in 1949 by Oakland-based architect Edward O. Blodgett, who served as a draftsman and architect for the City of Oakland's Board of Education between 1934 and 1949, after having worked with William G. Corlett and Walter Reed of Reed & Corlett as a draftsman. Research did not find that Blodgett was a particular important designer relative to his contemporaries. The Cafeteria building is designed in a modest, modern form that communicates the building's use as an educational building more so than a particular architectural style. The building does not have characteristics that enable it to stand out as an individually distinct example of an education building constructed in 1949 in Oakland.

Overall, the two age-eligible buildings within the former Cole School property, and the site as a whole do not stand out as individually significant entities under this criterion.

Criterion 4 (Information Potential)

The "potential to yield information important to the prehistory or history of California" typically relates to archeological resources, rather than built resources. When California Register Criterion 4 (Information Potential) does relate to built resources, it is for cases when the building itself is the principal source of important construction-related information. The subject property does not appear to feature construction or material types, or embody engineering practices that would, with additional study, provide important information. Page & Turnbull's evaluation of this property was limited to age-eligible resources above ground and did not involve survey or evaluation of the subject property for the purposes of archaeological information.

CITY OF OAKLAND THRESHOLDS OF SIGNIFICANCE

As 1011 Union Street is not listed in and does not appear to be eligible for the California Register, the subject property does not meet Criteria 1 and 4 of the City of Oakland's Thresholds of Significance Guidelines for historical resources under CEQA. The subject property is not currently listed on Oakland's Local Register (Threshold of Significance Criterion 2) and was previously assigned an Individual Property Rating of "C3" by the OCHS. The Individual Property Rating indicated the building appeared to be of secondary importance and is not located within a historic district or Area of Primary or Secondary Importance. The current evaluation by Page & Turnbull finds that the OCHS rating of "C3" remains applicable to the subject property. This rating would not qualify the property for listing in Oakland's Local Register, corresponding to a California Historical Resource Status Code of 6 (Threshold of Significance Criterion 3). Unless found uniquely significant to Oakland's history by City Council (Threshold of Significance Criterion 5), preliminary review of the subject property indicates that it is unlikely to meet the requisite criteria to attain the status of historical resource under CEQA.

INTEGRITY

In order to qualify for listing in any local, state, or national historic register, a property or landscape must possess significance under at least one evaluative criterion as described above and retain integrity. Integrity is defined by the California Office of Historic Preservation as "the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance," or more simply defined by the National Park Service as "the ability of a property to convey its significance."[94]

As the subject property does not appear to be significant under any of the criteria for listing in the California Register, an analysis of the property's historic integrity is not included in this report.

[94] California Office of Historic Preservation, *Technical Assistance Series No. 7: How to Nominate a Resource to the California Register of Historical Resources*, (Sacramento: California Office of State Publishing, 4 September 2001), 11; U.S. Department of the Interior, National Park Service, *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*, (Washington, D.C.: National Park Service, 1995), 44.

VII. CONCLUSION

The property at 1011 Union Street contains two buildings formerly used as Cole School, which operated as an elementary school between 1925 and 1980, and as a middle school from 1980 until its closure in 2009. The subject property exists as an expanded OUSD property that was originally roughly 1/3 the size when acquired by the City's Board of Education in 1875. The existing Cole School building was built in 1925 and underwent extensive renovation in 1936, with alterations designed by consulting architect William G. Corlett. The Cafeteria building was built in 1949 with design by architect Edward O. Blodgett, a draftsman-architect who worked for both Corlett and Oakland Public Schools before starting an individual practice in 1949. Research did not find that property at 1011 Union Street is significantly associated with historic patterns of development in Oakland, the State, or the nation. Similarly, none of the former staff or students of the school appear to have made significant contributions to history. Neither building appears to provide an individually distinct example of a style, type, period, or method of construction that would enable it to be significant based upon the merits of its design. Therefore, 1011 Union Street does not appear to qualify as an eligible historic resource for the purposes of review under the California Environmental Quality Act (CEQA).

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APPENDIX A: PREPARER QUALIFICATIONS

This Historic Resource Evaluation was prepared by Page & Turnbull of San Francisco, California. Page & Turnbull staff responsible for this report include Ruth Todd, FAIA, Principal-in-charge; Stacy Kozakavich, Cultural Resources Planner, project manager; and Josh Bevan, Cultural Resources Planner, primary author. All professional staff working on this report meet or exceed the Secretary of the Interior's Professional Qualification Standards for Historic Architecture, Architectural History, or History.

Appendix C

Archaeological Review in Support of the Central Administration Center at Cole Campus, Alameda County, California

PaleoWest Archaeology, March 9, 2020

Archaeological Desktop Review in Support of the Central Administration Center at Cole Campus Project, Alameda County, California

Submitted to:

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Technical Report 20-132

March 9, 2020

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Keywords: CEQA; Alameda County; Oakland Unified School District

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MANAGEMENT SUMMARY

The Oakland Unified School District (OUSD) is proposing the Central Administration Center at Cole Campus Project (Project) which includes the demolition of the cafeteria building and 1925-era Cole Middle School building and all other structures on the Project site, removal of all surface pavement and perimeter fencing, and construction of a 2-story 56,000 square foot central administration building and a 4,100 square foot 1-story building containing a multi-purpose room in Oakland, Alameda County, California. PaleoWest was contracted by Lamphier-Gregory to conduct an archaeological desktop review of the 2.8-acre Project area in compliance with the California Environmental Quality Act (CEQA). The OUSD is the Lead Agency for the purposes of the CEQA.

This report summarizes the methods and results of the desktop review of the Project area. This investigation included a cultural resource literature search, communication with the Native American Heritage Commission (NAHC) and interested Native American tribal groups. No fieldwork was conducted for this cultural resource assessment as the entire Project area is fully developed and hardscaped. The purpose of the investigation was to determine the potential for the Project to impact historic resources for the purposes of CEQA.

On January 24, 2020, Paleowest Archaeologist Zack Babineau conducted a records search at the Northwest Information Center (NWIC), at Sonoma State University, for the Oakland Unified School District Central Administration Center Survey (File No. 19-1233). The records search indicated that no fewer than 62 previous studies have been conducted within ¼-mile of the Project area. No cultural resources have been recorded within the Project area.

As part of the cultural resource assessment of the Project area, PaleoWest also requested a search of the Sacred Lands File (SLF) from the NAHC. Results of the SLF search were positive and they recommended contacting seven individuals/representatives of seven Native American tribal groups to find out if they have additional information about the Project area. All seven individuals were contacted. No responses were received.

In order to reduce potential impacts of the Project on known or potentially significant cultural resources, PaleoWest provides a set of management recommendations including an archaeological survey and procedures for inadvertent discoveries.

1.0 INTRODUCTION

The Oakland Unified School District (OUSD) proposed the Central Administration Center at Cole Campus Project (Project) which includes the demolition of the cafeteria building and 1925-era Cole Middle School building and all other structures on the Project site, removal of all surface pavement and perimeter fencing, and construction of a 2-story 56,000 square foot central administration building and a 4,100 square foot 1-story building containing a multi-purpose room in Oakland, Alameda County, California. PaleoWest was contracted by Lamphier-Gregory to conduct an archaeological desktop review of the 2.8-acre Project area in compliance with the California Environmental Quality Act (CEQA). The OUSD is the Lead Agency for the purposes of the CEQA.

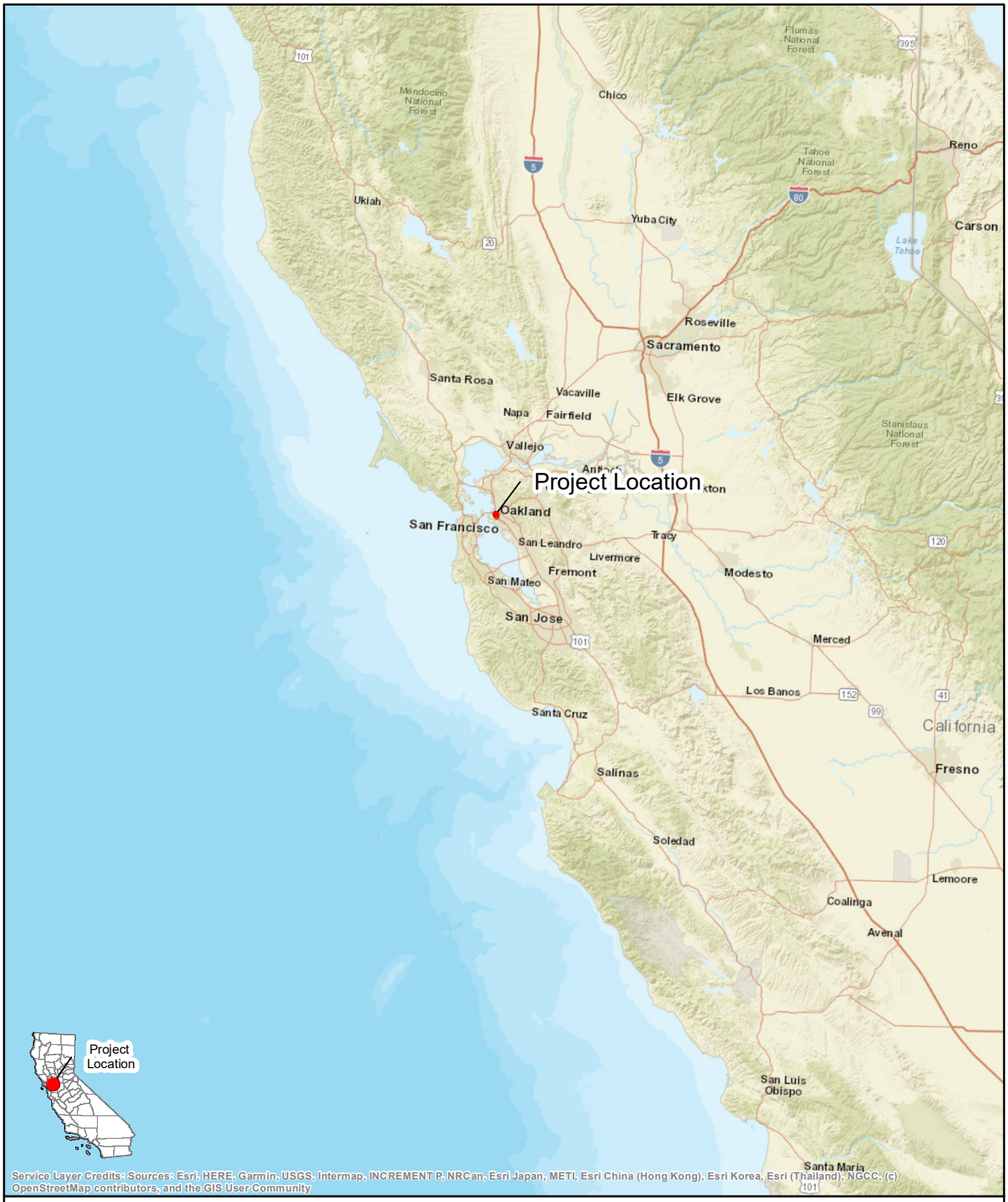
1.1 PROJECT LOCATION AND DESCRIPTION

The approximately 2.8-acre Project site is currently occupied by the former Cole Middle School and former cafeteria building along with paved surface parking for Oakland Unified School District (OUSD) personnel. The Project address is 1011 Union Street, Oakland. The Project site involves the entire block bounded by Union Street, 10th Street, Poplar Street and the south boundary of the Wade Johnson Park. Assessor's Parcel Number 04-53-7 (Figure 1-1). The Project area is located within unsectioned land in a developed section of Downtown Oakland, with no Township or Range, on the 1997 Oakland West, California 7.5' United States Geological Survey (USGS) topographic quadrangle (Figure 1-2).

The Project involves demolition of the cafeteria building and 1925-era Cole Middle School building and all other structures on the Project site, removal of all surface pavement and perimeter fencing, and construction of a 2-story 56,000 square foot central administration building and a 4,100 square foot 1-story building containing a multi-purpose room. The new main building will house the OUSD administrative staff, currently occupying rental space at 1000 Broadway. The new administration building would include a formal room for OUSD Board hearings, office space for administrative staff, and conference rooms. The multi-purpose room will provide space to accommodate overflow during Board meetings, a location to hold specialized educational curricula, and a place for larger District workshops. Other elements of the Project include surface parking for OUSD staff (69 spaces) and visitors (31 spaces), trees, shrubs and other landscape features, outdoor seating for staff and visitors, and night lighting.

1.2 REPORT ORGANIZATION

This report documents the results of a cultural resource investigation conducted for the proposed Project. Chapter 1 has introduced the project location and description. Chapter 2 states the regulatory context that should be considered for the Project. Chapter 3 synthesizes the natural and cultural setting of the Project area and surrounding region. The results of the cultural resource literature and records search conducted at the Northwest Information Center (NWIC) and the Sacred Lands File (SLF) search, and a summary of the Native American communications is presented in Chapter 4. The management recommendations are provided in Chapter 5. This is followed by bibliographic references and appendices.



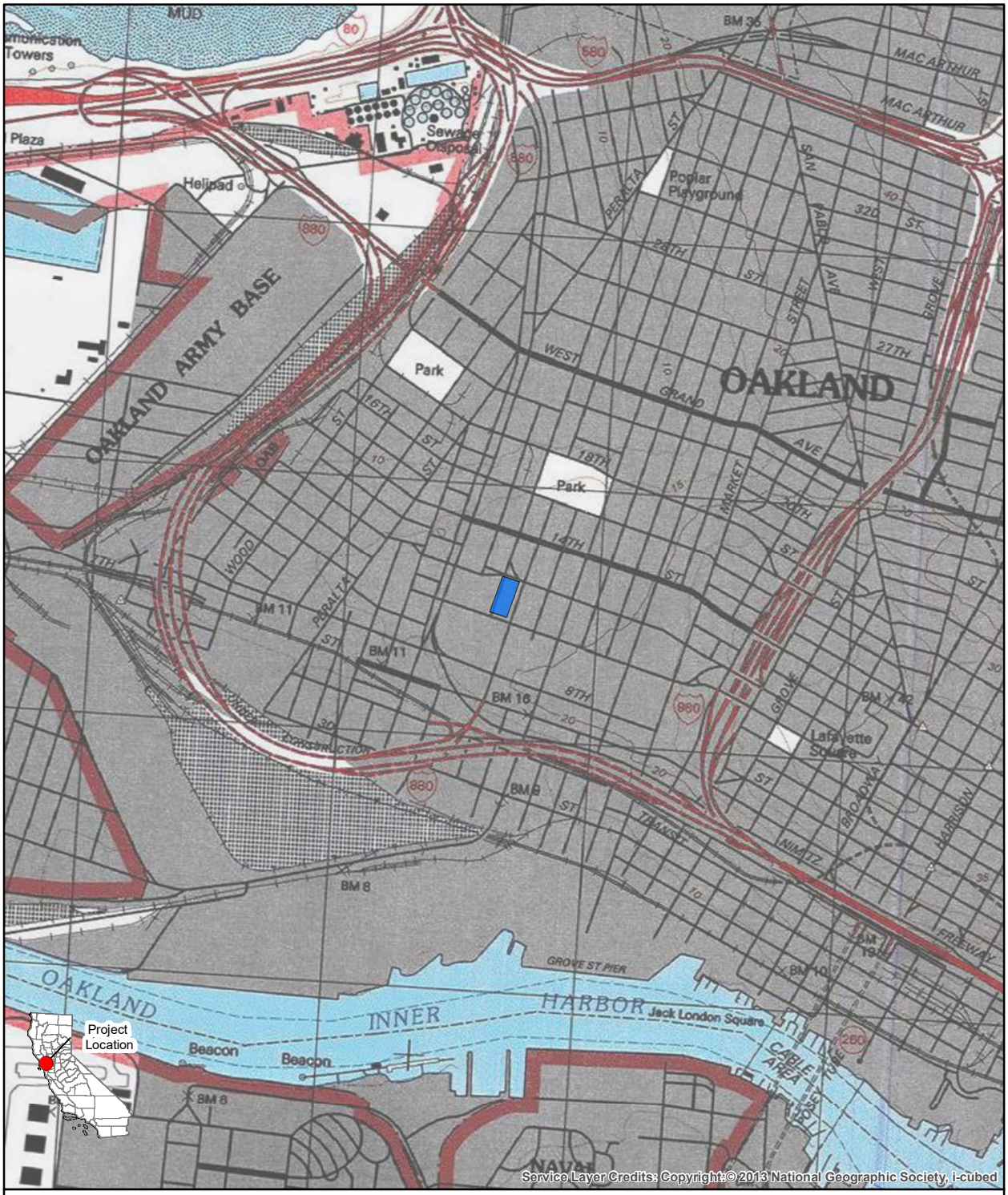
PALEO WEST

0 feet 236,000

0 meters 55,000

1:3,000,000

Figure 1
Project Vicinity Map



PALEO WEST

0 feet 2,000

0 meters 500

1:24,000

Figure 2
Project Location Map

USGS 7.5' Quadrangle:
Oakland West, CA (1981)
San Antonio - V&D Peralta Land Grant

Project Area

2.0 REGULATORY CONTEXT

2.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

The proposed Project is subject to compliance with CEQA, as amended. Compliance with CEQA statutes and guidelines requires both public and private projects with financing or approval from a public agency to assess the project's impact on cultural resources (Public Resources Code Section 21082, 21083.2 and 21084 and California Code of Regulations 10564.5). The first step in the process is to identify cultural resources that may be impacted by the project and then determine whether the resources are "historically significant" resources.

CEQA defines historically significant resources as "resources listed or eligible for listing in the California Register of Historical Resources (CRHR)" (Public Resources Code Section 5024.1). A cultural resource may be considered historically significant if the resource is 45 years old or older, possesses integrity of location, design, setting, materials, workmanship, feeling, and association, and meets any of the following criteria for listing on the CRHR:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or,
4. Has yielded, or may be likely to yield, information important in prehistory or history (Public Resources Code Section 5024.1).

Cultural resources are buildings, sites, humanly modified landscapes, traditional cultural properties, structures, or objects that may have historical, architectural, cultural, or scientific importance. CEQA states that if a project will have a significant impact on important cultural resources, deemed "historically significant," then project alternatives and mitigation measures must be considered. Additionally, any proposed project that may affect historically significant cultural resources must be submitted to the State Historic Preservation Officer (SHPO) for review and comment prior to project approval by the responsible agency and prior to construction.

3.0 SETTING

This section of the report summarizes information regarding the physical and cultural setting of the Project area, including the prehistoric, ethnographic, and historic contexts of the general area. Several factors, including topography, available water sources, and biological resources, affect the nature and distribution of prehistoric, ethnographic, and historic-period human activities in an area. This background provides a context for understanding the nature of the cultural resources that may be identified within the region.

3.1 ENVIRONMENTAL SETTING

The San Francisco Bay region is defined by the San Francisco Peninsula on the southwest, the Marin Peninsula on the northwest, and the Berkeley Hills and the Diablo Range on the east. The heart of the region is the San Francisco Bay system, which occupies a late Pliocene trough that flooded repeatedly during the Pleistocene interglacials, the last flooding occurring approximately 10,000 years ago. This trough extends to the south where it forms the Santa Clara and San Benito valleys and to the north where it forms the Petaluma, Napa, and Sonoma valleys (Moratto 1984:219). About 15,000 years ago the coastal shoreline extended more than 15 miles west of today's coastline. The California River flowed through the gorge that is now the Golden Gate and across what is today's submerged continental shelf, finally reaching the ocean far west of today's coastline (Moratto 1984:219).

Approximately 8,000 years ago, with the rising sea levels associated with the melting of continental glaciers, marine waters began to invade the San Francisco trough, creating a lush and bountiful marshland environment on the shores surrounding a newly created bay. Elk, deer, and waterfowl inhabited the marshlands and surrounding environs. The waters of the bay and ocean produced abalone, oyster, mussels, clams, salmon, sturgeon, seabass, shark, perch, and many other fish species. Tule and marsh grasses provided raw material for a variety of implements fashioned by the earliest inhabitants.

The flanks of the coastal mountain ranges provide the biotic zone of the coastal grasslands. These mountain ranges are the product of tectonic activity caused by the collision of the Pacific continental plate and the continent of North America. A variety of geological composition and soil variability are the result of this activity. The geologic foundation underlying the coastal grasslands is largely granite bedrock intermixed with large areas of sedimentary shales, sandstones and composites of igneous rock (Brown 1997:86). Mineral resources for both tool manufacture and trade were abundant. Obsidian, prized for projectile points and blades, was available to the north at Anadel and Napa's Glass Mountain. Franciscan chert was found locally in streambeds and rock outcroppings while banded Monterey chert could be found in coastal deposits to the south (Moratto 1984:221).

Native grasses covered the middle-elevation hillsides in the coastal areas prior to the late 18th century. The grasses now covering the coastal grassland region are not the same as those that would have been found in the area 250 years ago. Although the types of animals inhabiting the coastal regions before the influx of humans are largely known, the type of plants that may have occupied the coastal grassland is not as well defined.

Annual precipitation in the San Francisco Bay region varies from 20 to 40 in. with precipitation concentrated in the fall, winter, and spring months. This climate is much like that found in the Mediterranean: mild, rainy winters, and warm, dry summers. After the first rain at the end of October or early November, the vegetation becomes and remains green, but not growing, until late February, when it begins to grow rapidly. By early May, grasses have usually changed to dry golden-colored and remain that

way until fall (Brown 1985:86). Due to the cooling effects of the local Bay environment, temperatures in the Project area are mild in the summer, usually averaging 55-65°F (Moratto 1984:223).

3.2 PREHISTORIC SETTING

Research into local prehistoric cultures began in the early 1900s with the work of N. C. Nelson of the University of California at Berkeley. Nelson documented 425 shellmounds along the Bay shore and adjacent coast when the Bay was still ringed by salt marshes three to five miles wide (Nelson 1909:322-331). He maintained that the intensive use of shellfish, a subsistence strategy reflected in both coastal and bay shoreline middens, indicated a general economic unity in the region during prehistoric times, and he introduced the idea of a distinct San Francisco Bay archaeological region (Moratto 1984:227). Three sites, in particular, provided the basis for the first model of cultural succession in Central California, the Emeryville Shellmound (CA-ALA-309), the Ellis Landing Site (CA-CCO-295), and the Fernandez Site (CA-CCO-259) (Moratto 1984:227).

Investigations into the prehistory of the Central Valley of California, presaged by early amateur excavations in the 1890s, began in earnest in the 1920s. In the early 20th century, Stockton-area amateur archaeologists J. A. Barr and E. J. Dawson separately excavated a number of sites in the Central Valley and made substantial collections. On the basis of artifact comparisons, Barr identified what he believed were two distinct cultural traditions, an early and a late. Dawson later refined his work and classified the Central Valley sites into three "age-groups" (Schenck and Dawson 1929:402).

Professional or academic-sponsored archaeological investigations in central California began in the 1930s, when J. Lillard and W. Purves of Sacramento Junior College formed a field school and conducted excavations throughout the Sacramento Delta area. By seriating artifacts and mortuary traditions, they identified a three-phase sequence similar to Dawson's, including Early, Intermediate, and Recent cultures (Lillard and Purves 1936). This scheme went through several permutations (see Lillard et al. 1939; Heizer and Fenenga 1939). In 1948 and again in 1954, Richard Beardsley refined this system and extended it to include the region of San Francisco Bay (Beardsley 1948, 1954). The resulting scheme came to be known as the Central California Taxonomic System (CCTS) (Fredrickson 1973; Hughes 1994:1). Subsequently, the CCTS system of Early, Middle, and Late Horizons was applied widely to site dating and taxonomy throughout central California.

As more data were acquired through continued fieldwork, local exceptions to the CCTS were discovered. The accumulation of these exceptions, coupled with the development of radiocarbon dating in the 1950s and obsidian hydration analysis in the 1970s, opened up the possibility of dating deposits more accurately. Much of the subsequent archaeological investigation in central California focused on the creation and refinement of local versions of the CCTS.

In the 1960s and 1970s, archaeologists including Ragir (1972) and Fredrickson (1973) revised existing classificatory schemes and suggested alternative ways of classifying the prehistory of California. Fredrickson (1973:113-114) proposed four "major chronological periods" in prehistoric California: the Early Lithic Period (described as hypothetical), a Paleoindian Period, an Archaic Period, and an Emergent Period. The Archaic and Emergent Periods were further divided into Upper and Lower periods. Subsequently, Fredrickson (1974, 1994) subdivided the Archaic into Lower, Middle, and Upper. Milliken et al. (2007) have recently updated and further refined this scheme.

A series of "patterns," emphasizing culture rather than temporal periods, can be identified throughout California prehistory. Following Ragir, Fredrickson (1973:123) proposed that the nomenclature for each

pattern relates to the location at which it was first identified, such as the Windmiller, Berkeley, and Augustine Patterns.

Various modifications of the CCTS (e.g., Bennyhoff and Hughes 1987; Fredrickson 1973, 1974; Milliken and Bennyhoff 1993) sustain and extend the system's usefulness for organizing our understanding of local and regional prehistory in terms of time and space. The cultural patterns identified in the Bay Area that in a general way correspond to the CCTS scheme are the Berkeley and Augustine patterns (for information on the Berkeley and Augustine Patterns see Fredrickson 1973, Milliken et al. 2007, Moratto 1984 and Wiberg 1997). Dating techniques such as obsidian hydration analysis or radiometric measurements can further increase the accuracy of these assignments.

Most recently, Milliken et al. (2007:99-123) developed what they term a "hybrid system" for the San Francisco Bay Area, combining the Early-Middle-Late Period temporal sequence with the pattern-aspect-phase cultural sequence. Dating of the cultural patterns, aspects, and phases was based on Dating Scheme D of the CCTS, developed by Groza (2002). Groza directly dated over 100 Olivella shell beads, obtaining a series of AMS radiocarbon dates representing shell bead horizons. The new chronology she developed has moved several shell bead horizons as much as 200 years forward in time.

Milliken et al.'s (2007) San Francisco Bay Area Cultural Sequence includes:

Early Holocene (Lower Archaic) from 8000 to 3500 B.C.
Early Period (Middle Archaic) from 3500 to 500 B.C.
Lower Middle Period (Initial Upper Archaic) from 500 B.C. to A.D. 430
Upper Middle Period (Late Upper Archaic) from A.D. 430 to 1050
Initial Late Period (Lower Emergent) from A.D. 1050 to 1550
Terminal Late Period, post-A.D. 1550

No archaeological evidence dating to pre-8000 B.C. has been located in the Bay Area. Milliken et al. (2007) posit that this dearth of archaeological material may be related to subsequent environmental changes that submerged sites, buried sites beneath alluvial deposits, or destroyed sites through stream erosion. A brief summary of the approach presented by Milliken et al. (2007) follows.

A "generalized mobile forager" pattern marked by the use of milling slabs and handstones and the manufacture of large, wide-stemmed and leaf-shaped projectile points emerged around the periphery of the Bay Area during the Early Holocene Period (8000 to 3500 B.C.). Beginning around 3500 B.C., evidence of sedentism, interpreted to signify a regional symbolic integration of peoples, and increased regional trade emerged. This Early Period lasted until ca. 500 B.C. (Milliken et al. 2007:114, 115).

Milliken et al. (2007:115) identify "a major disruption in symbolic integration systems" circa 500 B.C., marking the beginning of the Lower Middle Period (500 B.C. to A.D. 430). Bead Horizon M1, dating from 200 B.C. to A.D. 430, is described by Milliken et al. (2007:115) as marking a 'cultural climax' within the San Francisco Bay Area.

The Upper Middle Period (A.D. 430 to 1050) is marked by the collapse of the Olivella saucer bead trade in central California, abandonment of many Bead Horizon M1 sites, an increase in the occurrence of sea otter bones in those sites that were not abandoned, and the spread of the extended burial mortuary pattern characteristic of the Meganos complex into the interior East Bay. Bead Horizons M2 (A.D. 430 to 600), M3 (A.D. 600 to 800), and M4 (A.D. 800 to 1050) were identified within this period (Milliken et al. 2007:116).

The Initial Late Period, dating from A.D. 1050 to 1550, is characterized by increased manufacture of status objects. In lowland central California during this period, Fredrickson (1973, 1994) noted evidence for increased sedentism, the development of ceremonial integration, and status ascription. The beginning of the Late Period (ca. A.D. 1000) is marked by the Middle/Late Transition bead horizon. The Terminal Late Period began circa A.D. 1550 and continued until European settlement of the area.

3.3 ETHNOGRAHIC SETTING

This section provides a brief summary of the ethnography of the Project vicinity and is intended to provide a general background only. More extensive reviews of Ohlone ethnography are presented in Bocek (1986), Cambra et al. (1996), Kroeber (1970), Levy (1978), Milliken (1995), and Shoup et al. (1995).

The Project area lies within the region occupied by the Ohlone or Costanoan group of Native Americans at the time of historic contact with Europeans (Kroeber 1970:462-473). Although the term Costanoan is derived from the Spanish word Costaños, or "coast people," its application as a means of identifying this population is based in linguistics. The Costanoans spoke a language now considered one of the major subdivisions of the Miwok-Costanoan, which belonged to the Utian family within the Penutian language stock (Shipley 1978:82-84). Costanoan actually designates a family of eight languages.

Tribal groups occupying the area from the Pacific Coast to the Diablo Range and from San Francisco to Point Sur spoke the other seven languages of the Costanoan family. Modern descendants of the Costanoan prefer to be known as Ohlone. The name Ohlone is derived from the Oljon group, which occupied the San Gregorio watershed in San Mateo County (Bocek 1986:8). The two terms (Costanoan and Ohlone) are used interchangeably in much of the ethnographic literature.

On the basis of linguistic evidence, it has been suggested that the ancestors of the Ohlone arrived in the San Francisco Bay area about A.D. 500, having moved south and west from the Sacramento-San Joaquin Delta. The ancestral Ohlone displaced speakers of a Hokan language and were probably the producers of the artifact assemblages that constitute the Augustine Pattern previously described (Levy 1978:486).

Although linguistically linked as a family, the eight Costanoan languages actually comprised a continuum in which neighboring groups could probably understand each other. However, beyond neighborhood boundaries, each group's language was reportedly unrecognizable to the other. Each of the eight language groups was subdivided into smaller village complexes or tribal groups. These groups were independent political entities, each occupying specific territories defined by physiographic features. Each group controlled access to the natural resources of its territory, which also included one or more permanent villages and numerous smaller campsites used as needed during a seasonal round of resource exploitation. Chochenyo or East Bay Costanoan was the language spoken by the estimated 2,000 people who occupied the "east shore of San Francisco Bay between Richmond and Mission San Jose, and probably also in the Livermore Valley" (Levy 1978:485).

A chief, who inherited the position patrilineally and could be either a woman or man, provided leadership. The chief and a council of elders served mainly as community advisers. Specific responsibility for feeding visitors, providing for the impoverished and directing ceremonies, hunting, fishing, and gathering fell to the chief. Only during warfare was the chief's role as absolute leader recognized by group members (Levy 1978:487).

Extended families lived in domed structures thatched with tule, grass, wild alfalfa, or ferns (Levy 1978:492). Semisubterranean sweathouses were built into pits excavated in stream banks and covered with a structure

against the bank. The tule raft, propelled by double-bladed paddles, was used to navigate across San Francisco Bay (Kroeber 1970:468).

Mussels were an important staple in the Ohlone diet, as were acorns of the coast live oak, valley oak, tanbark oak, and California black oak. Seeds and berries, roots and grasses, and the meat of deer, elk, grizzly, rabbit, and squirrel formed the Ohlone diet. Careful management of the land through controlled burning served to ensure a plentiful, reliable source of all these foods (Levy 1978:491).

The Ohlone usually cremated a corpse immediately upon death but, if there were no relatives to gather wood for the funeral pyre, interment occurred. Mortuary goods comprised most of the personal belongings of the deceased (Levy 1978:490).

The arrival of the Spanish in 1775 led to a rapid and major reduction in native California populations. Diseases, declining birth rates, and the effects of the mission system served to largely eradicate the aboriginal life ways. Brought into the missions, the surviving Ohlone, along with the Esselen, Yokuts, and Miwok, were transformed from hunters and gatherers into agricultural laborers (Levy 1978; Shoup et al. 1995). Following secularization of the mission system in the 1830s, numerous ranchos were established in the 1840s. Generally, the few Indians who remained were then forced, by necessity, to work on the ranchos.

In the 1990s, some Ohlone groups (e.g., the Muwekma, Amah, and Esselen further south) submitted petitions for federal recognition (Esselen Nation 2007; Muwekma Ohlone Tribe 2007). Many Ohlone are active in preserving and reviving elements of their traditional culture and are active participants in the monitoring and excavation of archaeological sites.

3.4 HISTORICAL SETTING

The historic period in the eastern San Francisco Bay region began with the Fages-Crespi expedition of 1770. The Fages party explored the eastern shore of San Francisco Bay, eventually reaching the location of modern Fremont, where they traded with the local Costanoans. Members of the expedition eventually sighted the entrance to San Francisco Bay from the Oakland Hills. In 1772, a second Fages expedition traveled from Monterey through what are now Milpitas, San Lorenzo, Oakland, and Berkeley, finally reaching Pinole on March 28, 1772 (Cook 1957:131). From there they traveled through the locations of today's Rodeo and Crockett to Martinez, made a brief foray into the delta region of the Central Valley, and then camped somewhere near Pittsburg or Antioch. On March 31, the Fages party began the return journey to Monterey. They traveled to the vicinity of today's Walnut Creek, turned south, and then made their way to the Danville area, where they spent the night. On April 1st, they passed through today's San Ramon, Dublin, and Pleasanton, finally arriving back in the area of Milpitas on the following day.

In 1776, the Anza-Font expedition traveled through the same area and also traded with residents of native villages encountered along the way. The most significant impact of the European presence on the local California natives, however, was not felt until the Spanish missions were established in the region (Cook 1957:132).

In 1775, Captain Juan Manuel Ayala's expedition studied the San Francisco Bay and ventured up the Sacramento and San Joaquin rivers. The first mission in the region was established the following year with the completion of Mission San Francisco de Asis (Mission Dolores) in San Francisco. Mission Santa Clara followed in 1777, and Mission San Jose in 1797. The Mission era lasted approximately 60 years and proved to be the downfall of the native inhabitants of the region, who were brought to the missions to be assimilated into a new culture as well as to provide labor for the missionaries. Diseases introduced by the early explorers and missionaries, and the contagions associated with the forced communal life at the missions

killed a large number of local peoples, while changes in land use made traditional hunting and gathering practices increasingly difficult. Cook (1976) estimates that by 1832, the Costanoan population had been reduced from a high of over 10,000 in 1770 to less than 2,000.

In 1820, Sergeant Luis Maria Peralta received a grant of "10 square leagues" of land in the East Bay in recognition of his long, faithful military service in California. Peralta named his grant Rancho San Antonio. It comprised the land that lay from the water's edge to the crest of the Oakland hills between San Leandro Creek to the south and El Cerrito Creek to the north (Hendry and Bowman 1940), completely encompassing modern-day Oakland, Berkeley, Emeryville, Piedmont, Albany, Alameda, and a portion of San Leandro (Sher 1994:9).

Following the U.S. takeover of Alta California from Mexico in 1848, rancho lands began to be divided up and generally overrun by Anglo immigration to the area that was coincident with the land boom following the Gold Rush of 1849. Rancho San Antonio suffered the fate of most Mexican land grants in northern California, with squatters taking quasi-legal title to lands, and the courts denying title to the original grantees (Hendry and Bowman 1940).

3.4.1 Oakland Historic Context

Early surveyors mapped parts of Oakland just after the time that Peralta's dominance began to give way to recently-settled American interests. The 1856 Survey of the Coast of the United States depicts the area that would become known as downtown and West Oakland. Although streets had been laid out near Broadway, much of the dry land remained covered in groves of oaks and was relatively unpopulated. Marshland extended as far north as modern-day Fifth Street in several locations, and Gibbons Pier, located at the end of Seventh Street, was the only sign of the industry to come. Oakland's early growth was concentrated near the wharves and rail lines that eventually transformed the rural outpost into a transportation center for both passengers and goods.

The first growth period followed the completion of the San Francisco & Oakland Railroad (SF&ORR) along Seventh Street in 1863, connecting Oakland to San Francisco by way of San Jose and enticing real estate speculators who saw the area as ideal for development. Only six years after the local rail connection was completed, the Big Four (Collis Huntington, Leland Stanford, Charles Crocker and Mark Hopkins) made a decision that would shape Oakland's future. The Central Pacific Railroad would locate the western terminus of its transcontinental route at Oakland Point (Scott 1959:48). Buildings were clustered at the foot of Broadway as well as at the end of the alignment of Seventh Street, where wharves extended into the bay. The businesses and residents that would soon fill the area, however, did not yet surround the local and transcontinental rail lines. City streets had been surveyed, although many blocks remained wooded or had become home to only small numbers of people. The large lots characteristic of a more rural settlement pattern were still present, and the northeastern portions of the city were growing far slower than downtown and West Oakland.

By the turn-of-the-century, electric railways connected the most densely populated areas of Oakland to the outlying suburbs. Some previously urban middle-class families now chose a suburban life in the relatively open spaces of the East Bay, and the 1906 earthquake further encouraged some urban residents to relocate to outlying areas.

The Oakland, Antioch & Eastern Railroad (OA&E) was also depicted on the 1915 USGS map along an alignment that ran southeast to northwest, ½-mile east of the Project area. The OA&E, an interurban line, shared the Key system ferry terminal in Oakland and made travel between San Francisco and emerging suburbs and recreation areas easier and more cost efficient. Lines between Oakland and Sacramento were

operational by 1913 and eventually became part of the Sacramento Northern Railroad (Groff 2011; Western Railway Museum 2014).

World War I was a catalyst for the shipyards on the Oakland waterfront, as new workers were enticed to the area by increased economic activity. Beth Bagwell summarized the growth of Oakland's hillside neighborhoods.

After the earthquake, Oakland experienced a housing construction boom; bungalows replaced the remaining hayfields in Rockridge, Claremont, and the district north to the Berkeley border. In the 1920s, the demand continued, spurred by the post-war prosperity and by the opening of new real estate tracts made easily reachable by the automobile. Piedmont, Montclair, Trestle Glen, and the Lakeshore district were among neighborhoods that experienced their greatest growth at this time. In 1923, a graph in the *Oakland Tribune Yearbook* showed a 900 percent increase in the number of dwellings built over the previous five years (Bagwell 1982:200).

Oakland did not escape the consequences of the Great Depression. Although the Southern Pacific Railroad (which merged with the Central Pacific Railroad in 1885) remained solvent, large numbers of jobs were lost. The San Francisco Bay Bridge was constructed between 1933 and 1936 in the midst of the Great Depression, and although it may not have been evident at the time, the bridge would significantly change a community that had built itself around its transportation terminals.

World War II brought a degree of economic relief through another round of increased shipbuilding, and it also saw the construction of the Oakland Army Base and the Naval Supply Center. As the outlying areas of Oakland continued to fill with new immigrants and residents who had left the city center, the oldest areas of downtown struggled, as automobiles and trucks began to dominate the transportation market that had defined Oakland's early growth.

4.0 CULTURAL RESOURCE INVENTORY

On January 24, 2020, Paleowest Archaeologist Zack Babineau conducted a records search at the Northwest Information Center (NWIC), at Sonoma State University, for the Oakland Unified School District Central Administration Center Survey (File No. 19-1233). The records search included a review of cultural resources studies and recorded cultural resources within the Project area and a 1/4-mile radius of the Project area. The records search also included a review of the Office of Historic Preservation's "Directory of Historic Property Data File for Contra Costa County". Paleowest also reviewed the Office of Historic Preservation (OHP) Historic Properties Directory, which includes information regarding National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the list of California State Historical Landmarks, the list of California State Points of Historical Interest, and pertinent historic building surveys. The objective of this records search was to identify any cultural resources that have been previously recorded within the study area during previous cultural resource investigations.

4.1 PREVIOUS CULTURAL RESOURCES REPORTED WITHIN THE STUDY AREA

The records search results indicate that no cultural resources have been previously recorded within the Project area; and a total of 22 cultural resources are located within ¼-mile of the Project areas. These resources are listed below in Table 1.

Table 1: Cultural Resources Within 1/4-mile of the Project Area

Primary Number	Resource Name	Age	Recorder
P-01-005887	Peralta Villa	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-005962	Oakland Point District	Historic	"1989 ([none], Oakland Cultural Heritage Survey); 1990 ([none], Oakland Cultural Heritage Survey); 2003 (Monte Kim, Science Applications International Corp.)"
P-01-006108	Chiesa (Luigi) flats	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006113	Carle (Silas) - Lagorio (A.) house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006115	Carle (Silas) - Connolly (Martin) house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006117	Hoppe (John) - Fuchs (Philip) house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006119	Fuchs (Philip) - Maggio (E&F) flats	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006266	Grist (Wm.H.) garage	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006302	Sandelin (Elias Fred) rental house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006304	Freese (Johanna and Frederick) house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006305	Fitzgerald store/flat-Hirota(M) cleaners	Historic	1990 ([none], Oakland Cultural Heritage Survey)

P-01-006306	Boscacci (Pietro) rental house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006307	Schulze (F.) rental-Gereich (E.) house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006308	Schirmer (August H.T.) house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006309	Catera (Luca) store and restaurant	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006310	Wells Fargo-Railway Express wagon shed	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006311	True Light Missionary Baptist	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006312	Maggio (Elena/Fortunato) rental cottage	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-007810	Haven (Charles D. and Laura) House	Historic	1992 (Staff and Consultants, Oakland Cultural Heritage Survey)
P-01-010509	Mandela-1	Prehistoric	2002 (Dale Beevers and Jason Claiborne, Archeo-Tec)
P-01-010521	Oakland Block 532	Historic	2002 (Thad M. Van Bueren, Caltrans, District 4)
P-01-010522	Oakland Block 533	Historic	2002 (Thad M. Van Bueren, Caltrans, District 4)

All of the cultural resources reported within the ¼-mile buffer of the Project area, excluding P-01-010509, are sites of residential and commercial buildings that date from the late 19th century to the mid-20th century. Resource P-01-010509, or Mandela-1, is a prehistoric deposit site that was found during the construction of the Mandela Gateway project. The prehistoric deposit contained midden comprised of a dense quantity of shell, few faunal fragments, and few charcoal chunks. Archeo-Tech interpreted the site as likely a food processing site associated with an unknown nearby habitation deposit.

4.2 PREVIOUS CULTURAL RESOURCE INVESTIGATIONS

A total of 62 cultural resource studies have been completed for locations within ¼-mile of the Project area. These studies are listed below in Appendix A. These report types include archaeological research, theses and dissertations, architectural/historical evaluations, CHP correspondence reports, management/planning reports, and literature search reports. Only one of these studies, S-037362, cross the Project area.

4.3 ADDITIONAL SOURCES

In addition to the records search, PaleoWest completed a review of the historical topographic maps and historic aerials that depict the Project area. The 1895 and 1899 United States Geologic Survey San Francisco quadrangle maps depict the Project area as having at least three buildings; one on Poplar St that is connected with another on 10th St, and a small isolated structure on Union St (USGS 1895 & 1899). The northern half of the Project area is undeveloped and there is a large vacant lot located on 12th St that spans three blocks from east to west. The 1915 San Francisco map shows at least seven buildings existing within the Project area, two on Poplar St, 1-2 on 10th St, and four on Union (USGS 1915). Twenty-four years later, an aerial from 1939 (Flight C_5750) shows the Project area with only one large building on 10th St. (Cartwright Aerial Surveys 1939). This building is large and U-shaped and is the only constant

building observed on this block on maps and aerial surveys throughout the years. There is no evidence of the vacant lot that was north on 12th St, the area is now heavily developed and is broken into three residential blocks. The 1949 Oakland West map depicts additional structures of the Project area, and the main building on 10th St is titled “Cole School”, which is still there today (USGS 1949). Only ten years later, the 1959 Oakland West map shows Cole School with an additional six structures, three on Union St and three on Poplar St (USGS 1959). In 1965, an aerial (Flight CAS_65_130) depicts the Project area to only have one small shed-like structure adjacent to the main school building, on Union (USGS 1959). The 1973 Oakland West map again shows Cole School with the six structures we saw on the 1959 USGS map (USGS 1973). The 1980 Oakland West map then depicts only two buildings on the Project area block, the main building for Cole School, and a small structure on Poplar St (USGS 1980). The small structure from the 1980 USGS map is currently still there, and no additional structures have been built on the property.

4.4 NATIVE AMERICAN COORDINATION

Paleowest contacted the Native American Heritage Commission (NAHC) on February 7, 2020 with a request for information on sacred sites or tribal cultural resources within the Project area, and for a list of Native American tribal representatives with heritage ties to the county. The NAHC response dated February 10th, stated that and after conducting a record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF), the results were positive; Paleowest was instructed to contact the Amah Mutsun Tribal Band of Mission San Juan Bautista and North Valley Yokuts Tribe for more information. The NAHC response provided a list of Native American contacts (Tony Cerda, Chairperson, Costanoan Rumsen Carmel Tribe; Katherine Perez, Chairperson, North Valley Yokuts Tribe; Irenne Zwierlein, Chairperson, Amah Mutsun Tribal Band of Mission San Juan Bautista; Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Costanoan; Monica Arellano, Chairperson, Muwekma Ohlone Indian Tribe of the SF Bay Area; Andrew Galvan , Chairperson, The Ohlone Indian Tribe; and Corrina Gould, Chairperson, The Confederated Villages of Lisjan).

Paleowest contacted the Native American representatives by email, on February 12, 2020, informing them of the project and asking for any recommendations for the Project. Follow up calls were made on February 18, 2020, all with no response.

5.0 MANAGEMENT RECOMMENDATIONS

As a result of the archaeological review effort, no cultural resources or isolates were identified with the Project area. In order to reduce the impacts of the Project on previously unknown archaeological resources, the following set of management recommendations are proposed.

5.1 SURVEY OF THE PROJECT AREA

PaleoWest recommends that an archaeologist conduct a pedestrian archaeological survey of the Project area after building demolition. This is intended to be an intensive survey of the Project area conducted to meet the requirements of CEQA. The pedestrian survey should be conducted to evaluate potential project impacts to cultural resources. Any newly discovered historic (over 45 years of age) or prehistoric archaeological sites identified during the survey must be recorded, as required, on appropriate Department of Parks and Recreation Primary Record (DPR 523) and associated (e.g., Building-Structure-Object) forms.

5.2 INADVERTENT DISCOVERIES

Should any previously unknown prehistoric resources in any of the Project areas, including but not limited to charcoal, obsidian or chert flakes, grinding bowls, shell fragments, bone, or pockets of dark, friable soils be discovered during grading, trenching, or other on-site excavation(s), earthwork within 25 feet of these materials shall be stopped until a qualified professional archaeologist have an opportunity to evaluate the potential significance of the find and suggest the appropriate steps to protect the resource.

According to CEQA Section 15126.4, avoidance is the preferred mitigation. Since CEQA provisions regarding the preservation of historic resources direct that adverse effects to historic resources shall be avoided, if feasible, the resource shall be protected from damaging effects through avoidance.

If avoidance of any previously undiscovered archaeological site is not feasible, data recovery shall be conducted in accordance with an approved Archaeological Data Recovery Plan (ADRP) to mitigate adverse effects to the significance of the site – the area of data recovery being limited to the area of adverse effect. This would fulfill CEQA requirements that the mitigation measure must be "roughly proportional" to the impacts of the project. A professional, qualified archaeologist shall conduct data recovery in compliance with CEQA Guideline Section §15064.5. Once the site has been properly tested, subject to data recovery, or preserved to the satisfaction of the professional archaeologist in compliance with CEQA Guideline §15064.5, the site can be further developed.

5.3 INADVERTENT DISCOVERY OF HUMAN REMAINS

Ground disturbing activities associated with construction activities in the Project area could disturb previously unknown human remains, including those interred outside of formal cemeteries. The potential to uncover Native American human remains exists in locations throughout California. Although not anticipated, human remains may be identified during site-preparation and grading activities.

Section 7050.5(b) of the California Health and Safety code will be implemented in the event that human remains, or possible human remains, are located during Project-related construction excavation. Section 7050.5(b) states:

> In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the NAHC within 24 hours. The Commission has various powers and duties, including the appointment of a Most Likely Descendant (MLD) to the Project. The MLD, or in lieu of the MLD, the NAHC, has the responsibility to provide guidance as to the ultimate disposition of any Native American remains.

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Appendix A. Cultural Resource Studies

Table 1: Cultural Resource Studies Within the Project Area

Report Number	Authors	Year	Title	Publisher
S-000848	David A. Fredrickson	1977	A Summary of Knowledge of the Central and Northern California Coastal Zone and Offshore Areas, Vol. III, Socioeconomic Conditions, Chapter 7: Historical & Archaeological Resources	The Anthropology Laboratory, Sonoma State College; Winzler & Kelly Consulting Engineers
S-002458	Neil Ramiller, Suzanne Ramiller, Roger Werner, and Suzanne Stewart	1981	Overview of Prehistoric Archaeology for the Northwest Region, California Archaeological Sites Survey: Del Norte, Humboldt, Mendocino, Lake, Sonoma, Napa, Marin, Contra Costa, Alameda	Anthropological Studies Center, Sonoma State University
S-002458	Suzanne Ramiller	1982	Prehistoric Archaeology Overview Northwest Region; California Archaeological Inventory, Volume I: Humboldt and Del Norte Counties	Anthropological Studies Center, Sonoma State University
S-002458	Roger H. Werner	1982	Archaeological Overview of Mendocino and Lake Counties	Anthropological Studies Center, Sonoma State University
S-002458	Suzanne Stewart	1982	Prehistoric Archaeology Overview Northwest Region; California Archaeological Inventory, Volume 3: Napa and Sonoma Counties	Anthropological Studies Center, Sonoma State University
S-002458	Suzanne B. Stewart	1982	Archaeological Overview of Alameda, Contra Costa, and Marin Counties	Anthropological Studies Center, Sonoma State University
S-002458	Neil Ramiller	1982	Environmental Overview of The Northwest Region	Anthropological Studies Center, Sonoma State University
S-007903	David Chavez	1985	Cultural Resources Evaluation for the East Bay Municipal Utility District Infiltration/Inflow Project (P. O. 951 1143 EA)	David Chavez & Associates
S-009462	Teresa Ann Miller	1977	Identification and Recording of Prehistoric Petroglyphs in Marin and Related Bay Area Counties	San Francisco State University
S-009583	David W. Mayfield	1978	Ecology of the Pre-Spanish San Francisco Bay Area	San Francisco State University
S-009795	Thomas Lynn Jackson	1986	Late Prehistoric Obsidian Exchange in Central California	Stanford University
S-012289	Donna M. Garaventa, Michael R. Fong, Sondra A. Jarvis, and Angela M. Banet	1990	Archaeological Survey Report, I-880/Cypress Replacement Project, 04-ALA-880 P.M. 32.4/34.3, E.A. #04195-190271 MEQ 85001, Cities of Oakland and Emeryville, Alameda County, California	Basin Research Associates, Inc.
S-014621	David Chavez	1992	Archaeological Resources Review for the Oakland Enterprise Zone EIR, Alameda County, California	David Chavez and Associates
S-015529	Robert L. Gearhart II, Clell L. Bond, Steven D. Hoyt, James H. Cleland, James Anderson, Pandora Snethcamp, Gary Wesson, Jack Neville, Kim Marcus, Andrew York, and Jerry Wilson	1993	California, Oregon, and Washington: Archaeological Resource Study	Espey, Huston & Associates, Inc.; Dames & Moore
S-016217	Mary Praetzellis, Nancy Leigh Olmsted, Roger Wolcott Olmsted, Katherine Johnson, Jack Mc Ilroy, Anmarie Medin, Adrian Praetzellis, Will Spires, Aicha Woods, Stuart	1994	West Oakland--A Place to Start From, Research Design and Treatment Plan, Cypress I-880 Replacement Project, Volume 1: Historical Archaeology, ALA-880 P.M. 31.9/35.8; ALA-80 P.M. 2.3/4.0, in the Cities of Oakland and Emeryville, Alameda County, California	Anthropological Studies Center, Sonoma State University; Basin Research Associates, Inc.; Caltrans

	Guedon, Melody Tannam, and Janet Pape			
S-016660	Jeffrey B. Fentress	1992	Prehistoric Rock Art of Alameda and Contra Costa Counties, California	California State University, Hayward
S-017835	Judy Myers Suchey	1975	Biological Distance of Prehistoric Central California Populations Derived from Non-Metric Traits of the Cranium	University of California, Riverside
S-018217	Glenn Gmoser	1996	Cultural Resource Evaluations for the Caltrans District 04 Phase 2 Seismic Retrofit Program, Status Report	California Department of Transportation
S-018515	Grace H. Ziesing	1996	Historic Sensitivity Study for Proposed Parking Lot between 7th and 8th Sts. and Union and Cypress Sts., Oakland, California (letter report)	Sonoma State University Academic Foundation Inc.
S-019466	Janet L. Pape and Greg White	1995	Archaeological Research Design and Treatment Plan, Volume II: Prehistoric Archaeology, I-880 Cypress Replacement Project in the Cities of Oakland and Emeryville, Alameda County, ALA-880 31.6/35.8, ALA-80 2.3/4.0	Caltrans; Anthropological Studies Center, Sonoma State University
S-020125	Suzanne Stewart, Mary Praetzellis, Willie R. Collins, Paul W. Groth, Marta Gutman, Janet Pape, Karana Hattersly-Drayton, Elaine-Maryse Solari, and William A. Spires	1997	Sights and Sounds, Essays in Celebration of West Oakland: The Results of a Focused Research Program to Augment Cultural Resources Investigations for the I-880 Cypress Replacement Project, Alameda County (ALA-880 PM 31.9/34.8; ALA-80 PM 2.3/4.0 in the Cities of Oakland and Emeryville, Alameda County, California)	Anthropological Studies Center, Sonoma State University; W. Collins & Associates; Department of Architecture, University of California, Berkeley; Caltrans
S-020395	Donna L. Gillette	1998	PCNs of the Coast Ranges of California: Religious Expression or the Result of Quarrying?	California State University, Hayward
S-022820	Wendy J. Nelson, Tammara Norton, Larry Chiea, and Eugenia Mitsanis	2000	Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project, Segment WS07: Oakland to San Jose	Far Western Anthropological Research Group, Inc.
S-023778	David Chavez and Jan M. Hupman	2000	Archaeological Resources Investigations for the EBMUD East Bayshore Recycled Water Project, Alameda County, California	David Chavez & Associates
S-023778	David Chavez	2002	Archaeological Resources Investigations for the EBMUD East Bayshore Recycled Water Project, Alameda County, California: Supplemental Report	David Chavez & Associates
S-023778	Daivd Chavez and Jan M. Hupman	2002	Archaeological Resources Investigations for the EBMUD East Bayshore Recycled Water Project, Alameda County, California: Additional Pipeline Alignments	David Chavez & Associates
S-025243	Thad Van Bueren, Jack Meyer, Jack Mc Ilroy, Heidi Koenig, and Brian Ramos	2002	Archaeological Sensitivity Study for Relocation of Park and Ride at Market and Interstate 880 in the City of Oakland, California, 04-ALA-880, KP 51.6 (PM 32.1), EA 04-44680K	Caltrans; Anthropological Studies Center, Sonoma State University
S-025649	Mary Praetzellis, Suzanne B. Stewart, Erica S. Gibson, Lori Hager, Virginia Hellmann, Madeline Hirn, Jack Mc Ilroy, Michael D. Meyer, Adrian Praetzellis, Mary Praetzellis, Sunsjine Psota, Maria Ribeiro, Margo Schur, Elaine-Maryse Solari, Suzanne B. Stewart, Michael Stoyka, Rose White, Nancy Olmsted, and Roger W. Olmsted	2001	Block Technical Report: Historical Archaeology, I-880 Cypress Replacement Project, Blocks 4, 5, 6 and 9	Anthropological Studies Center, Sonoma State University
S-027364	Allen G. Pastron, Andrew Gottsfield, Eric Wohlgemuth, Becky Johnson, Jason Claiborne,	2003	Final Archaeological Report, East Block of the Mandela Gateway Project, City of Oakland, Alameda County, California	Archeo-Tec

	L. Dale Beevers, Matt Calder, and Jonathan Goodrich			
S-029028	Thad Van Bueren, Scott Baxter, Anmarie Medin, Linda S. Cummings, Christie Hunter, and Kathryn Puseman	2004	A Germanic Enclave in West Oakland: Archaeological Investigations for the Mandela Park and Ride Relocation Project in the City of Oakland, California, 04-ALA-880, K.P 51.6 (PM 32.1) EA 04-446801	Caltrans
S-030204	Donna L. Gillette	2003	The Distribution and Antiquity of the California Pecked Curvilinear Nucleated (PCN) Rock Art Tradition.	University of California, Berkeley
S-032164	Harry Y. Yahata and Robert L. Gross	1999	Historic Property Survey Report and Findings of No Historic Properties Affected for the Mandela Parkway Corridor Improvement Project, City of Oakland, Alameda County, 04-Ala-880-KP, 52.5/54.9 (PM 32.6/34.1)	California Department of Transportation, District 4
S-032164	Jack McIlroy, Jack Meyer, Elaine-Maryse Solari, Grace H. Ziesing, Kimberly Esser, Maria Ribeiro, Adrian Praetzellis, and Mary Praetzellis	1999	Mandela Parkway Corridor Improvement Project: Archaeological Sensitivity Study and Survey Report, 04-Ala-880, KP 52.5/54.9 (PM 32.6/34.1), in the City of Oakland, California, Alameda County, EA No. 292360	Anthropological Studies Center, Sonoma State University
S-032596	Randall Milliken, Jerome King, and Patricia Mikkelsen	2006	The Central California Ethnographic Community Distribution Model, Version 2.0, with Special Attention to the San Francisco Bay Area, Cultural Resources Inventory of Caltrans District 4 Rural Conventional Highways	Consulting in the Past; Far Western Anthropological Research Group, Inc.
S-033239	David Chavez	1994	Alameda Watershed, Natural and Cultural Resources: San Francisco Watershed Management Plan	Environmental Science Associates
S-033600	Jack Meyer and Jeff Rosenthal	2007	Geoarchaeological Overview of the Nine Bay Area Counties in Caltrans District 4	Far Western Anthropological Research Group, Inc.
S-035927	Colin I. Busby	2008	Historic Properties Survey Report: West Oakland Transit Village - 7th Street Improvements, City of Oakland, Alameda County, California Project No. STPLER 5012 (082) FHWA 080806A	Basin Research Associates, Inc.
S-035927	Colin I. Busby	2008	Archaeological Survey Report, West Oakland Transit Village - 7th Street Improvements, City of Oakland, Alameda County, California Project No. STPLER 5012 (082)	Basin Research Associates, Inc.
S-037362		1990	Historic Property Survey Report for the Proposed I-880 Reconstruction Project in the Cities of Oakland and Emeryville, Alameda County, ALA-880 32.12/34.31; ALA-580 45.99/46.95; ALA-80 1.99/3.39; 04195-190271 MEQ85001	California Department of Transportation, District 4
S-037362	Donna M. Garaventa, Michael R. Fong, Sondra A. Jarvis, and Angela M. Banet	1990	Archaeological Survey Report, I-880/Cypress Replacement Project, 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.39, E.A. #04195-190271 MEQ 85001, Cities of Oakland and Emeryville, Alameda County, California	Basin Research Associates, Inc.
S-037362		1990	Historic Architecture Survey Report for the Proposed Reconstruction of Interstate 880 Within the City Limits of Oakland and Emeryville, Alameda County, 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.79, 4195-190271 MEQ85001	California Department of Transportation
S-037362	Gary Knecht, Alex G. Chiappetta, Michael R. Corbett, Miriam Liskin, Gail G. Lombardi, Betty Marvin, Woodruff C. Minor, Donnalyn Polito, Christine Winans, and Aicha S. Woods	1990	Historic Architecture Survey Report, Part VII. A, Subarea A: City of Oakland	Oakland Cultural Heritage Survey

S-037362	Bonnie W. Parks, Denise O'Connor, and Stephen D. Mikesell	1990	Historic Architecture Survey Report Part VII. B, Subarea B: Emeryville and San Francisco-Oakland Bay Bridge Vicinity	California Department of Transportation
S-037362	John W. Snyder	1990	Historic Architecture Survey Report Part VII. C, Subarea C: Southern Pacific Railroad Property and Interurban Railway Structures	Caltrans, District 4
S-037362	Kathryn Gualtieri	1990	FHWA900927X; I-880 Cypress structure, ER-1404 (1)	Office of Historic Preservation
S-037362		1990	First Addendum Historic Property Survey Report for the Proposed I-880 Reconstruction Project in the Cities of Oakland and Emeryville, Alameda County ALA-880 32.12/34.31; ALA-580 45.99/46.95; ALA-80 1.99/3.39 04195-190271 MEQ85001	California Department of Transportation
S-037362	Donna M. Garaventa and Sondra A. Jarvis	1990	First Addendum Archaeological Survey Report, I-880/Cypress Replacement Project 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.39, E.A.#04195-190271 MEQ 85001, Cities of Oakland and Emeryville, Alameda County, California	Basin Research Associates, Inc.
S-037362		1990	First Addendum Historic Architecture Survey Report for the Proposed Reconstruction of Interstate 880 within the City Limits of Oakland and Emeryville, Alameda County 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.79, 4195-19027 MEQ85001	California Department of Transportation
S-037362	Gary Knecht, Alex G. Chiappetta, Michael R. Corbett, Miriam Liskin, Gail G. Lombardi, Betty Marvin, Woodruff C. Minor, Donnalynn Polito, Christine Winans, and Aicha S. Woods	1990	First Addendum Historic Architecture Survey Report Part VII, Subarea F: City of Oakland	California Department of Transportation
S-037362		1991	Second Addendum Historic Property Survey Report for the Proposed Reconstruction of Interstate 880 within the City Limits of Oakland and Emeryville, Alameda County 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.79 4195-190270	California Department of Transportation
S-037362	Gary Knecht, Miriam Liskin, Gail G. Lombardi, Betty Marvin, and Christine Winans	1991	Second Addendum Historic Architecture Survey Report Part VII Subarea G: City of Oakland	California Department of Transportation
S-043686	Caprice "Kip" Harper	2013	Cultural Resources Constraints Report, Oakland C-1108 Feeder, City of Oakland, Alameda County (Circuit 1108)	Garcia and Associates
S-046249	Mary Praetzellis, Adrian Praetzellis, Marta Gutman, Paul R. Mullins, Adrian Praetzellis, Mary Praetzellis, and Mark Walker	2004	Putting the "There" there: Historical Archaeologies of West Oakland, Cypress Replacement Project Interpretive Report No. 2, I-880 Cypress Freeway Replacement Project, Alameda County, California	Anthropological Studies Center, Sonoma State University
S-046249	Adrian Praetzellis and Mary Praetzellis	2004	Chapter 1: The Loma Prieta Earthquake and its Aftermath	Anthropological Studies Center
S-046249	Robert Douglass	2004	Chapter 2: A Brief History of West Oakland	Anthropological Studies Center
S-046249	Adrian Praetzellis	2004	Chapter 3: Consumerism, Living Conditions, and Material Well-Being	Anthropological Studies Center
S-046249	Paul R. Mullins	2004	Chapter 4: Consuming Aspirations: Bric-A-Brac and the Politics of Victorian Materialism in West Oakland	Anthropological Studies Center
S-047732	Carolyn Losée	2016	Cultural Resources Investigation for AT&T Mobility CCU1236 "Expo Floors" 1315 16th Street AKA 1350 14th Street, Oakland, Alameda County, California 94607 (letter report)	Archaeological Resources Technology

S-048927	Donald Scott Crull	1997	The Economy and Archaeology of European-made Glass Beads and Manufactured Goods Used in First Contact Situations in Oregon, California and Washington	University of Sheffield, England
S-049780	Brian F. Byrd, Adrian R. Whitaker, Patricia J. Mikkelsen, and Jeffrey S. Rosenthal	2017	San Francisco Bay-Delta Regional Context and Research Design for Native American Archaeological Resources, Caltrans District 4	California Department of Transportation, District 4
S-049780	Julianne Polanco	2016	FHWA_2016_0615_001, Caltrans District 4 Archaeological Context	Office of Historic Preservation
S-051786	David Brunzell	2018	Cultural Resources Analysis for the San Francisco-Oakland Fiber Project, San Francisco and Oakland, California (letter report)	BCR Consulting LLC

Appendix D

CA-CHPS 2014 Editions, Annotated Worksheet prepared for the Administrative Building at Cole Project

Shaw Kawasaki Architects, February 19, 2021

CA-CHPS 2014 EDITION v1.02 - ANNOTATED SCORECARD

Project Information from Project Summary		Review Information	
Project Name:	CENTRAL ADMINISTRATIVE CENTER AT COLE CAMPUS	Submission/Resubmission Date:	5/26/2020
Project Location:	1011 Union Street, Oakland, CA 94607	Review Completed Date:	For Admin Use Only
Project Type:	Non-Classroom Building	CHPS Project ID:	For Admin Use Only

Instructions: Enter the submission or resubmission date and complete 'Points Pursued' columns. Columns entitled 'References for Contractors and Team (Attachments, Construction Docs, etc.)' and 'Other Notes for Contractor Regarding Compliance'are optional but encouraged to communicate project requirements to other team members. Use the Documentation tabs to list full references and attachments for formal review. This document is intended to assist in communicating important information to contractors and to facilitate review of the project by CHPS. This sheet is formatted to print on a 30"x 42" plan sheet.

	Criteria		Prerequisite	CalGreen/ Title 24 Measures	Points Possible	Points Pursued	References for Contractors and Team (Attachments, Construction Docs, etc.)	Other Notes for Contractor Regarding Compliance (Items to track during construction, etc.)
Integration		**Subtotal**			**20**	**4**		
II 1.0	Integrated Design		P	T	1	1	Min 2 CHPS workshops	
II 1.1	Enhanced Integrated Design				1	1	Involve GC before CDs, or more workshops, or use BIM	
II 2.1	District Level Commitment				2	1	Only 1 point possible in NC. OUSD is CHPS member and mandates CHPS best practices	
II 3.1	School Master Plan				1	0	N/A	
II 4.1	High Performance Transition Plan - MOD				2	0	N/A for new construction	
II 5.0	Educational Display		P		1	1	Provide a permanent display that describes the high performance features	
II 6.1	Educational Integration				2	0	Involve students as CHPS champions, prepare sustainability education (min 10hrs/yr), educational displays...	
II 7.1	Demonstration Area				1	0	Interactive feachtures for each one of the 5 major env categories: Indoor Environmental Quality, Energy, Water, Site, and Materials and Waste Management.	
II 8.1	Climate Change Action / Carbon Footprint Reporting				3	0	Calculate GHG Inventory (scopes 1, 2 & 3)	
II 9.1	Crime Prevention Through Environmental Design				1	0	Incorporate in design the CPTED Principles: natural surveillance, natural access control, territorial reinforcement, maintenance and management	
II 10.1	Innovation (CHPS Verified Projects only)				4		2 pts per strategy, max 2 strategies. TBD if needed	
II 11.1	District-Wide Sustainability Planning				1	0	SKA: cannot attempt this point since we are not pursuing 8.1.2 Climate Change Action point	
Indoor Environmental Quality		**Subtotal**			**82**	**37**		
EQ 1.0	HVAC Design - ASHRAE 62.1		P	C/T	8	8	MEP Eng	
EQ 1.1	Enhanced Filtration				2		Min MERV 15	
EQ 1.2	Dedicated Outdoor Air System				3		Provide a dedicated outdoor air ventilation system with the ability to efficiently process and manage ventilation down to the individual room level	
EQ 2.1	Pollutant and Chemical Source Control				2	1	3 strategies below=1 point, 5 strategies =2 points. Strategies: off-gassing; walk-off mats; electric ignitions for gas-fired equipment; no mobile fossil-fuel powered equipment indoors (polishers, etc.); CO monitoring, electronics meeting EPEAT rating	
EQ 3.0	Outdoor Moisture Management - NEW		P	C	1	1	CALGreen Section 5.407	
EQ 3.1	Outdoor Moisture Management - MOD					0	N/A for new construction	
EQ 4.1	Ducted Returns				2		Regularly occupied spaces with ducted HVAC return to minimize dust and microbial growth	
EQ 5.0	Construction Indoor Air Quality Management		P	C	7	7	GC to follow SMACNA guidelines for new construction. AND flushout	
EQ 5.1	Enhanced Construction Indoor Air Quality Management				1	2	2 points allowed in non-classroom bldg. Dust control, and follow SMACNA guidelines for occupied bldgs during construction	
EQ 6.1	Post-Construction Indoor Air Quality				1	1	Specify daily cleaning with certified HEPA filter vacuum that meets or exceeds the CRI Seal of Approval/Green Label Vacuum Cleaner Program	
EQ 7.0	Low Emitting Materials		P	C	2	2	Meet CALGreen in paints-coatings, flooring, composite wood, adhesives-sealants-caulks	
EQ 7.1	Additional Low Emitting Materials				6	3	1 pt each: paints-coatings, flooring, composite wood, adhesives-sealants-caulks, furniture-furnishings, ceilings-walls	
EQ 8.1	Low Radon				1	0	Measure radon and mitigate if radon concentrations > 4 pCi/L.	
EQ 9.0	Thermal Comfort - ASHRAE 55		P		4	4	Meet ASHRAE Standard 55 for thermal comfort standards	
EQ 10.1	Individual Controllability				2	0	Intended for classrooms but can translate to NC buildings depending on room type.	
EQ 10.2	Controllability of Systems				2	0	Intended for classrooms but can translate to NC buildings depending on room type. Enable teachers to have reasonable thermal control. Tstat in each classroom and 90% of classrooms with at least 1 operable window	
EQ 11.0	Daylighting: Glare Protection		P	T	4	4	Minimize glare and direct sunlight penetration	
EQ 11.1	Daylight Availability				7	2	Only 2 points available in non-classroom bldg. Support spaces option is applicable only. Daylighting controls and min 30fc illuminance for 50% of adm area and over 40fc in common areas	
EQ 12.1	Views				3	1	Focused on classrooms, libraries, and admin areas but can translate to other room types. Direct line of sight to view glazing from regularly occupied spaces	
EQ 13.1	Electric Lighting Performance				2	0	Credit is focused on classrooms only but practices not limited to classrooms. Project could consider Innovation points	
EQ 13.2	Superior Electric Lighting Performance				7	0	Credit is focused on classrooms only but practices not limited to classrooms. Project could consider Innovation points	
EQ 14.0	Acoustical Performance		P	C	5	0	Applies to classrooms only. N/A for our administration building. Confirmed by Elisabeth Krautscheid (ekrautscheid@chps.net) on 3/31/20 by email	
EQ 14.1	Enhanced Acoustical Performance				4	0	SKA response: we will not pursue this point. Not within acoustical consultant's scope.	
EQ 15.1	Low-EMF Wiring				1		No net current magnetic fields – Correct wiring	
EQ 15.2	Low-EMF Best Practices				2		Most of this is geared for classrooms but other room types with similar equipment could pursue some practices.	
EQ 16.1	Thermal Displacement Ventilation				2	0	N/A. Applies to classrooms only	
EQ 17.1	Mercury Reduction				1	1	All LED lighting	
Energy		**Subtotal**			69	27		
EE 1.0	Energy Performance		P	T	8	8	Time dependent valued (TDV) energy must be at least 5% less than Title 26-Part 6-2016	
EE 1.1	Superior Energy Performance				40	6	Utilize the Energy EE 1.0 for quantifying reductions in total energy use. 5% 3 pts. 10% 6pts, 15% 9 pts, 20% 12 pts, 30% 18 pts, 40% 22 pts, 50% 25 pts, 60% 28 pts, 70% 31 pts, 80% 34 pts, 90% 37 pts, 100% 40 pts	Interface Bldg Performance Report dated April 14, 2020 confirms compliance margin of 10.1% (6 pts)
EE 2.0	Solar Ready - NEW		P	T	0	0	Title 24, Part 6, Section 110.10	
EE 2.1	Zero Net Energy Bonus				2	2	Zero Net-Energy Capable	
EE 3.0	Commissioning		P	T	4	4	Like LEED enhanced Cx. Requires 3rd party CxA and 10-month post occupancy review	
EE 3.1	Additional Commissioning Qualifications				1	1	CxA is is a licensed architect or engineer with at least two years' experience in the state	
EE 3.2	Building Envelope Commissioning				2	0	Usually specialty consultant	
EE 4.0	Environmentally Preferable Refrigerants - NEW		P	C	1	1	No CFCs or Halons	
EE 4.1	Environmentally Preferable Refrigerants - MOD					0	N/A for new construction	
EE 5.0	Energy Management System - NEW		P	T	0	0	Comply with Title 24 Energy Management Systems (EMS), lighting control and metering	
EE 5.1	Energy Management System				2	0	N/A for new construction	
EE 5.2	Advanced Energy Management System and Submetering				2	2	Automated Demand Management and install a meter data acquisition and storage system for all electrical power used within the building	
EE 6.1	Natural Ventilation			T	3	0	N/A if there'sr mechanical air-cooling	
EE 7.1	Low Carbon School				1	1	Do not use on-site natural gas consumption for space heating and water heating	
EE 8.1	Electric Vehicle Charging				1	0	EV chargers in 2% of parking spaces. There will only be EV-ready	
EE 9.0	Energy Conservation Interlocks - NEW		P	T	2	2	Install interlocks on doors and windows as required in Title 24 Section 140.4(n)	
EE 9.1	Energy Conservation Interlocks - MOD					0	N/A for new construction	

	Criteria		Pre- requisite	CalGreen Element	Points Possible	Points Pursued	References for Contractors and Team (Attachments, Construction Docs, etc.)	Other Notes for Contractor Regarding Compliance (Items to track during construction, etc.)
Water		**Subtotal**			22	13		
WE 1.0	Indoor Water Use - NEW		P	C	4	4	Comply with CALGreen, Sections 5.303.3 and 5.303.6	
WE 1.1	Minimum Reduction in Indoor Potable Water Use - MOD					0	N/A in new construction	
WE 2.1	Reduce Potable Water Use for Sewage Conveyance				4	2	Only 2 pts available in non-classroom bldg. Reduce water use at least 20%	
WE 3.0	Irrigation and Exterior Water Budget		P	C	1	1	CALGreen mandatory measure SKA: confirmed by Landscape that we will meet this requirement	
WE 3.1	Irrigation and Exterior Water Budget - Use Reduction				2	0	Irrigation with soil moisture meter and auto shut-off SKA: confirmed by Landscape we cannot pursue this point as it pertains to recreational playing fields	
WE 4.1	Reduce Potable Water Use for Non-Recreational Landscaping				3	1	Reduce water use for irrigation. 20% 1 pt, 30% 2 pts, 50% 3 pts SKA: confirmed by Landscape we can achieve 20% reduction in potable water use	
WE 5.1	Reduce Potable Water Use for Recreational Landscaping				2	0	N/A	
WE 6.1	Irrigation Systems Commissioning				3	3	Ensure it is included in Cx scope, as usual	
WE 7.1	Water Management System				2	2	Sub meter indoor water uses & landscaping	
WE 8.1	Demonstration Rainwater Catchment				1	0	Rainwater catchment must be exposed and with permanent signage for education	
Sites		**Subtotal**			23	15		
SS 1.0	Site Selection		P		2	2	Do not build on sites containing pollutants known to be hazardous to student and staff health. CEQA document might have the info	
SS 2.1	Environmentally Sensitive Land				2	2	Previously developed	
SS 3.1	Minimize Site Disturbance				1	0	Floor Area Ratio OK: 56,176/110,759=1.9 (over 1.4) Parking capacity- no add compared to existing conditions & 5% preferred for carpools/vanpools and low emitting vehicles. SKA: Cannot achieve this point because requires 25% of site area to be vegetated open space, which is more than what we have shown.	
SS 4.0	Construction Site Runoff Control and Sedimentation		P		1	1	GC to do	
SS 5.0	Grading and Paving - NEW		P	C	0	0	Comply with CALGreen Section 5.106.10	
SS 5.1	Post Construction Stormwater Management				2	2	Reduce 25% stormwater runoff compared to pre-development AND isolate trash area to prevent off-site transport of trash. AND provide post-construction BMPs Civil to advise SKA: Civil has confirmed these 2 points are achievable	
SS 6.1	Central Location				2	2	Site within 1/2 mile of 8 basic services	
SS 7.1	Located Near Public Transportation				1	1	Site within 1/4 mile of a commuter rail, light rail or subway station, or within 1/8 mile of one bus line.	
SS 8.1	Joint Use of Facilities				1	0	50% of parking for community, all available off hours. 75% of garden space for community	
SS 9.0	Bicycle Parking - NEW		P	C	0	0	Comply with CALGreen, Section 5.160.4.2.2.	
SS 9.1	Human-Powered Transportation				2	1	Walkways and bike lanes from building entrace to end of property, AND bike parking (% based on number of students. 5 to 25%, not clear)	
SS 10.1	Reduce Heat Islands - Landscaping and Sites				2	0	Site non-roof area: 50% impervious, or with shade, or SRI over 0.29 SKA: per Civil we could potentially achieve these points but will add cost. Since budget is a concern and we don't need extra points, we will not pursue this.	
SS 11.1	Reduce Heat Islands - Cool Roofs and Green Roofs/Walls				2	2	SRI over 82 in at least 75% of roof surface	
SS 12.0	Light Pollution Reduction - NEW		P	C	0	0	CALGreen mandatory measure. Required only within scope of project.	
SS 12.1	Avoid Light Pollution and Unnecessary Lighting				2	1	Lighting eng to advise. Controls, lumens per acre, CRI...	
SS 13.1	School Gardens				2	0	Provide a min of 200sf of garden for a student enrollment of 499 or less to promote learning about environment and healthy foods	
SS 14.1	Use Locally Native Plants for Landscape				1	1	At least 80% of plants are native species	
Materials and Waste Management		**Subtotal**			17	12		
MW 1.0	Storage and Collection of Recyclables		P	C	2	2	Minimum: paper, cardboard, glass, plastics, organic waste, and metals. The school must have a written program stating the logistics of the recycling efforts.	
MW 2.0	Construction Site Waste Management		P	C	2	2	Min 65%	
MW 2.1	Construction Site Waste Management				2	1	75% diversion = 1 pt 90% diversion = 2pts	
MW 3.1	Single Attribute - Recycled Content				2	2	Specify materials with recycled. At least 20% by cost	
MW 4.1	Single Attribute - Rapidly Renewable Materials				1	1	Specify rapidly renewable materials for 50% by area of one of these: flooring, casework, acoustic ceiling tile, wall covering	
MW 5.1	Single Attribute - Certified Wood				1	1	50% of wood FSC certified	
MW 6.1	Single Attribute - Materials Reuse				1	0	N/A in non-classroom bldg	
MW 7.1	Multi-Attribute Materials Selection				2	2	Select at least 10 products with EPDs	
MW 8.1	Building Reuse - Exterior - MOD				2	0	N/A for new construction	
MW 9.1	Building Reuse - Interior - MOD				1	0	N/A for new construction	
MW 10.1	Health Product Related Information Reporting				1	1	At least 20 products with HPD, C2C, MHC, Declare or GreenScreen	
Operations & Metrics		**Subtotal**			17	4		
OM 1.0	Facility Staff and Occupant Training		P		2	2	Shall be in CxA scope	
OM 2.1	Post-Occupancy Transition				1		Do post-occupancy meeting and survey	
OM 3.0	Performance Benchmarking		P		2	2	Policy: track energy use over time: Conduct a post-occupancy analysis of the school's indoor environmental quality, and energy performance after 1-2 years or perform recommissioning after 2-5 years.	
OM 4.1	High Performance Operations				6	0	Only 2 possible points in non-classroom bldg. 4.1.1 intended for classrooms.	
OM 5.1	Systems Maintenance Plan				1		Create a school Systems Maintenance Plan for MEP items	
OM 6.1	Indoor Environmental Management Plan				1		Employ during operations the EPA's IAQ Tools for Schools Action Kit: www.epa.gov/iaq/schools/actionkit.html	
OM 7.1	Green Cleaning				1		Owner to decide. Create plan and audit between 12-18 months from occupancy	
OM 8.1	Integrated Pest Management				1		Design to limit potential of pest (see guidelines). Develop and support an Integrated Pest Management (IPM) Plan that emphasizes a least-toxic approach to IPM.	
OM 9.0	Anti-Idling Measures		P		0	0	No vehicle engines within 100 feet of a school. No idling for more than 30 seconds	
OM 9.1	Additional Anti-Idling Measures				1		Policy and signage	
OM 10.1	Green Power				1		Buy Renewable Energy Certificates (RECs) equivalent to at least 15% of the school's projected annual electricity needs as modeled under EE 1.0 and EE 1.1 for at least two years of occupancy.	

Total	250	112	NEED 83 POINTS FOR CHPS VERIFIED CERTIFICATION

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-119003 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 04/01/2021

NOTE: If this drawing is not 30"x42" it has been revised from its original size and the scales noted on drawing/details are no longer applicable.

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NO.	DATE	ISSUE DESCRIPTION
	06/04/2020	90% CONSTRUCTION DOCUMENTS
	07/10/2020	100% CONSTRUCTION DOCUMENTS
1	02/19/2021	DSA BACK CHECK

S H A H
KAWASAKI
ARCHITECTS
570 10th Street, Suite 201
Oakland, CA 94607

CENTRAL ADMINISTRATIVE CENTER AT COLE CAMPUS

1011 UNION STREET,
OAKLAND, CA 94607

LICENSED ARCHITECT PHILIP SHENG-TI LO C 29075 EXP. 12-31-21 STATE OF CALIFORNIA

Drawing Title
CHPS SCORECARD

Drawing No.
A-005

SKA Project Number: 19718 | OUSD Project Number: 19119

3/9/2021 3:04:00 PM

Appendix E

Geotechnical Engineering and Geologic Hazards Study for the Cole Campus Central Administrative Center

Consolidated Engineering Laboratories, as revised September 25, 2020

CONSOLIDATED ENGINEERING
L A B O R A T O R I E S
AN ATLAS COMPANY

September 25, 2020

Oakland Unified School District
Department of Facilities Planning and Management
955 High Street
Oakland, California 94601

Attention: Mr. Tadashi Nakadegawa, Acting Executive Director

Subject: ***Response to CGS Review Comments***
Cole Campus – Central Administrative Center
1011 Union Street, Oakland, California 94607
CEL Project No. 84-04726-B

References:
1) *"Geotechnical Engineering and Geologic Hazards Study, Cole Campus – Central Administrative Center,"* CEL Project No. 84-04726-PWA, dated May 22, 2020.
2) *"Engineering Geology and Seismology Review for Central Administrative Center at Cole Campus – New Buildings, CGS Application No. 01-CGS4511,"* dated September 10, 2020.

Dear Mr. Nakadegawa,

Consolidated Engineering Laboratories (CEL) has prepared this response letter to address review comments issued by the California Geological Survey (CGS) to the Oakland Unified School District (District) regarding the proposed new Central Administrative Center at Cole Campus in Oakland. CEL previously prepared and submitted the referenced geotechnical report for this project (Reference 1).

Following their review of our report, CGS (Reference 2) requested CEL revise our site-specific ground motion analysis to include the possibility of rupture of all the segments of the Hayward Fault, and provide updated site-specific ground motion parameters, design response spectrum, and PGA_M. Based on the resulting analysis results, CGS also requested CEL to revise the liquefaction analyses, as needed.

As recommended by CGS, we revised our May 22, 2020 geotechnical engineering and geologic hazards study report, which is attached. As presented in our revised report, Section *6.2.2 Deterministic (MCE_R) Ground Motions*, our site-specific ground motion analysis was revised to include all segments of the Hayward Fault: HN+HN+HS. The results of the analysis are presented in Section 6.2 of our revised report.

Using the resultant PGA_M from our revised site-specific ground motion analysis, we have updated our liquefaction analysis and the results are presented in the table below, as well as in our revised report. Our revised analysis shows that the calculated total seismically-induced settlements have increased slightly (< 0.1 inch); however, it remains our judgment that the calculated values of potential liquefaction settlement would not result in significant surface manifestation of such liquefaction settlement, and that significant post-seismic reduction in the bearing capacities of the existing overlying soils would not occur. In our opinion, the proposed project site is still suitable for a shallow foundation system as recommended in our report.

Seismic Settlement Analysis Results

CPT No.	Calculated Liquefaction Settlement (inches)	Calculated Dynamic Compaction Settlement (inches)	Calculated Total Seismic Settlement (inches)
CPT-1	0.34	0.08	0.42
CPT-2	0.62	0.10	0.72
CPT-3	0.66	0.02	0.68
CPT-4	0.53	0.04	0.57

Closing

We trust that this letter provides the requested information at this time. If you have any questions regarding the contents of this letter, please contact Mr. Dare via email (cdare@ce-labs.com). We greatly appreciate the opportunity to be of service to the District and to be involved in the design of this project.

Sincerely,
CONSOLIDATED ENGINEERING LABORATORIES

Alex Lim, PE, QSP
Project Engineer

Corey T. Dare, PE, GE
Principal Geotechnical Engineer

REGISTERED PROFESSIONAL ENGINEER
COREY T. DARE
No. 2013
Exp. 6-30-2022
GEOTECHNICAL
STATE OF CALIFORNIA

Attachments: Geotechnical Engineering and Geologic Hazards Study, revised September 25, 2020.
Letter from California Geological Survey to Oakland Unified School District, dated September 10, 2020.

Distribution: PDF to Mr. Colland Jang, OUSD; colland.jang@ousd.org
PDF to Ms. Kenya Chatman, OUSD; kenya.chatman@ousd.org

AL/CTD:pmf

CONSOLIDATED ENGINEERING
LABORATORIES
AN ATLAS COMPANY

Geotechnical Engineering and Geologic Hazards Study

COLE CAMPUS - CENTRAL ADMINISTRATIVE CENTER

Oakland, California







PREPARED FOR:

Oakland Unified School District
955 High Street
Oakland, CA 94601

PREPARED BY:

Consolidated Engineering Laboratories
534 23rd Avenue
Oakland, CA 94606

CEL Project No. 84-04726-PWA
Revised September 25, 2020

CONSOLIDATED ENGINEERING
LABORATORIES
AN ATLAS COMPANY

May 22, 2020
Revised September 25, 2020

Oakland Unified School District
Department of Facilities Planning and Management
955 High Street
Oakland, California 94601

Attention: Mr. Tadashi Nakadegawa, Acting Executive Director

Subject: **Geotechnical Engineering and Geologic Hazards Study**
Cole Campus – Central Administrative Center
1011 Union Street, Oakland, California 94607
CEL Project No. 84-04726-PWA

Dear Mr. Nakadegawa:

Consolidated Engineering Laboratories has completed a Geotechnical Engineering and Geologic Hazards Study for the proposed new Central Administrative Center project to be located at Cole Campus in Oakland, California. This report has been prepared in accordance with the requirements set forth in California Geological Survey Note 48. Transmitted herewith are the results of our findings, conclusions, and recommendations for foundations, interior and exterior concrete slabs, site preparation, grading, drainage, utility trench backfilling, and pavements. In general, the proposed improvements at the site are considered to be geotechnically feasible provided the recommendations of this report are implemented in the design and construction of the project.

Should you or members of the design team have questions or need additional information, please contact any of the undersigned at (925) 314-7100, or by e-mail at cdare@ce-labs.com. We greatly appreciate the opportunity to be of service to the Oakland Unified School District and to be involved in the design of this project.

Sincerely,
CONSOLIDATED ENGINEERING LABORATORIES

Alex Lim, P.E., Q.S.P.
Project Engineer

Corey T. Dare, P.E., G.E.
Principal Geotechnical Engineer

REGISTERED PROFESSIONAL ENGINEER
COREY T. DARE
No. 2013
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STATE OF CALIFORNIA

REGISTERED GEOLOGIST
JOEL E. BALDWIN, II
No. EG 1132
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

(Renewal date 02/28/2021)
Joel E. Baldwin II, P.G., C.E.G., C.Hg.
Principal Engineering Geologist

Distribution: PDF to Mr. Colland Jang, OUSD; colland.jang@ousd.org
PDF to Ms. Kenya Chatman, OUSD; kenya.chatman@ousd.org

AK/AL/JEB/CTD:pmf

CONSOLIDATED ENGINEERING LABORATORIES
AN ATLAS COMPANY

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FIELD EXPLORATION

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Boring Logs (B-1 through B-5)
Boring Logs (Geosphere 2015 Borings B-1 and B-2)
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CONSOLIDATED ENGINEERING
LABORATORIES
AN ATLAS COMPANY

GEOTECHNICAL ENGINEERING AND GEOLOGIC HAZARDS STUDY

Project: **Cole Campus – Central Administrative Center**
Oakland, California

Client: **Oakland Unified School District**
Oakland, California

1.0 INTRODUCTION

1.1 Purpose and Scope

The purposes of this study were to evaluate the subsurface conditions at the site and prepare geotechnical and geological recommendations for the proposed improvements. This study provides recommendations for foundations, interior and exterior concrete slabs, site preparation, grading, drainage, and utility trench backfilling. This study was performed in accordance with the scope of work outlined in our proposal dated September 11, 2019 and our Contract Amendment request dated February 19, 2020, which included additional services to cover revisions to the originally proposed project.

The scope of this study included the review of pertinent published and unpublished documents related to the site, the drilling of five subsurface borings, four Cone Penetration Tests (CPT), laboratory testing of selected samples retrieved from the borings, engineering analysis of the accumulated data, and preparation of this report. The conclusions and recommendations presented in this report are based on the data acquired and analyzed during this study, and on prudent engineering judgment and experience. This study did not include an assessment of potentially toxic or hazardous materials that may be present on or beneath the site.

1.2 Site Description

Cole Campus is located at 1011 Union Street in Oakland, California, as shown on Plate 1, *Site Vicinity Map*. The project site is located at approximately 37.8082° north latitude and 122.2897° west longitude.

The school site is bounded by 10th Street on the south, Poplar Street on the west, Wade Johnson Park on the north, and Union Street on the south. The proposed Main Building is to be located adjacent to Poplar Street, adjacent to the north side of an existing one-story, former school building. A Multi-Purpose Room (MPR) building is also proposed in the northeast corner of the site.

The property is essentially level, with site elevations ranging between about +15 and +17, based on a revised survey plan prepared by Martin M. Ron Associates dated November 22, 2019 (Oakland City Datum). The school site is occupied by a U-shaped, two-story former school building on the southern portion of the property, the aforementioned one-story former school building adjacent to the northwest corner of the two-story building, a relocatable building on the northeast corner of the site and paved parking and play yard areas on the east and north sides of the property. We understand the southern Main Building is currently used as offices for the OUSD Police Department.

1.3 Proposed Development

Based on our understanding, the project will primarily consist of construction of a new 2-story, 54,000 square-foot office building on the northwest corner of the campus and a single-story, 4,000 square foot MPR building as well as redevelopment of the rest of the property. The project area is currently partially occupied by an existing Main Building, a smaller Cafeteria Building, a relocatable building, a playground, and a parking lot. Project construction will consist of four distinct phases: Demolition of the existing Cafeteria Building, construction of the New Main and MPR Buildings, demolition of the existing Main Building, and site redevelopment consisting of a new parking lot, and other site amenities. Construction of the new buildings will require the removal of current existing AC pavement. The approximate locations of the proposed new office and MPR buildings are shown on Plate 2a, *Site Plan*. A detailed schematic drawing of the proposed development is shown on Plate 2b, *Development Plan*.

1.4 Validity of Report

This report is valid for three years after publication. If construction begins after this time period, CEL should be contacted to confirm that the site conditions have not changed significantly. If the proposed development differs considerably from that described above, CEL should be notified to determine if additional recommendations are required. Additionally, if CEL is not involved during the geotechnical aspects of construction, this report may become wholly or in part invalid; CEL's geotechnical personnel should be retained to verify that the subsurface conditions anticipated when preparing this report are similar to the subsurface conditions revealed during construction. CEL's involvement should include grading and foundation plan review, grading observation and testing, foundation excavation observation, testing of subgrade and baserock preparation in new hardscape and pavement areas, asphalt concrete pavement placement, and utility trench backfill testing.

2.0 PROCEDURES AND RESULTS

2.1 Literature Review

Pertinent geologic and geotechnical literature pertaining to the site area were reviewed. These included various publications and maps issued by the United States Geological Survey (USGS), California Geological Survey (CGS), United States Department of Agriculture (USDA), Federal Emergency Management Agency (FEMA), water agencies, and other government agencies, as listed in the *References* section.

2.2 Field Exploration

In order to characterize the subsurface conditions beneath the proposed improvement areas, a field exploration program was conducted at the site on November 9, 2019 and May 2, 2020 under the supervision of a California-certified geotechnical engineer. The borings were sited to satisfy CGS Note 48 requirements and to facilitate development of soil cross section profiles across the area of the subject project. Our field exploration program consisted of performing a combination of drilled test borings and Cone Penetration Tests (CPT). A total of five test borings were drilled and four CPTs were advanced at the locations shown on Plates 2a and 2b. The borings supplement two borings previously drilled at the site by CEL's geotechnical affiliate, Geosphere Consultants, Inc., in 2015.

2.2.1 Test Borings

The new borings, designated B-1 through B-4, and B-5, were drilled using a truck-mounted B-53R and B-61 drill rig equipped with eight-inch hollow stem augers, respectively. Following the completion of drilling, the boreholes were backfilled using a cement grout in accordance with Alameda County Public Works Agency (ACPWA) drilling permit requirements.

A CEL representative visually classified the materials encountered in the borings according to the Unified Soil Classification System as the borings were advanced. Relatively undisturbed soil samples were recovered at selected intervals using a three-inch outside diameter Modified California split spoon sampler containing six-inch long brass liners, and a two-inch outside diameter Standard Penetration Test (SPT) sampler. The samplers were driven by means of a 140-pound wireline hammer with an approximate 30-inch fall using a manually operated lever-drop mechanism. Resistance to penetration was recorded as the number of hammer blows required to drive the sampler the final foot of an 18-inch drive. All of the field blow counts recorded using Modified California (MC)

split spoon sampler were converted in the final logs to equivalent SPT blow counts using appropriate modification factors suggested by Burmister (1948), i.e., a factor of 0.65 with inner diameter of 2.5 inches. Therefore, all blow counts shown on the final boring logs are either directly measured (SPT sampler) or equivalent SPT (MC sampler) blow counts.

The boring logs with descriptions of the various materials encountered in each boring, a key to the boring symbols, and select laboratory test results are included in Appendix A, which also includes previous Geosphere boring logs. Ground surface elevations indicated on the soil boring logs were estimated to the nearest foot using a survey produced by Martin M. Ron Associates.

2.2.2 Cone Penetration Tests (CPTs)

Four CPTs, designated CPT-1 through CPT-4, were conducted on November 9, 2019 to practical refusal depths of 26 to 29 feet. The CPTs were conducted by Middle Earth Geo Testing, Inc. (MEGT) of Orange, California using a truck-mounted, 25-ton cone apparatus. The instrumented cone assembly used for this project included a cone tip with a 60-degree apex, diameter of 44.45 millimeters (mm), and a projected cross sectional area of 15 square centimeters (cm^2), a sleeve segment with a surface area of 225 cm^2, and a pore pressure transducer near the base (shoulder) of the cone tip.

Prior to the start of the test, the truck was jacked up and leveled on four pads to provide a stable reaction for the cone thrust. During the test, the instrumented cone was hydraulically pushed into the ground at a rate of about 20 millimeters per second (about four feet per minute), and continuous readings of cone tip resistance, sleeve friction, and pore pressure were digitally recorded. As the cone advanced, additional cone rods were added. The PC-based data acquisition hardware received electric signals from strain gauges mounted in the cone assembly, and generated graphical logs including cone resistance, friction resistance, friction ratio, and pore pressure ratio versus depth. Pore pressure dissipation tests and shear wave velocity measurements were also performed on select CPTs.

CPT data was subsequently processed based on generally accepted soil behavior type correlations (e.g., Robertson et al., 1986) to interpret soil classification and other properties such as SPT N-value and undrained shear strength were also estimated through correlations. CPT test summaries and plots for all of the CPTs are also presented in Appendix A.

2.3 Laboratory Testing

Laboratory tests were performed on select samples to determine some of the physical and engineering properties of the subsurface soils. The results of the laboratory testing are either presented on the boring logs, and/or are included in Appendix B. The following soil tests were performed for this study:

Dry Density and Moisture Content (ASTM D2216 and ASTM 2937) – In-situ dry density and/or moisture tests were conducted on select samples to measure the in-place dry density and moisture content of the subsurface materials. These properties provide information for evaluating the physical characteristics of the subsurface soils. Test results are shown on the boring logs.

Atterberg Limits (ASTM D4318 and CT204) – An Atterberg Limits test was performed on one sample of cohesive soils encountered at the site. Liquid Limit, Plastic Limit, and Plasticity Index are useful in the classification and characterization of the engineering properties of soil, and help to evaluate the expansive characteristics of the soil and determine the USCS soil classification. Test results are presented in Appendix B, and on the boring logs.

Particle Size Analysis (Wet and Dry Sieve) (ASTM D422, D1140, and CT202) - Sieve analysis testing was conducted on select samples to measure the soil particle size distribution and the total percentage of fines (i.e., percent passing the USCS No. 200 sieve). This information is useful for characterizing the soil type according to USCS, and to assist in the evaluation of liquefaction susceptibility of granular soils or soils of relatively low cohesion. Test results are presented in Appendix B.

Direct Shear (modified ASTM D3080) - Direct shear testing was performed on two samples of onsite soil materials to measure the angle of internal friction and cohesion of the tested material. This data can be utilized in developing allowable bearing capacities, retaining wall design parameters, and strength characteristics of the materials. Direct shear specimens were wetted to near saturation and consolidated under 1,000, 3,000 and 5,000 psf normal loads prior to and during testing. Test results are presented in Appendix B.

R-Value Test (ASTM D2844 and CT301) – One R-value test was conducted on a bulk sample of near-surface material collected from cuttings generated from Boring B-1 to provide data on prospective pavement subgrade materials for use in new pavement section design. Test results are presented in Section 6.8 and in Appendix B.

Soil Corrosivity, Redox (ASTM D1498), pH (ASTM D4972), Resistivity (ASTM G57), Chloride (ASTM D4327), and Sulfate (ASTM D4327) - Soil corrosivity testing was performed to determine the effects of constituents in the soil on buried steel and concrete. Water-soluble sulfate testing is required by the CBC and IBC. Test results are presented in Appendix B and discussed in Section 4.3.

3.0 GEOLOGIC AND SEISMIC OVERVIEW

3.1 Geologic Setting

The site is located in the central portion of the Coast Ranges geomorphic province of California. The Coast Ranges extend from the Transverse Ranges in southern California to the Oregon border and are comprised of a northwest-trending series of mountain ranges and intervening valleys that reflect the overall structural grain of the province. The ranges consist of a variably thick veneer of Cenozoic volcanic and sedimentary deposits overlying Mesozoic sedimentary, metamorphic, and basic igneous Franciscan Assemblage and marine sedimentary rocks of the Great Valley Sequence. The sedimentary rocks of the Coast Ranges are flanked on the east by sedimentary rocks of the Great Valley geomorphic province (Page, 1966).

More specifically, the project site is located in the flatlands west of the base of the Oakland Hills, which is proximal to the San Francisco Bay structural depression to the west. According to Radbruch (1957), the site is underlain by Pleistocene-epoch Merritt sand, consisting of beach or near-shore deposits of slightly clayey, silty sand, the approximate extent of which is shown on Plate 3, *Regional Geologic Map*. Geologic maps by Graymer (2000, 2006), show the site to be underlain by Quaternary-age Beach and dune sand deposits. Bedrock underlying the Oakland-San Leandro area and exposed in the hills to the east primarily consists of gabbro and basalt of the Jurassic Coast Range Ophiolite, Late Jurassic-Early Cretaceous Franciscan rocks, Jurassic silicic volcanics (keratophyre; e.g., Leona Rhyolite) and Late Jurassic-Early Cretaceous Knoxville Formation, as described in Graymer (2000) and CGS (2003). According to the USDA Natural Resources Conservation Service, Web Soil Survey, the site soil is classified as Urban Land - Baywood Eolian deposits generally described as loamy sand.

3.2 Geologic Evolution of the Northern Coast Ranges

The subject site is located within the tectonically active and geologically complex northern Coast Ranges, which have been shaped by continuous deformation resulting from tectonic plate convergence (subduction) beginning in the Jurassic period (about 145 million years ago). Eastward thrusting of the oceanic plate beneath the continental plate resulted in the accretion of materials onto the continental plate. These accreted materials now largely comprise the Coast Ranges. The dominant tectonic structures formed during this time include generally east-dipping thrust and reverse faults.

Beginning in the Cenozoic time period (about 25 to 30 million years ago), the tectonics along the California coast changed to a transpressional regime and right-lateral strike-slip displacements as well as thrusting were

superimposed on the earlier structures resulting in the formation of northwest-trending, near-vertical faults comprising the San Andreas Fault System. The northern Coast Ranges were segmented into a series of tectonic blocks separated by major faults including the San Andreas, Hayward, and Calaveras. The project site is situated between the active Hayward and San Andreas faults, but no known active faults with Holocene movement (i.e., last 11,000 years) lie within the limits of the site. The site is not mapped within an Alquist-Priolo Earthquake Fault Zone.

3.3 Regional Faulting and Tectonics

Regional transpression has caused uplift and folding of the bedrock units within the Coast Ranges. This structural deformation occurred during periods of tectonic activity that began in the Miocene and continues today. The site is located in a seismically active region that has experienced periodic, large magnitude earthquakes during historic times. This seismic activity appears to be largely controlled by displacement between the Pacific and North American crustal plates, separated by the San Andreas Fault zone located approximately 14.5 miles southwest of the site. This plate displacement produced regional strain that is concentrated along major faults of the San Andreas Fault System including the San Andreas, Hayward, and Calaveras faults in this area.

The site is located in a seismically active region dominated by major faults of the San Andreas Fault System. Major active faults include the aforementioned San Andreas Fault; the Hayward Fault, located approximately 4 miles northeast of the site; the Calaveras Fault, located on the order of 14 miles northeast of the site; the Concord-Green Valley Fault, located on the order of 18 miles northeast of the site and the San Gregorio Fault, estimated to be on the order of 23 miles southwest of the site. The site location relative to active and potentially active faults in the San Francisco Bay Area is shown on Plate 4, *Regional Fault Map*. A discussion of the four nearest active faults to the site follows.

3.3.1 Hayward Fault

The Hayward Fault trends northwesterly approximately 88 km from the Milpitas area to San Pablo Bay. The Hayward Fault has been divided into two main segments, the Northern and Southern segments. The Rodgers Creek Fault, considered as a possible extension of the Hayward Fault, extends northward from beneath San Pablo Bay up to near Healdsburg, where it is aligned with the Healdsburg Fault zone (Watt, et al., 2016). The site is located approximately 4.2 miles southwest of the northern segment of the Hayward Fault. The slip rate on this segment of the Hayward Fault is estimated to be about 9 mm/year and has been assigned a moment magnitude

(M_{max}) of 6.4 (CGS, 2003). UCERF3, the earthquake forecast model developed by the Working Group on California Earthquake Probabilities (USGS, 2015) has estimated that there is a 14.3 percent probability of at least one magnitude 6.7 or greater earthquake before 2044 along the Hayward Fault.

3.3.2 San Andreas Fault

The northwest-trending San Andreas Fault runs along the western coast of California extending on the order of 625 miles from the north near Point Arena to the Salton Sea area in southern California (Jennings, 1994). The fault zone has been divided into 11 segments. The site is located about 14½ miles to the northeast of the Peninsula segment. The slip rate on the Peninsula segment of the San Andreas Fault is estimated to be about 17 mm/year and has been assigned a moment magnitude (M_{max}) of 7.1 (CGS, 2003). UCERF3 has estimated that there is a 6.4 percent probability of at least one magnitude 6.7 or greater earthquake before 2044 along the Northern San Andreas Fault.

3.3.3 Calaveras Fault

The Calaveras Fault trends northwesterly about 123 km in length from near Hollister to the San Ramon/Dublin area. The Calaveras Fault has been divided into three segments, the Northern, Central, and Southern segments. The site is located approximately 14 miles southwest of the northern segment of the Calaveras Fault. The slip rate on the north segment of the Calaveras Fault is estimated to be about 6 mm/year and has been assigned a moment magnitude (M_{max}) of 6.8 (CGS, 2003). UCRF3 has estimated that there is a 7.4 percent probability of at least one magnitude 6.7 or greater earthquake before 2044 along the Calaveras Fault.

3.3.4 Concord - Green Valley Fault

The north to northwest trending Concord Fault extends from the approximate central Walnut Creek and Concord border, northward into the Green Valley Fault. The Green Valley Fault extends northward from Suisun Bay up to just west of Lake Curry, northeast of Napa. The site is located on the order of 18 miles southwest of the Concord Fault. The slip rate of the Concord Fault is estimated to be about 4 mm/year and has been assigned a moment magnitude (M_{max}) of 6.2 (CGS, 2002). UCERF3 estimated that there is a three percent probability of at least one magnitude 6.7 or greater earthquake before 2044 occurring on the Concord Fault, and seven percent probability of at least one magnitude 6.7 or greater earthquake before 2044 occurring on the Green Valley Fault.

3.4 Historic Seismicity

As discussed above, the San Francisco Bay Area is subject to a high level of seismic activity. Within the period of 1800 to 2000 there were an estimated 20 earthquakes exceeding a Richter magnitude of 6.0 within a 100-mile radius of the site, seven exceeding 6.5, four exceeding 7.0 and one exceeding 7.5. There have been six major Bay Area earthquakes since 1800. Those were in 1836 and 1868 on the Hayward-Rodgers Creek Fault, in 1861 on the Calaveras Fault, and in 1838, 1906, and 1989 on the San Andreas Fault.

Of the major earthquakes known to have affected the site, the 1868 Hayward earthquake caused the most damage with at least 30 deaths in the region and with extensive building collapse in Hayward and San Leandro, including the Alameda County Courthouse in San Leandro. The 1906 San Francisco earthquake and the 1989 Loma Prieta earthquake also caused property and extensive structural damage in the vicinity. The project site is located approximately ½ mile southeast of the portion of the Cypress structure which collapsed in the 1989 earthquake. However, the collapsed portion of the structure was underlain by soft Bay Mud as opposed to Merritt Sand underlying the project site.

4.0 SUBSURFACE CONDITIONS

4.1 Subsurface Soil Conditions

During our subsurface exploration program, we investigated the subsurface soils and evaluated soil conditions to a maximum depth of 50 feet in the four borings and 29 feet in the four CPTs performed for this study. From our collected data, we conclude that where explored, the area of the proposed new construction is underlain by Merritt sands, consisting of dark brown sand to silty sand layers with frequent lenses of medium dense to very dense, clayey to silty sand to a depth of about 27 feet, below which primarily clean, fine sand was encountered to a depth of about 50 feet. The consistency of the sand layers was found to be loose in the upper three to five feet, becoming denser immediately after. The CPTs encountered what appeared to be primarily fine grained sands to refusal depths of 27 to 29 feet.

Borings B-1 and B-2 were drilled at the proposed Main Building site in an existing paved area that was found to consist of about one inch of asphalt concrete overlying four to six inches of aggregate baserock. Below the pavement section, Boring B-1 encountered fill consisting of loose, fine sand mixed with brick and concrete fragments. Borings B-3 and B-4 were drilled in a landscape area at a previously considered future Server Building site encountering similar subsurface soil conditions as the Main Building site. Boring B-5 was drilled near the northeast entrance of the site in the area of the proposed MPR Building. Previous explorations conducted by Geosphere in 2015 encountered similar materials.

Atterberg Limit tests performed on one sample at a depth of about 15 feet in the area of the proposed MPR Building resulted in measured Liquid Limits (LL) of 17 and corresponding Plasticity Index (PI) of 5, indicative of low plasticity and low expansion potential which suggest that the sample may be susceptible to liquefaction.

Our interpretation of the general subsurface geologic conditions below the Office Building site is presented in Plate 5a, *Cross Sections A-A' and B-B'* and Plate 5b, *Cross Section C-C'*. Additional details of materials encountered in the exploratory borings, including laboratory test results are included in the boring logs in Appendix A, and laboratory test summaries are presented in Appendix B. Also, details of CPT test results including soil behavior type (SBT) are presented in Appendix A.

4.2 Groundwater

Free groundwater was encountered during drilling at Borings B-1 through B-4 at a depth of approximately 19 feet and were measured after drilling completion at a depth of approximately 18 feet. Groundwater was encountered at Boring B-5 at a depth of 17 feet during drilling and 14 feet after completion of drilling. Pore-pressure dissipation tests performed in the CPTs estimated that free groundwater may be at depths ranging from 13 to 15 feet. A historic high groundwater depth is estimated to be about 12 feet deep based on historic high groundwater table contours presented in Plate 1.2 of the Seismic Hazard Zone Report 081 for the Oakland West Quadrangle (CGS, 2003). The borings and CPTs were backfilled with a neat cement grout in accordance with Alameda County Public Works Agency requirements shortly after drilling. We note that the borings may not have been left open for a sufficient period of time to establish equilibrium groundwater conditions. Groundwater levels can vary in response to time of year, variations in seasonal rainfall, well pumping, irrigation, and alterations to site drainage. A detailed investigation of local groundwater conditions was not performed and is beyond the scope of this study.

4.3 Corrosion Testing

A sample collected from the upper five feet of the soil profile at Boring B-2 was tested to measure sulfate content, chloride content, redox potential, pH, resistivity, and presence of sulfides. Test results are included in Appendix B and are summarized on Table 1.

Table 1: Summary of Corrosion Test Results

Soil Description	Sample Depth (feet)	Sulfate (mg/kg)	Chloride (mg/kg)	Redox (mV)	Resistivity (ohm-cm)	Sulfide	pH
Very Dark Brown Silty SAND (SM)	0-5	47	2	501	23,762	Negative	6.0

Water-soluble sulfate can affect the concrete mix design for concrete in contact with the ground, such as shallow foundations, piles, piers, and concrete slabs. Section 4.3 in American Concrete Institute (ACI) 318, as referenced by the CBC, provides the following evaluation criteria:

Table 2: Sulfate Evaluation Criteria

Sulfate Exposure	Water-Soluble Sulfate in Soil, Percentage by Weight or (mg/kg)	Sulfate in Water, ppm	Cement Type	Max. Water Cementitious Ratio by Weight	Min. Unconfined Compressive Strength, psi
Negligible	0.00-0.10 (0-1,000)	0-150	NA	NA	NA
Moderate	0.10-0.20 (1,000-2,000)	150-1,500	II, IP (MS), IS (MS)	0.50	4,000
Severe	0.20-2.00 (2,000-20,000)	1,500-10,000	V	0.45	4,500
Very Severe	Over 2.00 (20,000)	Over 10,000	V plus pozzolan	0.45	4,500

The water-soluble sulfate content was measured to be about 47 mg/kg (ppm) or 0.0047% by dry weight in the soil sample, suggesting the site soil should have negligible impact on buried concrete structures at the site. However, it should be pointed out that the water-soluble sulfate concentrations can vary due to the addition of fertilizer, irrigation, and other possible development activities.

Table 4.4.1 in ACI 318 suggests use of mitigation measures to protect reinforcing steel from corrosion where chloride ion contents are above 0.06% by dry weight. The chloride content was measured to be 2 mg/kg (ppm) or 0.0002% by dry weight in the soil sample. Therefore, the test result for chloride content does not suggest a corrosion hazard for mortar-coated steel and reinforced concrete structures due to high concentration of chloride.

In addition to sulfate and chloride contents described above, pH, oxidation reduction potential (Redox), and resistivity values were measured in the soil sample. For cast and ductile iron pipes, an evaluation was based on the 10-Point scaling method developed by the Cast Iron Pipe Research Association (CIPRA) and as detailed in Appendix A of the American Water Works Association (AWWA) publication C-105, and shown on Table 3.

Table 3: Soil Test Evaluation Criteria (AWWA C-105)

Soil Characteristics	Points		Soil Characteristics	Points
Resistivity, ohm-cm, based on single probe or water-saturated soil box.			**Redox Potential, mV**	
<700	10		>+100	0
700-1,000	8		+50 to +100	3.5
1,000-1,200	5		0 to 50	4
1,200-1,500	2		Negative	5
1,500-2,000	1		**Sulfides**	
>2,000	0		Positive	3.5
PH			Trace	2
0-2	5		Negative	0
2-4	3		**Moisture**	
4-6.5	0		Poor drainage, continuously wet	2
6.5-7.5	0		Fair drainage, generally moist	1
7.5-8.5	0		Good drainage, generally dry	0
>8.5	5			

Assuming fair site drainage, the tested soil sample had a total score of 1 point, indicating a non-corrosive rating. When total points on the AWWA corrosivity scale are at least 10, the soil is classified as corrosive to cast and ductile iron pipe, and use of cathodic corrosion protection is often recommended.

These results are preliminary, and provide information only on the specific soil sampled and tested. Other soil at the site may be more or less corrosive. Providing a complete assessment of the corrosion potential of the site soils are not within our scope of work. For specific long-term corrosion control design recommendations, we recommend that a California-registered professional corrosion engineer evaluate the corrosion potential of the soil environment on buried concrete structures, steel pipe coated with cement-mortar, and ferrous metals.

5.0 GEOLOGIC HAZARDS

5.1 Seismic Induced Hazards

Seismic hazards resulting from the effects of an earthquake generally include ground shaking, liquefaction, lateral spreading, dynamic settlement, fault ground rupture and fault creep, seismically-induced landsliding, and tsunamis and seiches. The site is not necessarily impacted by all of these potential seismic hazards. Nonetheless, potential seismic hazards are discussed and evaluated in the following sections in relation to the planned construction.

5.1.1 Ground Shaking

The site may experience strong to severe ground shaking from a major earthquake originating from the major Bay Area faults, particularly the nearby Hayward Fault (approximately 4 miles from the site), Calaveras Fault (14 miles from the site), or San Andreas Fault (14½ miles from the site). Moderate shaking may also be generated at the site by the Concord-Green Valley Fault (approximately 18 miles from the site).

5.1.2 Liquefaction

Research and historical data indicate that soil liquefaction generally occurs in saturated, loose granular soil (primarily fine to medium-grained, clean, poorly-graded sand deposits) during or after strong seismic ground shaking and is typified by a loss of shear strength in the affected soil layer, thereby causing the soil to flow as a liquid. Typically, liquefaction potential increases with increased duration and magnitude of cyclic loading. However, because of the higher intergranular pressure of the soil at greater depths, the potential for liquefaction is generally limited to the upper 40 feet of the soil. Potential hazards associated with soil liquefaction below or near a structure include loss of foundation support, lateral spreading, sand boils, and areal and differential settlement. No specific liquefaction related ground failures other than isolated ground settlement in old tidal marsh areas in the vicinity of Lake Merritt and the Oakland Estuary were reported as a result of the 1906, 1868, or 1989 earthquakes (Youd and Hoose, 1978; Plafker and Galloway, 1989).

The site has been mapped as within a Seismic Hazard Zone for liquefaction based on the State of California, Official Map of the Oakland West Quadrangle released on February 14, 2003. The site location relative to these zones is shown on Plate 6, *Seismic Hazard Zones Map*. The soils encountered in the subsurface investigation below the

water table included layers of dense to very dense sand that may be susceptible to liquefaction in response to strong ground shaking.

To analyze for liquefaction settlement, we utilized the CLiq v 2.2.1.11 software, developed by Geologismiki, Geotechnical Software. Calculation of soil resistance against liquefaction is performed according to the Robertson (NCEER R&W 1998, 2009) procedure and as recommended on CGS Special Publication 117 A (2008). The procedure used in the software, slightly differs from the one originally published in NCEER-97-0022 (Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils). This methodology compares a critical Cyclic Shear Stress (CSR) against the field Cyclic Resistance Ratio (CRR). When the CSR exceeds the CRR, the factor-of-safety falls below 1.0 and liquefaction can occur.

All CPTs were identified as susceptible to potential seismic settlement through liquefaction. Borings were not used for liquefaction analysis since sampling (and SPT blow counts) were not continuous and as such, were considered to be less accurate for liquefaction evaluation. For analysis purposes, ASCE 7-16 specifies the use of Peak Ground Acceleration PGA_M for use in liquefaction analyses or a PGA value generated from a site-specific seismic response analysis. A PGA_M value of 0.7g, generated from a site-specific seismic response analysis was used in our calculation. We also used a Mean Magnitude of 6.9 based on the return period of 10 percent in 50 years in the Unified Hazard Tool Deaggregation Report. Based on historic high groundwater table contours presented in Plate 1.2 of the Seismic Hazard Zone report 081 for the Oakland West Quadrangle (CGS, 2003), a historic high groundwater depth of 12 feet was assumed for the analysis. Per SP117A (2008) guidelines, we also assumed a Factor-of-Safety (FS) of 1.3 below which would initiate liquefaction.

The following table presents a summary of our analysis results. A summary report of the analyses is presented in Appendix C of this report.

Table 4: Seismic Settlement Analysis Results

CPT No.	Calculated Liquefaction Settlement (inches)	Calculated Dynamic Compaction Settlement (inches)	Calculated Total Seismic Settlement (inches)
CPT-1	0.34	0.08	0.42
CPT-2	0.62	0.10	0.72
CPT-3	0.66	0.02	0.68
CPT-4	0.53	0.04	0.57

Based on the analysis results, in our opinion, it is reasonable to assume that seismically-induced settlements at the project site due to the design earthquake may potentially range between on the order of ⅓ to ¾ inch with differential settlements across the site generally considered to be ½ to ⅔ the maximum estimated total seismic settlement value. These settlements were calculated to occur in discontinuous layers primarily between depth intervals of 15 to 18 feet. Assuming a 1-meter-thick liquefiable zone overlain by 5 meters of non-liquefiable materials, per Youd and Garris (1995), it is our opinion that the calculated values of potential liquefaction settlement would not result in significant surface manifestation of such liquefaction settlement, and that significant post-seismic reduction in the bearing capacities of the existing overlying soils would not occur.

5.1.3 Lateral Spreading

Lateral spreading involves both vertical and lateral ground movement, with some vertical component, as a result of liquefaction. In addition to liquefaction, a free face or slope is necessary in most cases for lateral spreading to occur. Lateral spreading can occur on relatively flat sites with slopes less than two percent under certain circumstances, and manifest itself at the ground surface in the form of cracking and settlement. Lateral spreading can occur in areas located within close proximity to an open face which are supported by underlying liquefiable soil under or close to the open face. Under a lateral spreading condition, soils which liquefy lose strength and the slope moves towards the open face. Any structures or improvements located within close proximity to the slope can also move and possibly be destabilized.

No significant free slope faces are present within the general vicinity of the project site. In addition, no significant continuous liquefiable subsurface layers underlying the site were identified in our exploration. Therefore, it is our opinion that the potential for the occurrence of lateral spreading effects (i.e., surface cracking, settlement) significant enough to structurally impact the new buildings is very low to nil.

5.1.4 Dynamic Compaction (Settlement)

Dynamic compaction is a phenomenon where loose, sandy soil located above the water table densified from vibratory loading, typically from seismic shaking or vibratory equipment. The site is generally underlain by layers of medium dense to very dense silty to clayey sand. Based on our evaluation of the composition, measured density and strength of the soils encountered above the historic high ground-water table depth in the borings, and CLiq calculation results, potential dynamic settlements for the design seismic event are anticipated to be less than 0.1 inch.

5.1.5 Fault Ground Rupture and Fault Creep

A Regional Fault Map is shown on Plate 4. The State of California adopted the Alquist-Priolo (A-P) Earthquake Fault Zone Act of 1972 (Chapter 7.5, Division 2, Sections 2621 – 2630, California Public Resources Code), which regulates development near active faults for the purpose of preventing surface fault rupture hazards to structures for human occupancy. In accordance with the Alquist-Priolo (A-P) Act, the California Geological Survey established boundary zones or A-P "Earthquake Fault Zones" surrounding faults or fault segments judged to be sufficiently active, well-defined and mapped for some distance. These zones generally extend at least 500 feet on each side of a mapped or inferred trace of an active fault. Structures for human occupancy within designated Earthquake Fault Zone boundaries are not permitted unless surface fault rupture and fault creep hazards are adequately addressed in a site-specific evaluation of the development site.

The site is not currently within a designated Earthquake Fault Zone as defined by the State (Hart and Bryant, 1997), as shown on Plate 6. The closest Earthquake Fault Zone is that of the Hayward Fault, which is located about four miles east of the site (not shown on Plate 6). Since the site is not within an Earthquake Fault Zone and no faults are known to be present that are within or toward the project site, the potential for fault ground rupture and surface manifestations from fault creep is judged to be very low to nil.

5.1.6 Tsunamis and Seiches

Tsunamis are long-period sea waves generated by seafloor movements from submarine earthquakes or volcanic eruptions that rapidly displace large volumes of water. Coastal communities along the Pacific Ocean are particularly susceptible to such phenomena. In accordance with CEMA et al. (2009), the edge of the potential tsunami inundation area in closest proximity to the project site is near the intersection of Mandela Parkway and 15th Street, located about ¼ mile northwest of the site. Therefore, the site is not expected to be susceptible to tsunami inundation.

Earthquake-induced waves generated within enclosed bodies of water are called seiches. The nearest significant enclosed body of water is Lake Merritt, located about 1.4 aerial miles east of the site and is separated by urban developed land of downtown Oakland. The City of Oakland Safety Element (2004, Amended 2012) does not identify a seiche from Lake Merritt as a potential seismic hazard for Oakland. Due to these factors, the site is not considered to be susceptible to seiches.

5.2 Other Hazards

Potential geologic hazards other than those caused by a seismic event generally include ground failure and subsidence, consolidation settlement, landslides under static loading conditions, expansive and collapsible soils, flooding, naturally occurring asbestos (NOA) and soil erosion. These are discussed and evaluated in the following sections.

5.2.1 Ground Cracking and Subsidence

Withdrawal of groundwater and other fluids (i.e. petroleum and the extraction of natural gas) from beneath the surface has been linked to large-scale land subsidence and associated cracking on the ground surface. Other causes for ground cracking and subsidence include the oxidation and resultant compaction of peat beds, the decline of groundwater levels and consequent compaction of aquifers, hydrocompaction and subsequent settlement of alluvial deposits above the water table from irrigation, or a combination of any of these causes. However, subsidence generally impacts a region, and should not produce excessive differential settlement in a single location, such as the subject site. Local and regional locations prone to subsidence generally subside equally over time.

5.2.2 Settlement Due to Consolidation

Consolidation is the densification of soil into a more dense arrangement from additional loading, such as new fills or foundations. Consolidation of clayey soils is usually a long-term process, whereby the water is squeezed out of the soil matrix with time. Sandy soils consolidate relatively rapidly with an introduction of a load. Consolidation of soft and loose soil layers and lenses can cause settlement of the ground surface or buildings. Based on visual observation in the field, and laboratory testing, the subsurface soils are primarily granular, so are not considered to be susceptible to long-term consolidation settlement. However, the uppermost four feet underlying the site consists of loose sands which may be susceptible to immediate compression settlement due to imposed footing loads, as well as minor settlement due to earthquake shaking as discussed in Sections 5.1.2 and 5.1.4. Immediate compression settlements of these near surface loose sandy soils can be controlled by limiting the magnitude of building loads, or minimized by either deepening the building foundations to bear on denser underlying soils or by reworking loose soils under footings as compacted, engineered fill.

5.2.3 Landsliding

Landslides can occur under a variety of loading conditions, including both static and seismic, but involve sloping ground. As shown on Plate 6, the site is not within a zone of seismically-induced landslide investigation. The site and immediate vicinity are relatively flat, covered by urban development, and does not exhibit landslide features as determined by our site reconnaissance and literature review. Therefore, the site is not considered susceptible to landsliding.

5.2.4 Expansive and Collapsible Soils

The subsurface deposits encountered during the drilling program generally consisted of moist to wet, medium dense to very dense clayey to silty sand. Collapsible soils are fine sandy and silty soils that have been laid down by the action of flowing water, usually in alluvial fan deposits. Terrace deposits and fluvial deposits can also contain collapsible soil deposits. The soil particles are usually bound together with a mineral precipitate. The loose structure is maintained in the soil until a load is imposed on the soil and water is introduced. The water breaks down the inter-particle bonds and the newly imposed loading densifies the soil.

The potential for collapsible soils underlying the site is considered to be low provided that our recommendations are followed. Visual observation of selective samples of the near-surface soils indicated the soils to be of low plasticity, and the near-surface soils are considered to be generally of very low expansion potential. In addition, the soil did not show visual evidence of collapse potential.

5.2.5 Flooding

The site does not appear to be subject to significant flooding, as indicated in the Safety Element of the City of Oakland General Plan (adopted 2004, amended 2012). As shown on Plate 7, *Flood Hazard Map*, FEMA (2009), the project site is mapped as within the portion of Zone X outside the 0.2 percent annual chance floodplain.

The City of Oakland Safety Element also shows the site as not located within a potential dam failure inundation zone. The nearest source of potential flooding inundation of the site due to dam failure is Upper and Lower Edwards Reservoirs in Piedmont, located on the order of 3⅓ aerial miles northeast of the site. The theoretical dam failure inundation zone for these reservoirs is along the narrow creek channel of Glen Echo Creek, which discharges into Lake Merritt at Grand Avenue, about 1½ miles northeast of the site. Therefore, based on our

reviewed data, we conclude that the hazard of significant flooding of the site due to dam failure to be essentially nil.

An in-depth engineering evaluation of the flooding potential of the site is beyond the scope of this study or our expertise, and a flood specialist should be contacted if a more in-depth flooding analysis is desired.

5.2.6 Soil Erosion

Present construction techniques and agency requirements have provisions to limit soil erosion and resultant siltation during construction. These measures will reduce the potential for soil erosion at the site during the various construction phases. Long-term erosion at the site will be reduced by landscaping and hardscape areas, such as parking lots and walkways, designed with appropriate surface drainage facilities.

5.2.7 Naturally Occurring Asbestos (NOA)

No sources of NOA have been mapped in the vicinity of the site and therefore the potential for NOA to impact the site is very low.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based upon the analysis of the information gathered during the course of this study and our understanding of the proposed improvements.

6.1 Conclusions

The site is considered geologically and geotechnically suitable for the proposed improvements provided the recommendations of this report are incorporated into the design and implemented during construction. The predominant geotechnical and geological issues that need to be addressed at this site are summarized below.

Seismic Ground Shaking – The site is located within a seismically active region. As a minimum, the building design should consider the effects of seismic activity in accordance with the latest edition of the California Building Code (CBC).

Loose Surficial/Artificial Soil – A surficial loose layer up to four feet in thickness was encountered in all of our borings and CPTs, and in at least one boring was identified as undocumented fill. In order to provide uniform bearing support and to limit abrupt differential settlements beneath the structures, we recommend the new buildings be supported on a reworked engineered fill layer. Detailed recommendations for remedial earthwork and foundation design as part of our mitigation recommendations are contained in the earthwork and foundations sections of this report.

Seismic Settlements – The site is mapped as being located in a zone of potential liquefaction settlement. Based on the subsurface soil encountered and its characteristics, and the results of our liquefaction analysis, liquefaction settlement of soils below historic high groundwater table may occur at the site in response to the design seismic event. Liquefaction settlement was calculated in all four CPT's as occurring within discrete granular layers between depths of about 15 and 18 feet, with calculated total site settlements of ⅓ to ¾ inches resulting from the design earthquake event. Dynamic compaction of soils above historic high groundwater table was also calculated to occur in the CPTs but was not found to be significant (i.e., 0.1 inch or less). Potential differential settlements across the structure may be considered to be on the order of ½ to ⅔ of the aforementioned total seismic settlement range. These settlements are considered to be relatively minor and occurring at sufficient depth as to not result in a significant degree of surface manifestation of liquefaction, due to the thickness of non-liquefiable capping soil at the site, including our recommended construction of an engineered fill layer supporting the structure. As such,

significant strength loss of the near-surface soils of an extent to induce foundation failure is not expected to result from the design seismic event. In addition, we have provided conservative allowable bearing capacity values to also account for potential loss of bearing capacity.

Other potential geotechnical considerations, including those that should not significantly impact the project are explained below.

Groundwater – Relatively shallow groundwater was encountered at a depth of about 13 feet or greater during our field investigation. Therefore, with the exception of unanticipated shallow seepage, groundwater should not be problematic with placement of the anticipated shallow conventional foundations and associated over-excavations and all except for relatively deep utility trenches, if any.

Utility Connections – As a general suggestion, where utility damage during a design seismic event may be an issue, the design engineer should consider using utility connections at building perimeters designed for minimum of one inch of potential movement in any direction where the utility enters the buildings. This flexibility would help accommodate potential differential movement during a seismic event.

Winter Construction – If grading occurs in the winter rainy season, appropriate erosion control measures will be required, and weatherproofing of the building pads, foundation excavations, and/or pavement areas should be considered. Winter rains may also impact foundation excavations and underground utilities.

6.2 Seismic Design Parameters

The proposed structures should be designed in accordance with local design practice to resist the lateral forces generated by ground shaking associated with a major earthquake occurring within the greater San Francisco Bay region. Based on the measured shear wave velocity at the site on all CPT's, subsurface conditions encountered in our borings, our evaluation of the geology of the site and extrapolating the site condition in mapped Pleistocene-epoch Merritt sand to 100 feet, we have estimated average shear wave velocity, V_{s30} of 300 meter/second and classifies the site as Site Class "D". In accordance with ASCE 7-16, Section 11.4.8, a ground motion hazard analysis is required for structures on Site Class "D" with S_1 greater than or equal to 0.2 (unless Exceptions are taken). Since the project site is mapped as S_1 equal to 0.6, a site specific ground motion analysis in accordance with CBC 2019 and ASCE 7-16, Section 21.2.1.2, was performed for the site, as requested by the Structural Engineer.

6.2.1 Probabilistic (MCE_R) Ground Motions

A Probabilistic Seismic Hazard Analysis was performed for a 2,475-year return period ground motion corresponding to a 2% probability that the ground motion will be exceeded over a 50-year period. The analysis was performed using the 2014 USGS Unified Hazard Tool, Dynamic Ed., which includes the attenuation relationships of Abrahamson et al. (2014) NGA West 2, Boore et al. (2014) NGA West 2, Campbell-Bozorgnia (2014) NGA West 2, and Chiou-Youngs (2014) NGA West 2. The Method 2 analysis was carried out using the USGS Risk-Targeted Ground Motion Calculator. The resultant spectral accelerations were then scaled up by maximum direction scale factors presented in Section 21.2. The results are presented in Appendix D, *Site Specific Ground Motion Analysis*.

6.2.2 Deterministic (MCE_R) Ground Motions

A site specific deterministic analysis (ASCE 7-16, Section 21.2.2), was performed for all known influential seismic sources in the region as shown on USGS Deaggregation website, using the USGS Response Spectra Application. The attenuation relationships of Abrahamson et al. (2014) NGA West 2, Boore-et al (2014) NGA West 2, Campbell-Bozorgnia (2014) NGA West 2, and Chiou-Youngs (2014) NGA West 2 were utilized. The highest acceleration for each period, comparing the different faults, was used and compared to the deterministic lower limit as shown in Figure 21.2.1 (ASCE 7-16). Based on our analysis, the design earthquake occurring on the Hayward: HN+HS+HE at a rupture distance of 7.5 km from the project site, was found to govern the site. The results are presented in Appendix D.

6.2.3 Site-Specific MCE_R

The site specific Risk Targeted Maximum Considered Earthquake ground motion was then determined per ASCE 7-16, Section 21.2.3 by taking the lower of the spectral accelerations taken from the probabilistic and deterministic analysis performed per ASCE 7-16, Sections 21.2.1 and 21.2.2. The results are presented in Appendix D.

6.2.4 Design Response Spectrum

The design response spectral acceleration was calculated per ASCE 7-16, Section 21.3 and compared to the design response spectrum from ASCE 7-16, Section 11.4.6 to verify that the values from the site specific analysis meet the requirement of not less than 80 percent of the accelerations obtained from Section 11.4.6. If the values were

less than the 80 percent requirement, they were then raised to the 80 percent value to obtain the final Design Response Spectrum S_a (g). The results are presented in Appendix D.

The adjusted maximum spectral response accelerations and designed spectral response acceleration values were determined from the site specific analysis as per ASCE 7-16, Section 21.4 and were confirmed that the values are not less than 80 percent of the values obtained from, ASCE 7-16, Section 11.4.3 and 11.4.4.

6.2.5 Design Acceleration Parameters

The design acceleration parameters were calculated per ASCE 7-16, Section 21.4 and the values were compared to verify that the values meet the requirement of not less than 80 percent of the values determined in accordance with Section 11.4.3 and 11.4.4.

6.2.6 Peak Ground Acceleration (PGA)

Peak Ground Acceleration (PGA) was determined per ASCE 7-16, Section 21.5 by taking the lower of the PGA determined by the probabilistic ground motions, and deterministic ground motions, not less than 80 percent of PGA_M determined from ASCE 7-16, equation 11.8 -1. The results are presented in Appendix D.

6.2.7 Conclusions

For design of the site structures in accordance with the seismic provisions of the CBC 2019 and American Society of Civil Engineers (ASCE) 7-16, the following design seismic ground motion values are recommended. The results are presented in Appendix D. The structural engineer should refer to ASCE Section 21.4 for permitted usage.

Table 5: Seismic Design Parameters Based on 2019 CBC (ASCE 7-16)

Site Class	D
Mapped Spectral Response Accelerations	
Short Period, S_S	1.592 g
1-second Period, S_1	0.6 g
Adjusted Maximum Spectral Response Accelerations	
Short Period, S_{MS}	1.778 g
1-second Period, S_{M1}	1.650 g
Design Spectral Response Accelerations	
Short Period, S_{DS}	1.185 g
1-second Period, S_{D1}	1.100 g
Site-Specific Peak Ground Acceleration (PGA)	0.700 g

6.3 Site Grading and Site Preparation

6.3.1 General Grading, Demolition, Preparation and Site Drainage

Site grading should be performed in accordance with these recommendations. A pre-construction conference should be held at the jobsite with representatives from the owner, general contractor, grading contractor, and CEL prior to starting the clearing and demolition operations at the site.

Following demolition of the existing site pavements in the proposed project area, as well as clearing and grubbing of landscape areas, site grading is generally anticipated to consist of overexcavation and construction of the engineered fill supporting layer for the new building pads, as well as minor cuts and fills required to establish new site grades as required. In existing landscape areas within proposed new construction, organic topsoils should be completely removed and may be re-used as landscape topsoil, but should not be used as structural fill.

On-site soils having an organic content of less than three percent by weight and meeting the size requirements for import fill can be reused as structural, non-expansive (i.e., select) backfill as approved by the Geotechnical Engineer. Onsite soils containing construction debris such as brick or concrete should not be reused unless oversize material is removed prior to use. Tree roots exceeding one inch in diameter shall be removed if encountered in any excavated soils proposed for re-use.

Imported select soil should be non-expansive, having a Plasticity Index of 12 or less, an R-Value greater than 40, and contain sufficient fines so the soil can bind together. Import general fill soil for mass grading should be at least of comparable quality as the existing onsite soils, and in any case shall be approved by the Geotechnical Engineer prior to use on the project. Imported materials should be free of environmental contaminants, organic materials and debris, and should not contain rocks or lumps greater than six inches in maximum size, and at least 95 percent smaller than three inches in maximum size. In general, recycled baserock material containing recycled asphalt concrete should not be used in building pad areas. All import fill materials should be approved by the Geotechnical Engineer prior to use on site.

Excavations resulting from the removal of abandoned underground utilities, or deleterious materials should be cleaned down to firm soil, processed as necessary, and backfilled with engineered fill in accordance with the grading sections of this report. The Geotechnical Engineer's representative should verify the adequacy of site clearing operations during construction, prior to placement of engineered fill.

Existing underground utilities where encountered will need to be properly abandoned and/or entirely removed if impacting any proposed building, pavement or flatwork areas. In general, utility pipelines less than four inches in diameter to be abandoned may be left in place provided they will not be in close proximity to new foundation elements or interfere with new utilities. Such pipes should be plugged at the ends with concrete or sand-cement slurry. Larger utility pipelines or pipelines that underlie new foundations should be removed and replaced with engineered fill, or left in place and completely grouted with flowable sand-cement slurry or other approved Controlled Density Fill (CDF; also known as Controlled Low Strength Material, or CLSM).

Engineered fill should be placed in maximum eight-inch thick, pre-compacted lifts. The fill should be moisture conditioned and thoroughly mixed during placement to provide uniformity in each layer, and subsequently compacted per the requirements listed in Table 6.

Final grading should be designed to provide drainage away from structures and the top of slopes. Soil areas within 10 feet of proposed structures should slope at a minimum of 5% away from the buildings. Adjacent concrete hardscape should slope a minimum 2% away from the buildings. Roof leaders and downspouts should not discharge into landscape areas adjacent to buildings, and should discharge onto paved surfaces sloping away from the structures or into a closed pipe system channeled away from the structure to an approved collector or outfall.

6.3.2 Project Compaction Recommendations

The following table provides the recommended compaction requirements for this project. Not all soils, aggregates and scenarios listed below may be applicable for this project. Specific grading recommendations are discussed individually within applicable sections of this report.

Table 6: Project Compaction Requirements

Description	Min. Percent Relative Compaction (per ASTM D1557)	Min. Percent Above Optimum Moisture Content
Fill Areas, Engineered Fill, Onsite Soil/Select Fill	90	2
Building Pads, Onsite Soil – scarified subgrade or used as Fill	95	2
Building Pads, Baserock or Select Engineered Fill	95	2
Concrete Flatwork, Subgrade Soil	90	2
Concrete Flatwork, Baserock	90	2
Underground Utility Backfill (upper 3', below existing vehicular AC pavement sections)	95	2
Underground Utility Backfill (all other applications)	90	2

Description	Min. Percent Relative Compaction (per ASTM D1557)	Min. Percent Above Optimum Moisture Content
AC Pavement – Class 2 Aggregate Base Section (Vehicular/Traffic areas)	95	2
AC Pavement – Baserock in Non-Traffic (e.g., Playground) Areas	90	2
AC Pavement – Non-Expansive Subgrades in Vehicular/Traffic Areas (upper 8 inches)	95	2
AC Pavement –Non-Expansive Subgrades in Non-Traffic Areas	90	2

6.3.3 Building Pad Grading

To reduce potential abrupt differential settlement of the near surface soils as well as to provide uniform bearing support, the buildings should be supported by a layer of reworked, engineered fill. The fill layer should extend to at least four feet below existing ground surface, and be constructed by a combination of over-excavating the pad below the existing grade, scarifying the over-excavation subgrade to a depth of at least eight inches, and compacting the exposed surface to the project compaction requirements, and backfilling with compacted, engineered fill to the new building pad subgrades. Therefore, the scarified fill thickness can be considered to be a part of the required minimum four-foot engineered fill thickness. The engineered fill layer should extend at least five feet horizontally beyond the perimeter of the building footprints or as feasible if limited by nearby structures.

Engineered fill should be placed and compacted to final pad subgrade in accordance with the recommendations presented in Sections 6.3.1, 6.3.2 and Table 6. Due to the granular nature of the near-surface materials, excavating the edges of the over-excavations may require that slopes be cut back, as near-vertical slopes may not stand beyond the short-term.

6.3.4 Grading Flatwork/Pavement Areas

Areas to receive concrete hardscape or pavements should be scarified to a minimum depth of eight inches below existing grade or final subgrade whichever is lower. Scarified areas should be moisture conditioned and compacted. Where required, engineered fill should be placed and compacted to reach design subgrade elevation.

Rubber-tired heavy equipment, such as a full water truck, should be used to proof load exposed subgrade areas where pumping is suspected. Proof loading will determine if the subgrade soil is capable of supporting construction equipment without excessive pumping or rutting.

6.3.5 Site Winterization and Unstable Subgrade Conditions

If grading occurs in the winter rainy season, unstable and unworkable subgrade conditions may be present and compaction of onsite soils may not be feasible. These conditions may be remedied using soil admixtures, such as lime and cement. A four percent mixture of equal parts of lime and cement based on a dry soil unit weight of 105 pcf is recommended for planning purposes. Treatment should vary between 12 to 18 inches, depending on the anticipated construction equipment loads and extent of observed instability. More detailed and final recommendations can be provided during construction. Stabilizing subgrade in small, isolated areas can be accomplished with the approval of the Geotechnical Engineer by over-excavating one foot, placing Tensar TriAx TX140 or equivalent geogrid on the soil, and then placing 12 inches of Class 2 baserock on the geogrid. The upper six inches of the baserock should be compacted to at least 90 percent (building pads) or 95 percent (pavement subgrades) relative compaction.

6.4 Utility Trench Construction

6.4.1 Trench Backfilling

Utility trenches may be backfilled with onsite soil above the utility bedding and shading materials. If rocks or concrete larger than four inches in maximum size are encountered, they should be removed from the fill material prior to placement in the utility trenches. Utility bedding and shading compaction requirements should be in conformance with the requirements of the local agencies having jurisdiction and as recommended by the pipe manufacturers. Jetting of trench backfill is not recommended. Compaction recommendations are presented in Section 6.3.2, *Project Compaction Recommendations*.

Pea gravel, rod mill, or other similar self-compacting material should not be utilized for trench backfill since this material will transmit the shallow groundwater to other locations within the site and potentially beneath the building. Additionally, fines may migrate into the voids in the pea gravel or rod mill, which could cause settlement of the ground surface above the trench.

If rain is expected and the trench will remain open, the bottom of the trench may be lined with one to two inches of gravel. This would provide a working surface in the trench bottom. The trench bottom may have to be sloped to a low point to pump the water out of the trench.

6.4.2 Utility Penetrations at Building Perimeter

Flexible connections at building perimeters should be considered for utility lines going through perimeter foundations. This would provide flexibility during a seismic event. This could be provided by special flexible connections, pipe sleeving with appropriate waterproofing, or other methods.

6.4.3 Pipe Bedding and Shading

Pipe bedding material is placed in the utility trench bottom to provide a uniform surface, a cushion, and protection for the utility pipe. Shading material is placed around the utility pipe after installation and testing to protect the pipe. Bedding and shading material and placement are typically specified by the pipe manufacturer, agency, or project designer. Agency and pipe manufacturer recommendations may supersede our suggestions. These suggestions are intended as guidelines and our opinions based on our experience to provide the most cost-effective method for protecting the utility pipe and surrounding structures. Other geotechnical engineers, agency personnel, contractors, and civil engineers may have different opinions regarding this matter.

Bedding and Shading Material - The bedding and shading material should be the same material to simplify construction. The material should be clean, uniformly graded, fine to medium grained sand. It is suggested that bedding and shading material contain less than three percent fines with 100 percent passing the No. 8 sieve. Coarse sand, angular gravel or baserock should be avoided since this type of shading material may bridge when backfilling around the pipe, possibly creating voids, and may be too stiff as bedding material. Open graded gravel should be avoided for shading since this material contains voids, and the surrounding soil could wash into the voids, potentially causing future ground settlement. However, open graded gravel may be required for bedding material when water is entering the trench. This would provide a stable working surface and a drainage path to a sump pit in the trench for water in the trench. The maximum size for bedding material should be limited to about ¾ inch.

Bedding Material Placement - The thickness of the bedding material should be minimized to reduce the amount of trench excavation, soil export, and imported bedding material. Two to three inches for pipes less than eight-inches in diameter and about four to six inches for larger pipes are suggested. Bedding for very large diameter pipes are typically controlled by the pipe manufacturer. Compaction is not required for thin layers of bedding material. The pipe needs to be able to set into the bedding, and walking on a thin layer of bedding material should

sufficiently compact the sand. Rounded gravel may be unstable during construction, but once the pipe and shading material is in place, the rounded gravel will be confined and stable.

Shading Material Placement – Jetting is not recommended since the type of shading material is unknown when preparing the geotechnical report and agencies typically do not permit jetting. If the sand contains fines or if the sand is well graded, jetting will not work. Additionally, if too much water is used during jetting, this could create a wet and unstable condition. The shading material should be able to flow around and under the utility pipe during placement. Some compactive effort along the sides of the pipe should be made by the contractor to consolidate the shading material around the pipe. A minimum thickness of about six-inches of shading material should be placed over the pipe to protect the pipe from compaction of the soil above the shading material. The contractor should provide some compactive effort to densify the shading material above the pipe. Relative compaction testing is not usually performed on the shading material. However, the contractor is ultimately responsible for the integrity of the utility pipe.

6.5 Temporary Excavation Slopes and Shoring

Where temporary excavation slopes are required, the Contractor should incorporate all appropriate requirements of OSHA/ Cal OSHA into the design of any temporary construction slopes used during construction. Excavation safety regulations are provided in the OSHA Health and Safety Standards for Excavations, 29 CFR Part 1926, Subpart P, and apply to excavations greater than five feet in depth.

The Contractor, or his specialty subcontractor, should design temporary construction slopes to conform to the OSHA regulations and should determine actual temporary slope inclinations based on the subsurface conditions exposed at the time of construction. For pre-construction planning purposes, the subsurface materials in the areas of the site where excavation may take place may be assumed to consist of a silty sand mix categorized as OSHA Type C with temporary slope inclination of no steeper than 1.5:1 (horizontal to vertical). This maximum slope ratio is assumed to be uniform from top to toe of the slope. The type of slope material and actual temporary construction slopes should be confirmed or adjusted during construction by a person who is trained as a "competent person" as designated by OSHA and directly responsible to the grading contractor.

If temporary slopes are left open for extended periods of time, exposure to weather and rain could have detrimental effects such as sloughing and erosion on surficial soils exposed in the excavations. We recommend that all vehicles and other surcharge loads be kept at least 10 feet away from the top of temporary slopes, and

that such temporary slopes are protected from excessive drying or saturation during construction. In addition, adequate provisions should be made to prevent water from ponding on top of the slope and from flowing over the slope face. Desiccation or excessive moisture in the excavation could reduce stability and require shoring or laying back side slopes.

6.6 Building Foundations

6.6.1 Shallow Foundations

The proposed buildings can be supported on conventional continuous perimeter and interior spread footings bearing on the recommended engineered fill layer. Footings should have a minimum width of 18 inches and should be founded a minimum of 24 inches below lowest adjacent finished grade (i.e., pad subgrade for interior continuous footings, exterior compacted surface grade for exterior footings, not including loose landscape or topsoil material).

Footings located adjacent to other footings or utility trenches should bear below an imaginary 1.5:1 (horizontal to vertical) plane projected upward from the bottom edge of the adjacent footings or utility trenches. Footing reinforcement should be determined by the project Structural Engineer.

Footings should be designed for the following allowable bearing pressures, assuming design Factors-of-Safety of 3.0, 2.0 and 1.5 for dead loads, dead plus live loads and total loads, respectively, from the calculated ultimate bearing pressure.

Table 7: Allowable Bearing Pressures for Spread Footings

Load Condition	Allowable Net Bearing Pressure (psf)
Dead Load	3,000
Dead plus Live Loads	4,500
Total Loads (including wind or seismic)	6,000

If site preparation and foundation observation services are conducted as outlined in the Geotechnical Study report, static vertical settlement is expected to be on the order of ½ inch or less for footings bearing within the materials described in the report and designed to the aforementioned allowable bearing pressures. Differential settlement across the structure is not expected to exceed about ½ this value. In addition to the aforementioned

static settlements, potential post-construction seismic total and differential settlements resulting from a design earthquake as discussed in Sections 5.1.2 and 6.1 should be considered when designing the building foundations. To evaluate immediate (distortion) settlement of footing foundations using an elastic spring constant, a modulus of subgrade reaction value, k_{v1}, of 230 pounds per cubic inch may be assumed for footings bearing directly on onsite subsurface granular soils that have been improved through dynamic compaction, or for footings bearing on soil improvement columns. The k_{v1} value applies for a 1-foot by 1-foot area and should be adjusted for footing width to obtain the k_v value as follows:

$$K_v = K_{v1} \times (B+1/2B)^2$$

where B = width of the footing in feet.

CEL personnel should be retained to observe and confirm that footing excavations prior to formwork and reinforcing steel placement bear in engineered fill soils suitable for the recommended maximum design bearing pressure.

Footing excavations should have firm bottoms and be free from excessive slough prior to concrete or reinforcing steel placement. Care should also be taken to prevent excessive wetting or drying of the bearing materials during construction. Extremely wet or dry or any loose or disturbed material in the bottom of the footing excavations should be removed prior to placing concrete. If construction occurs during the winter months, a thin layer of concrete (sometimes referred to as a rat slab) could be placed at the bottom of the footing excavations. This will protect the bearing soil and facilitate removal of water and slough if rainwater fills the excavations.

6.6.2 Lateral Resistance

Shallow foundations can resist lateral loads with a combination of bottom friction and passive resistance, and for mat foundations, bottom friction only. An allowable coefficient of friction of 0.40 between the base of the foundation elements and underlying material is recommended. In addition, an allowable passive resistance equal to an equivalent fluid weighing 350 pounds per cubic foot (pcf) acting against the foundation may be used for lateral load resistance against the sides of footings perpendicular to the direction of loading where the footing is poured neat against engineered fill material. The top foot of passive resistance at foundations not adjacent to pavement or hardscape should be neglected. The friction between the bottom of a slab-on-grade floor and the underlying soil should not be utilized to resist lateral forces.

6.6.3 Foundations for Equipment Pads and Minor Structures

Foundations for equipment pads and other minor structures may be designed using the recommendations presented in Sections 6.6.1 and 6.6.2 provided that supporting subgrade is prepared in accordance with Section 6.3.3. However, if the foundation for a minor structure will not bear on the engineered fill layer, it should be designed using a reduced allowable dead plus live bearing capacity of 1,500 psf, a modulus of subgrade reaction value of k_{v1}, of 75 pci, a coefficient of friction of 0.35, and a passive pressure of 250 pcf.

6.7 Concrete Slabs-on-Grade

6.7.1 Interior Floor Slabs

Surficial onsite materials appeared low to non-plastic; therefore, a non-expansive fill layer is not required for the proposed building. Slab reinforcing as well as slab construction joints should be designed by the structural engineer or slab designer to satisfy the anticipated use and loading of the slab. Slab-on-grade subgrade surfaces should be proof-rolled to provide a smooth, unyielding surface for slab support.

If desired and where potential near-surface water seepage from irrigation or surface water sources may be a concern, slab-on-grade concrete floors with moisture sensitive floor coverings can be underlain by a moisture retarder system constructed between the slab and subgrade. Such a system could consist of four inches of free-draining gravel, such as ¾-inch, clean, crushed, uniformly graded gravel with less than three percent passing No. 200 sieve, or equivalent, overlain by a relatively impermeable vapor retarder placed between the subgrade soil and the slab. The vapor retarder should be at least 10-mil thick and should conform to the requirements for ASTM E 1745 Class C Underslab Vapor Retarders (e.g., Griffolyn Type 65, Griffolyn Vapor Guard, Moistop Ultra C, or equivalent). If additional protection is desired by the owner, a higher quality vapor barrier conforming to the requirements of ASTM E 1745 Class A, with a water vapor transmission rate less than or equal to 0.006 gr/ft^2/hr (i.e., 0.012 perms) per ASTM E 96 (e.g., 15-mil thick “Stego Wrap Class A”), or to Class B (Griffolyn Type 85, Moistop Ultra B, or equivalent) may be used in place of a Class C retarder.

The vapor retarder or barrier should be placed directly under the slab. A sand layer is not required over the vapor retarder from a geotechnical standpoint. If sand on top of the vapor retarder is required by the design structural engineer, we suggest the thickness be minimized to less than one inch. If construction occurs in the winter months, water may pond within the sand layer since the vapor retarder may prevent the vertical percolation of rainwater.

ASTM E1643 should be utilized as a guideline for the installation of the vapor retarder. During construction, all penetrations (e.g., pipes and conduits,) overlap seams, and punctures should be completely sealed using a waterproof tape or mastic applied in accordance with the vapor retarder manufacturer's specifications. The vapor retarder or barrier should extend to the perimeter cutoff beam or footing.

6.7.2 Exterior Concrete Flatwork

Exterior concrete flatwork with pedestrian traffic should be at least four-inches thick and placed on subgrade compacted to the applicable requirements in Table 6. If desired, an underlying baserock layer can be used at the option of the designing engineer.

6.8 Pavements

Recommendations for the design of flexible asphalt concrete pavement sections were developed in accordance with the procedures outlined in the latest edition of the Caltrans Highway Design Manual. The Caltrans design method uses Traffic Indices (TI) to represent anticipated wheel loads and frequency of usage for a given design life. A design life of 20 years is typically used in California. Factors such as surface and subsurface drainage have an effect on the overall life of a pavement section.

An R-value of 79 was obtained from a laboratory test on a sample of typical existing near-surface onsite materials. To account for potential local variation in the clay and silt content of the near-surface soils, an R-value of 45 was used for determining the design sections. Based on assumed Traffic Index values of 4.5, 5.0, 6.0 and 7.0, the following resulting structural asphalt concrete (AC)/ aggregate base (AB) pavement sections were developed based on the provided TI values.

Table 8: Recommended Pavement Design Alternatives

Traffic Index	Asphalt Concrete (in.)	Class 2 AB (in.)	Total Section (in.)
4.5	2.0	6.0*	8.0
5.0	2.5	6.0*	8.5
6.0	3.5	6.0*	9.5
7.0	4.0	6.0	10.0

* Minimum recommended AB thickness

Asphalt concrete pavement should be designed and constructed per Caltrans standards. The asphalt pavement should be placed in minimum 1½-inch thick compacted lifts and maximum 3-inch thick lifts.

Minimizing subgrade saturation is an important factor in maintaining subgrade strength. Water allowed to pond on or adjacent to pavements could saturate the subgrade and cause premature pavement deterioration. The pavement should be sloped to provide rapid surface drainage, and positive surface drainage should be maintained away from the edge of the paved areas. Design alternatives which could reduce the risk of subgrade saturation and improve long-term pavement performance include crowning the pavement subgrades to drain toward the edges, rather than to the center of the pavement areas; and installing surface drains next to any areas where surface water could pond, should be considered. Properly designed and constructed subsurface drainage will reduce the time subgrade soils are saturated and can also improve subgrade strength and performance.

Periodic maintenance extends the service life of the pavement and should include crack sealing, surface sealing and patching of any deteriorated areas. Also, thicker pavement sections could be used to reduce the required maintenance and extend the service life of the pavement. The owner/user should consider placing signs at entryways to deter heavy duty trucks from light duty pavement areas, or by extending concrete curbs to a depth of three inches below the pavement subgrade.

6.9 Stormwater Infiltration Design Considerations

In order to meet the requirements of Provision C.3 of the Bay Area Municipal Regional Stormwater Permit (MRP), post-construction stormwater controls would be required as part of the project, post-construction stormwater controls may be required as part of the project. Stormwater infiltration treatment systems utilizing measures such as biofiltration swales or planters, or pervious pavements or pavers should be designed considering the typical infiltration rates characteristic of the onsite surficial soils. The near-surface soils at the site were found to typically consist of sand with silt and clayey sand with little clay soils, and would likely be categorized as Hydrologic Soil Group “B” soils (USDA, 2007). In such a case where the infiltration rates may be too low to accommodate infiltration of collected stormwater into the underlying soils, the use of a subdrainage layer consisting of an appropriate permeable material will be required.

In general, biofiltration swales or basins should not be placed directly adjacent to building perimeters in order to minimize impact on the long-term performance of foundations. If such features must be constructed adjacent to foundations, the filter material should not be located within the footing zone of influence, considered to be the zone below an imaginary 1.5:1 (horizontal to vertical) plane projected downward from the bottom edge of the

adjacent building footing. In addition, the bottom of the bioswale or biofiltration area should include a perforated subdrain pipe to carry collected infiltration water away from the foundations.

Biofiltration swales should generally be placed a minimum of five feet away from pavements or exterior flatwork in order to reduce potential impacts on these features such as settlement or lateral movement. Where concrete curbs are located adjacent to bioswale or other filtration features, the loose biofiltration material should not be located within a zone below an imaginary 1:1 (horizontal to vertical) plane projected downward from the bottom edge of the adjacent curb. Curbs adjacent to deeper biofiltration features may also be designed as retaining walls with the bottom of the wall deriving passive resistance from soils below the adjacent biofiltration medium. Retaining walls may be designed assuming an ultimate lateral active pressure of 30 pcf EFP.

6.10 Plan Review

We recommend that CEL be provided the opportunity to review the final project plans prior to construction. The purpose of this review is to assess the general compliance of the plans with the recommendations provided in this report and confirm the incorporation of these recommendations into the project plans and specifications.

6.11 Observation and Testing During Construction

We recommend that CEL be retained to provide observation and testing services during site preparation, mass grading, underground utility construction, foundation excavation, and to observe final site drainage. This is to observe compliance with the design concepts, specifications and recommendations, and to allow for possible changes in the event that subsurface conditions differ from those anticipated prior to the start of construction.

7.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

The recommendations of this report are based upon the soil and conditions encountered in the borings. If variations or undesirable conditions are encountered during construction, CEL should be contacted so that supplemental recommendations may be provided.

This report is issued with the understanding that it is the responsibility of the owner or his representatives to see that the information and recommendations contained herein are called to the attention of the other members of the design team and incorporated into the plans and specifications, and that the necessary steps are taken to see that the recommendations are implemented during construction.

The findings and recommendations presented in this report are valid as of the present time for the development as currently proposed. However, changes in the conditions of the property or adjacent properties may occur with the passage of time, whether by natural processes or the acts of other persons. In addition, changes in applicable or appropriate standards may occur through legislation or the broadening of knowledge. Accordingly, the findings and recommendations presented in this report may be invalidated, wholly or in part, by changes outside our control. Therefore, this report is subject to review by CEL after a period of three (3) years has elapsed from the date of issuance of this report. In addition, if the currently proposed design scheme as noted in this report is altered CEL should be provided the opportunity to review the changed design and provide supplemental recommendations as needed.

Recommendations are presented in this report which specifically request that CEL be provided the opportunity to review the project plans prior to construction and that we be retained to provide observation and testing services during construction. The validity of the recommendations of this report assumes that CEL will be retained to provide these services.

This report was prepared upon your request for our services, and in accordance with currently accepted geotechnical engineering practice. No warranty based on the contents of this report is intended, and none shall be inferred from the statements or opinions expressed herein.

The scope of our services for this report did not include an environmental assessment or investigation for the presence or absence of wetlands or hazardous or toxic materials in the soil, surface water, groundwater or air, on,

below or around this site. Any statements within this report or on the attached Plates, logs or records regarding odors noted or other items or conditions observed are for the information of our client only.

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Publications may have been used as general reference and not specifically cited in the report text.

PLATES

Plate 1 – Site Vicinity Map
Plate 2a – Site Plan
Plate 2b – Development Plan
Plate 3 – Regional Geologic Map
Plate 4 – Regional Fault Map
Plate 5a –Cross-Sections A-A' and B-B'
Plate 5b –Cross-Section C-C'
Plate 6 – Seismic Hazard Zones Map
Plate 7 – Flood Hazard Map



USGS Topographic Map, Oakland West, CA Quadrangle 2015.

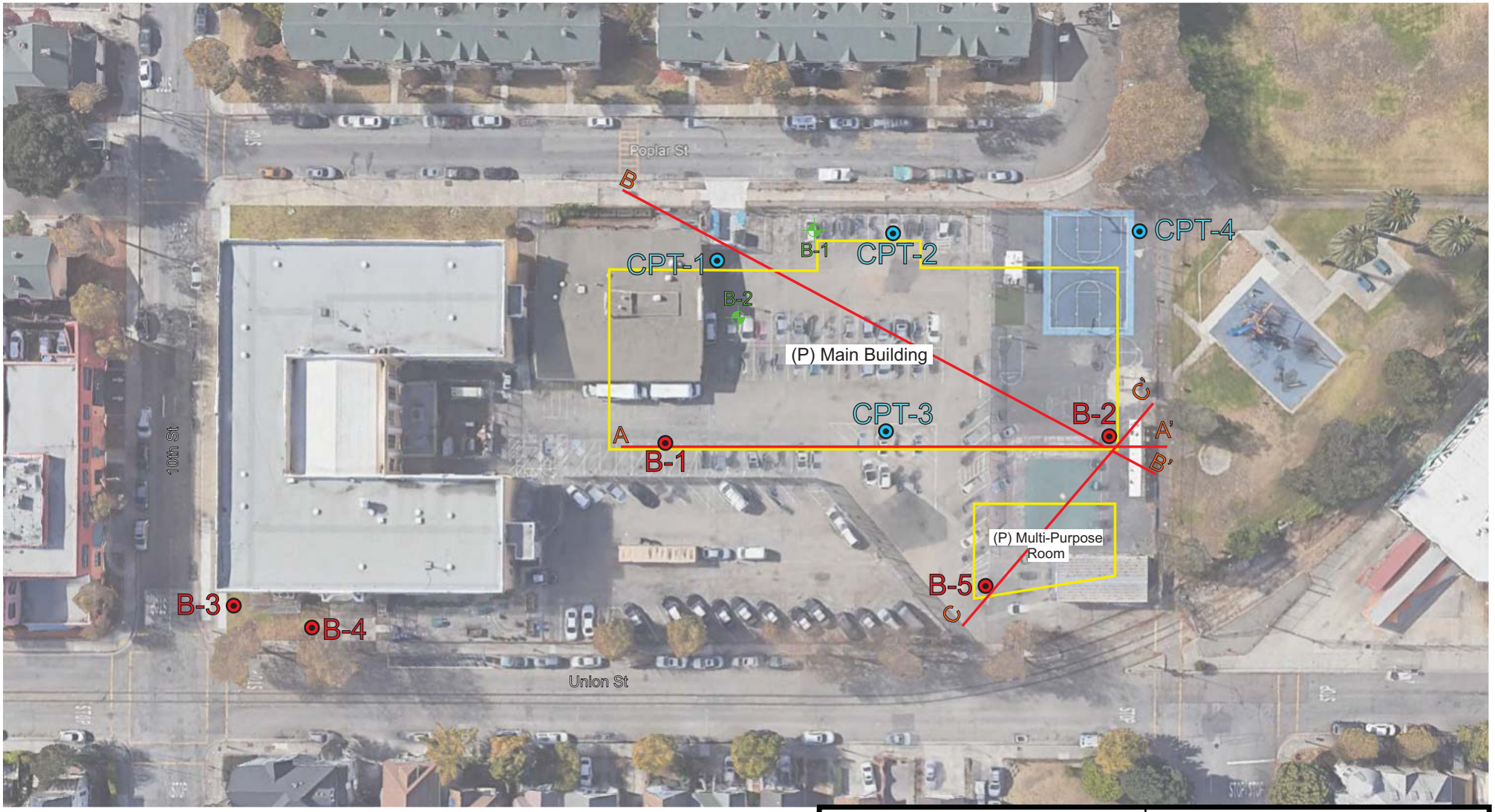
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Site Vicinity Map

Central Administrative Center
Cole Campus
1011 Union Street, Oakland, California 94607

84-04726-PWA	May 2020	Plate 1



- Approximate Boring Location (Geosphere 2015)
- B1 - Approximate Boring Location (This Study)
- CPT1 - Approximate CPT Location
- Geologic Cross Section

N

100 feet
Scale

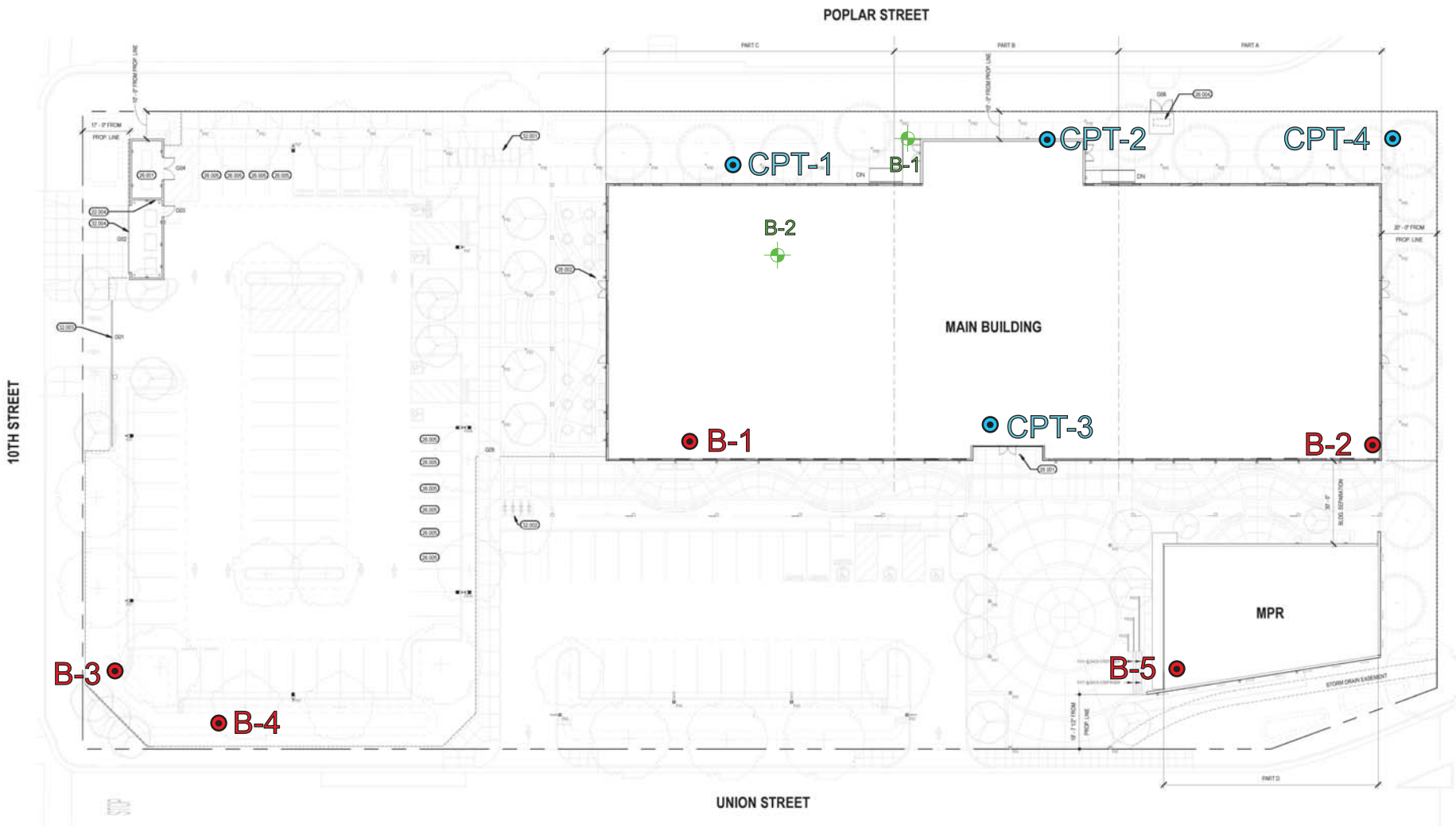
Base map: Google Earth (2019)

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Site Plan

Central Administrative Center
Cole Campus
1011 Union Street, Oakland, California 94607

84-04726-PWA	May 2020	Plate 2a



B-1 - Approximate Boring Location (Geosphere 2015)

B1 - Approximate Boring Location (This Study)

CPT1 - Approximate CPT Location

N

70 feet

Scale

Base map: Shah Kawasaki Architects (2020)

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Development Plan

Central Administrative Center
Cole Campus
1011 Union Street, Oakland, California 94607

84-04726-PWA	May 2020	Plate 2b



Qtc - Temescal formation

Qm - Merritt sand

Qaf - Artificial fill

N

SCALE

2000 0 2000 4000

Feet

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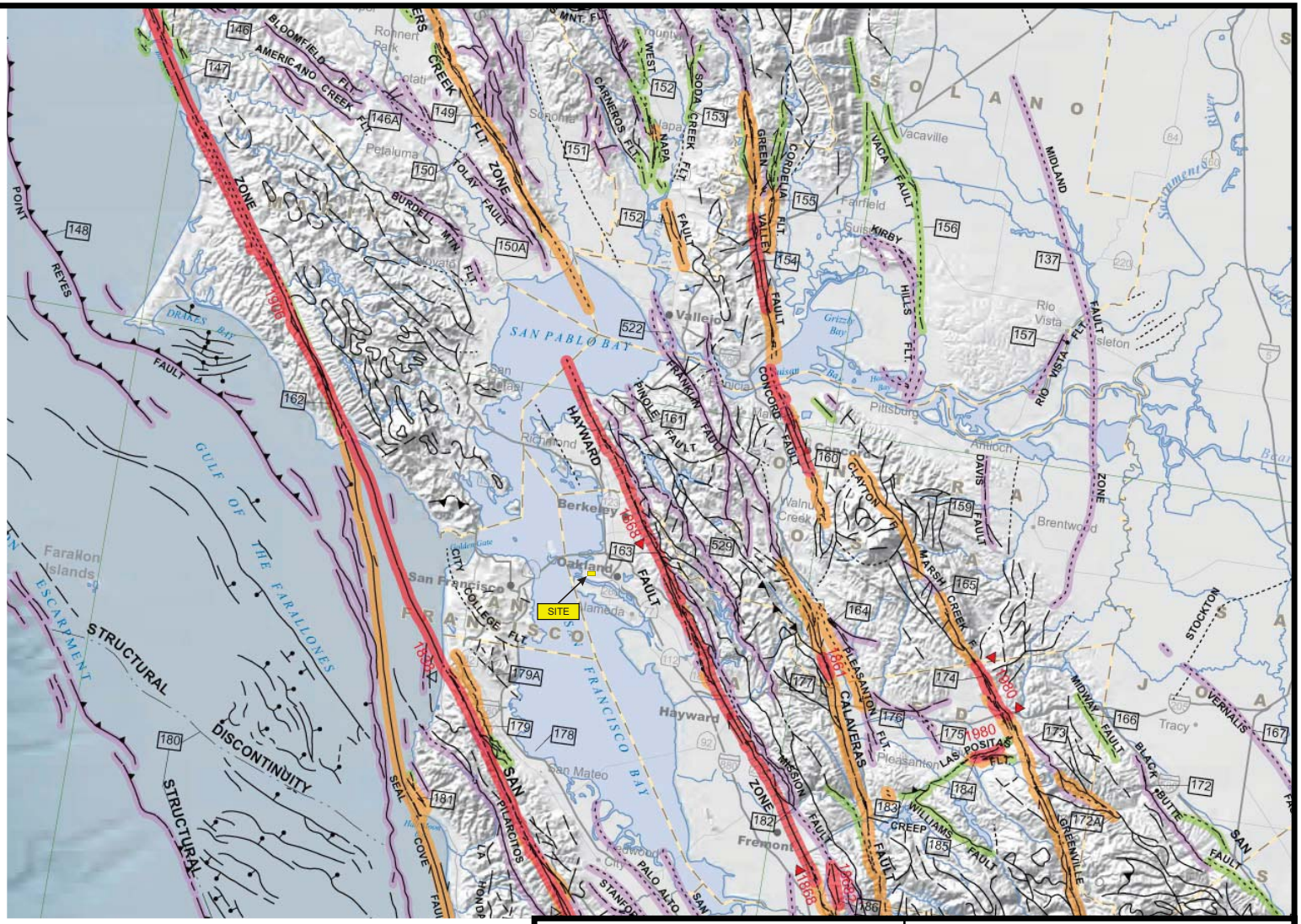
Regional Geologic Map

Central Administrative Center
Cole Campus
1011 Union Street, Oakland, California 94607

84-04726-PWA	May 2020	Plate 3

DESCRIPTION	
ON LAND	OFFSHORE
Displacement during historic time (e.g. San Andreas fault 1906). Includes areas of known fault creep.	
Displacement during Holocene time.	Fault offsets seafloor sediments or strata of Holocene age.
Faults showing evidence of displacement during late Quaternary time.	Faults cuts strata of Late Pleistocene age.
Undivided Quaternary faults - most faults in this category show evidence of displacement during the last 1,600,000 years; possible exceptions are faults which displace rocks of undifferentiated Plio-Pleistocene age.	Fault cuts strata of Quaternary age.
Faults without recognized Quaternary displacement or showing evidence of no displacement during Quaternary time. Not necessarily inactive.	Fault cuts strata of Pliocene or older age.

Geologic Time Scale			Years Before Present (Approx.)	Fault Symbol	Recency of Movement
Quaternary	Late Quaternary	Historic	200		
		Holocene	11,700		
		Pleistocene	700,000		
	Early Quaternary		1,600,000		
Pre-Quaternary			4.5 billion (Age of Earth)		



N

20 miles

Scale

Base map: Google Earth Pro (2018)

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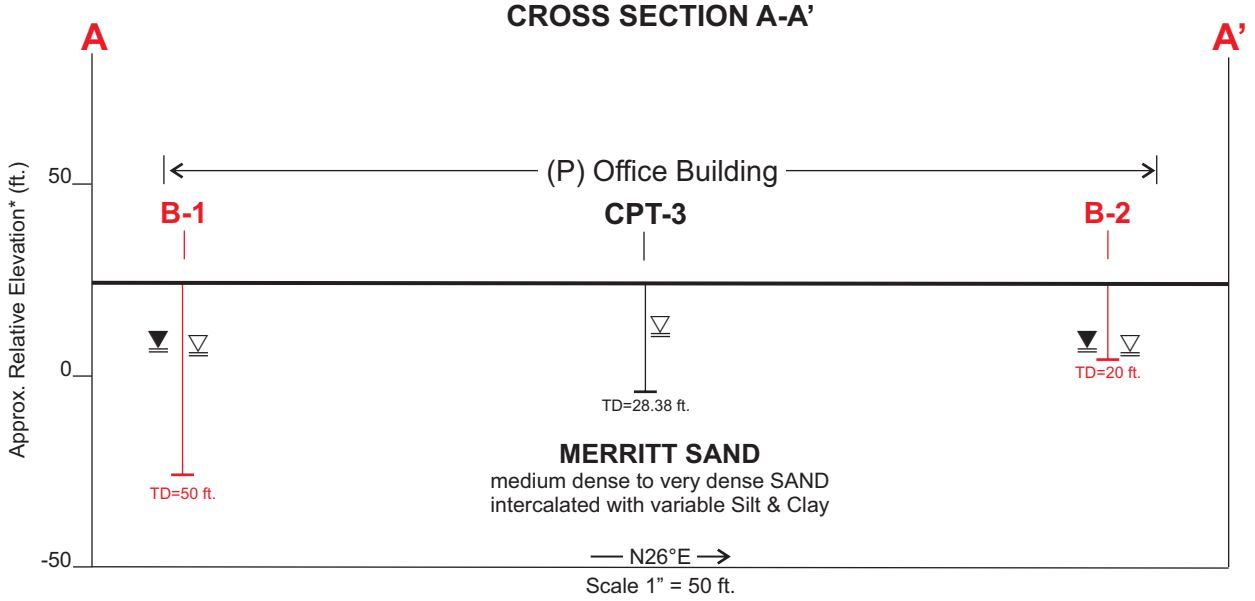
— AN ATLAS COMPANY —

Regional Fault Map

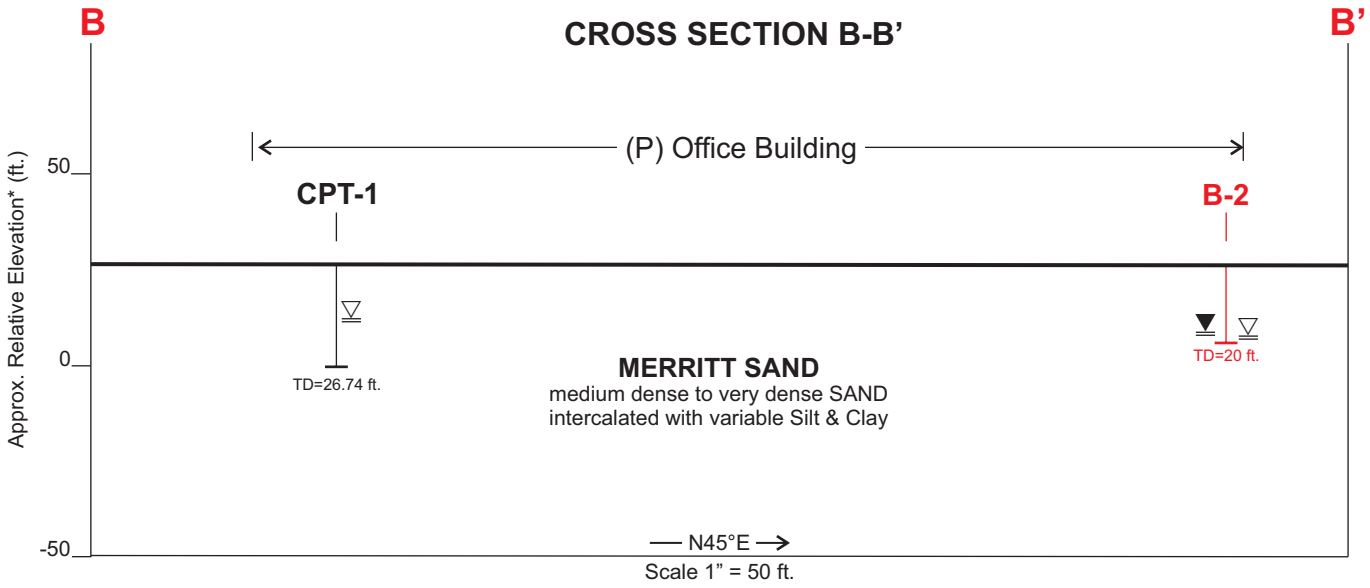
Central Administrative Center
Cole Campus
1011 Union Street, Oakland, California 94607

84-04726-PWA	May 2020	Plate 4

CROSS SECTION A-A'



CROSS SECTION B-B'



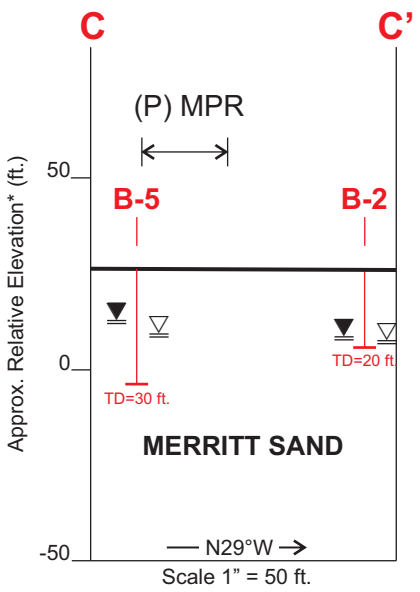
EXPLANATION

- Water first encountered during drilling
- Water level post drilling
- B-2 / TD=20 ft. — Approx. location and total depth drilled (this study)

*elevation from Google Earth Pro

ATLAS CONSOLIDATED ENGINEERING LABORATORIES — AN ATLAS COMPANY	**Job No.:** 84-04726-PWA **Approved:** AL **Date:** May 2019	**CROSS SECTIONS A-A' & B-B'** Central Administrative Center Cole Campus 1011 Union Street, Oakland, California	**Plate** 5a

CROSS SECTION C-C’



EXPLANATION

Water first encountered during drilling

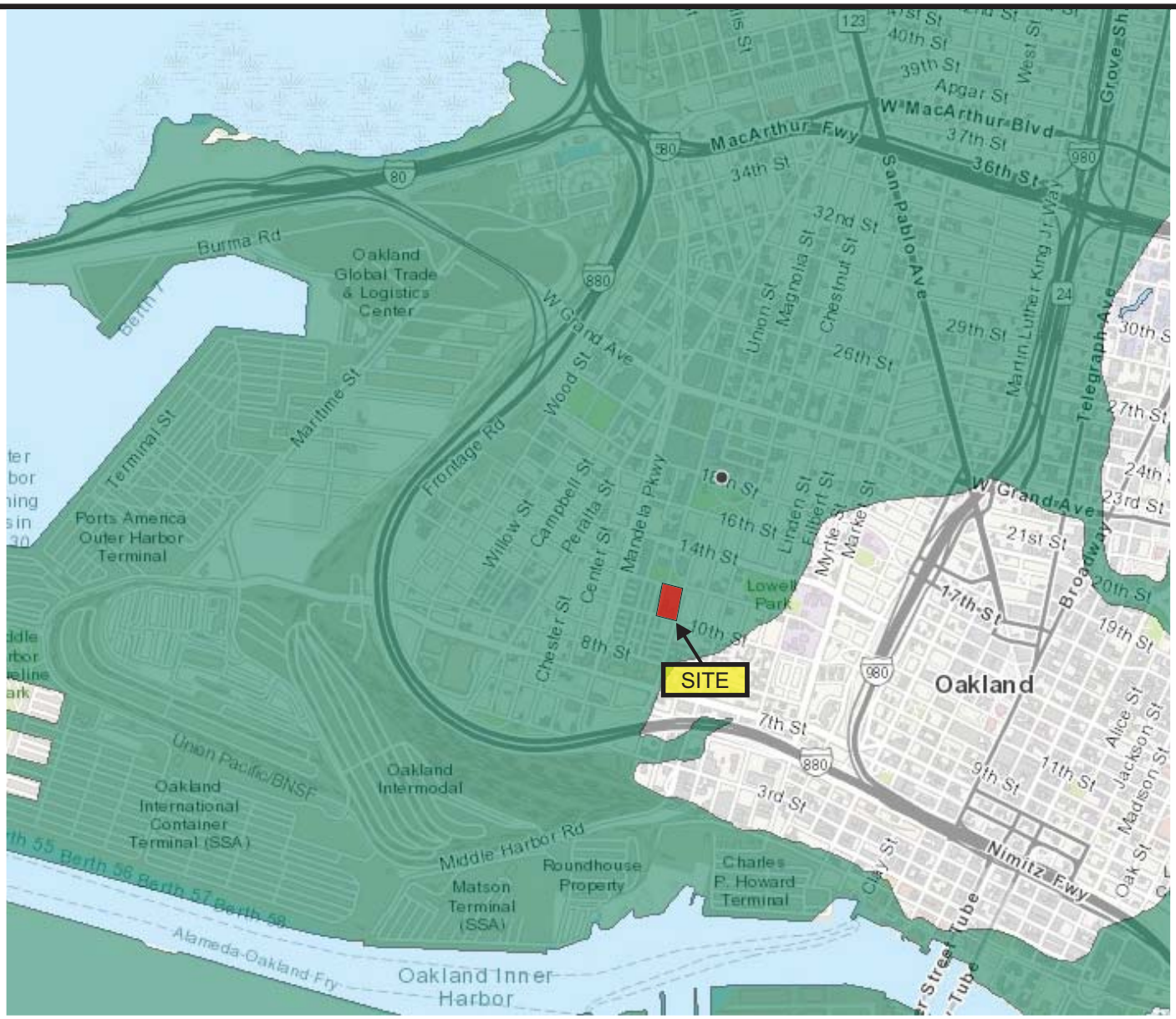
Water level post drilling

B-2
TD=20 ft.

Approx. location and total depth drilled (this study)

*elevation from Martin M. Ron Associates (2015)

ATLAS CONSOLIDATED ENGINEERING LABORATORIES — AN ATLAS COMPANY	**Job No.:** 84-04726-PWA **Approved:** AL **Date:** May 2020	**CROSS SECTIONS C-C’** Central Administrative Center Cole Campus 1011 Union Street, Oakland, California	**Plate** 5b



MAP EXPLANATION

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONES

Earthquake Fault Zones
Zone boundaries are delineated by straight-line segments; the boundaries define the zone encompassing active faults that constitute a potential hazard to structures from surface faulting or fault creep such that avoidance as described in Public Resources Code Section 2621.5(a) would be required.

Active Fault Traces
Faults considered to have been active during Holocene time and to have potential for surface rupture: Solid Line in Black or Red where Accurately Located; Long Dash in Black or Solid Line in Purple where Approximately Located; Short Dash in Black or Solid Line in Orange where Inferred; Dotted Line in Black or Solid Line in Rose where Concealed; Query (?) indicates additional uncertainty. Evidence of historic offset indicated by year of earthquake-associated event or C for displacement caused by fault creep.

SEISMIC HAZARD ZONES

Liquefaction Zones
Areas where historical occurrence of liquefaction, or local geological, geotechnical and ground water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Earthquake-Induced Landslide Zones
Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Reference: California Geological Survey - Seismic Hazard Zones Oakland West Quadrangle (2016)

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Seismic Hazards Zones Map

Central Administrative Center
Cole Campus
1011 Union Street, Oakland, California 94607

84-04726-PWA	May 2020	Plate 6

LEGEND

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0288G

FIRM

FLOOD INSURANCE RATE MAP

ALAMEDA COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 288 OF 725

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
HAYWARD, CITY OF	065033	0288	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06001C0288G

EFFECTIVE DATE
AUGUST 3, 2009

Federal Emergency Management Agency

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

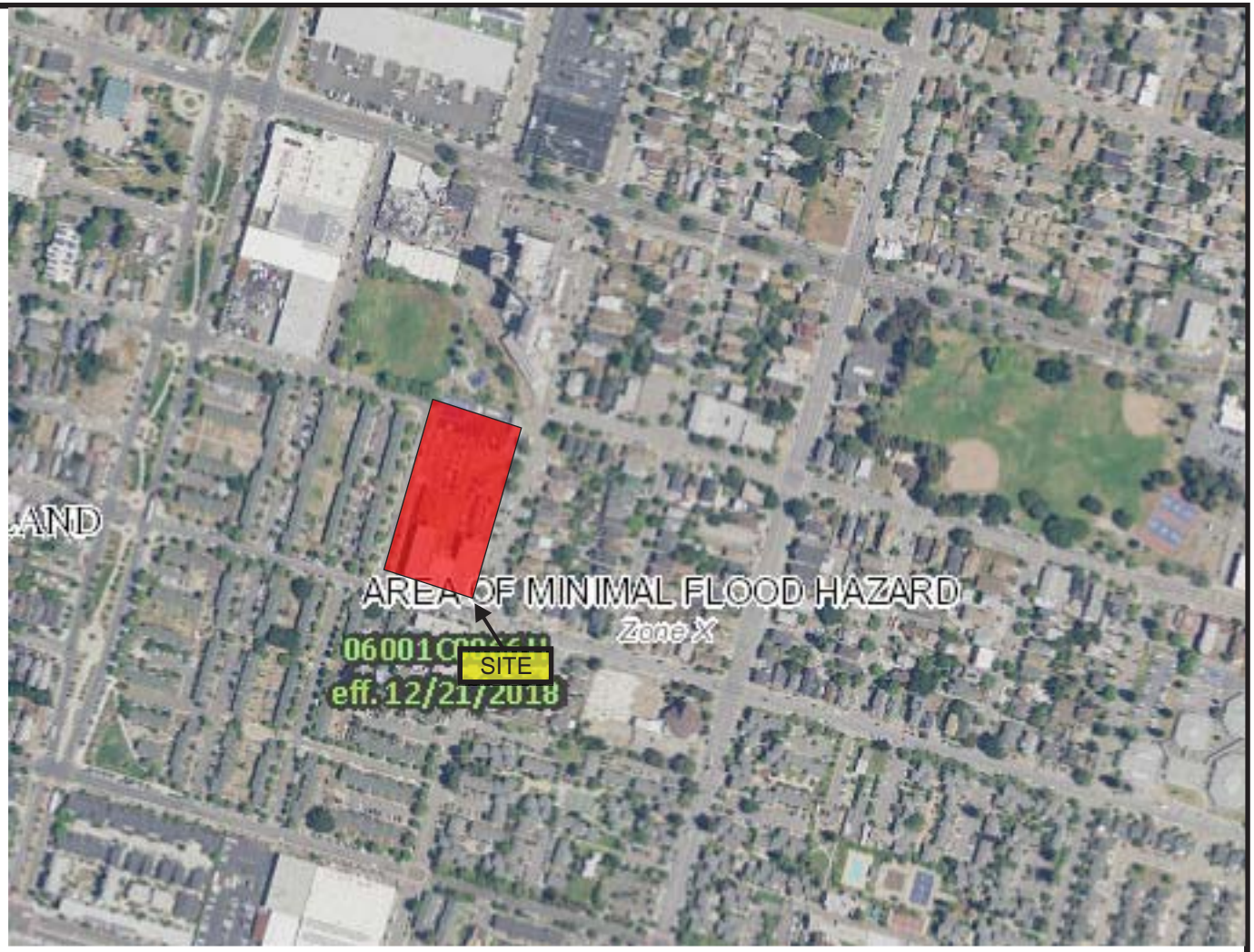
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.



N

500ft 1000ft

Scale

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Flood Hazard Map

Central Administrative Center
Cole Campus
1011 Union Street, Oakland, California 94607

84-04726-PWA	May 2020	Plate 7

APPENDIX A

FIELD EXPLORATION
Key to Boring Log Symbols
Boring Logs (B-1 through B-5)
Boring Logs (Geosphere 2015 Borings B-1 and B-2)
Cone Penetration Test Results

UNIFIED SOIL CLASSIFICATION (ASTM D-2487)						
Material Types	**Criteria for Assigning Soil Group Names**			**Group Symbol**	**Soil Group Names**	**Legend**
Coarse Grained Soils	Gravels >50% of Coarse Fraction Passes on No. 4 Sieve	Clean Gravels <5% Fines	Cu≥4 and 1≤Cc≤3	GW	Well-Graded Gravel	
			Cu≥4 and/or 1>Cc>3	GP	Poorly-Graded Gravel	
		Gravels with Fines >12% Fines	Fines Classify as ML or MH	GM	Silty Gravel	
>50% Retained on No. 200 Sieve			Fines Classify as CL or CH	GC	Clayey Gravel	
	Sands ≥50% of Coarse Fraction Passes on No. 4 Sieve	Clean Sands <5% Fines	Cu<6 and 1≤Cc≤3	SW	Well-Graded Sand	
			Cu<6 and/or 1>Cc>3	SP	Poorly-Graded Sand	
		Sands and Fines >12% Fines	Fines Classify as ML or MH	SM	Silty Sand	
			Fines Classify as CL or CH	SC	Clayey Sand	
Fine Grained Soils	Silts and Clays Liquid Limits<50	Inorganic	PI>7 and Plots≥"A" Line	CL	Lean Clay	
			PI<4 and Plots<"A" Line	ML	Silt	
		Organic	LL (Oven Dried)/LL(Not Dried <0.75)	OL	Organic Silt	
≥50% Passes No. 200 Sieve	Silts and Clays Liquid Limits≥50	Inorganic	PI Plots≥"A" Line	CH	Fat Clay	
			PI Plots<"A" Line	MH	Elastic Silt	
		Organic	LL (Oven Dried)/LL(Not Dried <0.75)	OH	Organic Clay	
Highly Organic Soils		Primarily Organic Matter, Dark in Color and Organic Odor		PT	Peat	

PENETRATION RESISTANCE (RECORDED AS BLOWS/0.5 FEET)				
SAND AND GRAVEL		SILT AND CLAY		
RELATIVE DENSITY	N-VALUE (BLOWS/FOOT)*	CONSISTENCY	N-VALUE (BLOWS/FOOT)*	COMPRESSIVE STRENGTH
Very Loose	0 - 3	Very Soft	0 - 1	0 - 0.25
Loose	4 - 10	Soft	2 - 4	0.25 - 0.50
Medium Dense	11 - 29	Medium Stiff	5 - 7	0.50 - 1.0
Dense	30 - 49	Stiff	8 - 14	1.0 - 2.0
Very Dense	50 +	Very Stiff	15 - 29	2.0 - 4.0
		Hard	30 +	Over 4.0

SOIL MOISTURE	
DESCRIPTOR	**DESCRIPTION**
Dry	Dry of Standard Proctor Optimum
Damp	Sand Dry
Moist	Near Standard Proctor Optimum
Wet	Wet of Satandard Proctor Optimum
Saturated	Free Water in Sample

PARTICLES SIZES		
COMPONENTS		**SIZE OR SIEVE NUMBER**
Boulders		Over 12 Inches
Cobbles		3 to 12 Inches
Gravels	-Coarse	3/4 to 3 Inches
	-Fine	Number 4 to 3/4 Inch
Sand	-Coarse	Number 10 to Number 4
	-Medium	Number 40 to Number 10
	-Fine	Number 200 to Number 40
Fines (Silt and Clay)		Below Number 200

Grab Bulk Sample

Standard Penetration Test

2.5 Inch Modified California

Shelby Tube

No Recovery

Initial Water Level Reading

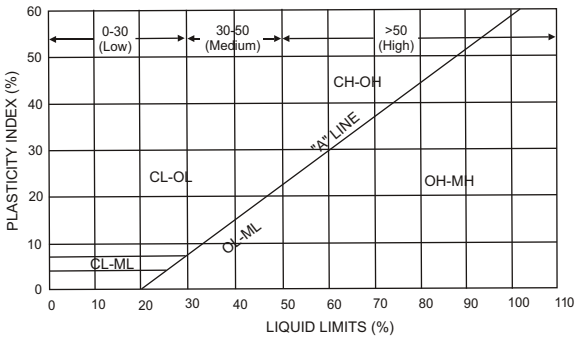
Final Water Level Reading

Blow Count
The number of blows of the sampling hammer required to drive the sampler through each of three 6-inch increments. Less than three increments may be reported if more than 50 blows are counted for any increment. The notation 50/5" indicates 50 blows recorded for 5 inches of penetration.

N-Value
Number of blows 140 LB hammer falling 30 inches to drive a 2 inch outside diameter (1-3/8 inch I.D) split barrel sampler the last 12 inches of an 18 inch drive (ASTM-1586 Standard Penetration Test)

CU -Consolidated Undrained triaxial test completed. Refer to laboratory results
DS - Results of Direct Shear test in terms of total cohesion (C, KSF) or effective cohesion and friction angles (C', KSF and degrees)
LL - Liquid Limit
PI - Plasticity Index
PP - Pocket Penetrometer test
TV - Torvane Shear Test results in terms of undrained shear strength (KSF)
UC - Unconfined Compression test results in terms of undrained shear strength (KSF)
#200 - Percent passing number 200 sieve
Cu - Coefficient of Uniformity
Cc - Coefficient of Concavity

PLASTICITY CHART



General Notes

1. The boring locations were determined by pacing, sighting and/or measuring from site features. Locations are approximate. Elevations of borings (if included) were determined by interpolation between plan contours or from another source that will be identified in the report or on the project site plan. The location and elevation of borings should be considered accurate only to the degree implied by the method used.

2. The stratification lines represent the approximate boundary between soil types. The transition may be gradual.

3. Water level readings in the drill holes were recorded at time and under conditions stated on the boring logs. This data has been reviewed and interpretations have been made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, tides, temperature and other factors at the time measurements were made.

4. The boring logs and attached data should only be used in accordance with the report.

CONSOLIDATED ENGINEERING LABORATORIES

KEY TO EXPLORATORY BORING LOGS

CONSOLIDATED ENGINEERING LABORATORIES
2001 Crow Canyon Road, Suite 210
San Ramon, CA 94583-5368
Telephone: (925) 314-7180

BORING NUMBER B-1

CLIENT Oakland Unified School District
PROJECT NAME Cole Campus - Central Administrative Center
PROJECT NUMBER 84-04726-PWA
PROJECT LOCATION 1011 Union Street Oakland, California 94607
DATE STARTED 11/9/19 **COMPLETED** 11/9/19
GROUND ELEVATION 17.2 ft **HOLE SIZE** 8"
DRILLING CONTRACTOR Exploration Geoservices Inc.
GROUND WATER LEVELS:
DRILLING METHOD HSA B-53R
AT TIME OF DRILLING 19.00 ft / Elev -1.80 ft
LOGGED BY AK **CHECKED BY** AL
AT END OF DRILLING ---
NOTES Elevations from Martin M. Ron Associates (2015)
AFTER DRILLING 18.00 ft / Elev -0.80 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0	**AC 1" :**	GB 1-1									
	AB 6" :										
	(SP) **POORLY GRADED SAND :** Medium dense, dark brown, moist, fine grained sand with brick and concrete fragments.	MC 1-2		12-5-6 (11)		103	7				
	[FILL]										
5	(SC) **CLAYEY SAND :** Medium dense, brown, moist, with fine grained sand.	MC 1-3		4-7-7 (14)		107	7				16
	Becomes very dense.	MC 1-4		12-21-33 (54)							
10	Becomes dense.	SPT 1-5		20-23-24 (47)							
15	Becomes very dense and brown with Increased clay content.	SPT 1-6		25-28-22 (50)							
20	Becomes wet and dense.	SPT 1-7		13-17-16 (33)			18				
25	Becomes very dense.	SPT 1-8		22-50/5"							
	(SP-SM) **POORLY GRADED SAND WITH SILT :** Very dense, brown, wet, with fine grained sand.										
30		SPT 1-9		28-43-44 (87)							
35		SPT 1-10		50							

(Continued Next Page)

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San Ramon, CA 94583-5368
Telephone: (925) 314-7180

BORING NUMBER B-1

CLIENT Oakland Unified School District **PROJECT NAME** Cole Campus - Central Administrative Center

PROJECT NUMBER 84-04726-PWA **PROJECT LOCATION** 1011 Union Street Oakland, California 94607

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
35		(SP-SM) **POORLY GRADED SAND WITH SILT** : Very dense, brown, wet, with fine grained sand. *(continued)*										
			SPT 1-11		34-50							
40												
			SPT 1-12		28-38-50/5"							
45												
			SPT 1-13		50							
50		Bottom of borehole at 50.0 feet.										

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San Ramon, CA 94583-5368
Telephone: (925) 314-7180

BORING NUMBER B-2

CLIENT Oakland Unified School District
PROJECT NAME Cole Campus - Central Administrative Center
PROJECT NUMBER 84-04726-PWA
PROJECT LOCATION 1011 Union Street Oakland, California 94607
DATE STARTED 11/9/19 **COMPLETED** 11/9/19
GROUND ELEVATION 16.7 ft **HOLE SIZE** 8"
DRILLING CONTRACTOR Exploration Geoservices Inc.
GROUND WATER LEVELS:
DRILLING METHOD HSA B-53R
AT TIME OF DRILLING 19.00 ft / Elev -2.30 ft
LOGGED BY AK **CHECKED BY** AL
AT END OF DRILLING ---
NOTES Elevations from Martin M. Ron Associates (2015)
AFTER DRILLING 18.00 ft / Elev -1.30 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0	**AC 1" :**	GB 2-1									
	AB 4" :										
	(SP) **POORLY GRADED SAND :** Loose, dark brown, moist, with fine grained sand.	MC 2-2		2-2-3 (5)		102	6				
	(SC) **CLAYEY SAND :** Medium dense, light orangish brown, moist. with fine grained sand.	MC 2-3		3-5-7 (12)		100	8				
5											
	Becomes dense.	MC 2-4		11-18-26 (44)							
	(SM) **SILTY SAND :** Dense, brown, moist, with fine grained sand.	SPT 2-5		18-20-24 (44)							
10											
	(SC) **CLAYEY SAND :** Very dense, brown, very moist, with fine grained sand.										
		SPT 2-6		16-18-36 (54)			16				
15											
	Becomes wet and dense.	SPT 2-7		9-13-17 (30)			20				16
20											

Bottom of borehole at 20.0 feet.

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2001 Crow Canyon Road, Suite 210
San Ramon, CA 94583-5368
Telephone: (925) 314-7180

BORING NUMBER B-3

CLIENT Oakland Unified School District
PROJECT NAME Cole Campus - Central Administrative Center
PROJECT NUMBER 84-04726-PWA
PROJECT LOCATION 1011 Union Street Oakland, California 94607
DATE STARTED 11/9/19 **COMPLETED** 11/9/19
GROUND ELEVATION 16.6 ft **HOLE SIZE** 8"
DRILLING CONTRACTOR Exploration Geoservices Inc.
GROUND WATER LEVELS:
DRILLING METHOD HSA B-53R
AT TIME OF DRILLING 19.00 ft / Elev -2.40 ft
LOGGED BY AK **CHECKED BY** AL
AT END OF DRILLING ---
NOTES Elevations from Martin M. Ron Associates (2015)
Elevations from Martin M. Ron Associates (2015)
AFTER DRILLING 18.00 ft / Elev -1.40 ft

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0		**TOPSOIL :**	GB 3-1									
		(SP) **POORLY GRADED SAND :** Loose, dark brown, moist, with fine grained sand.	SPT 3-2		3-2-4 (6)							
		(SC) **CLAYEY SAND :** Loose, orangish brown, moist, with fine grained sand.	SPT 3-3		3-4-5 (9)							
5		Becomes brown.										
		Becomes very dense.	SPT 3-4		18-23-32 (55)			12				21
		(SM) **SILTY SAND :** Very dense, orangish brown, moist, with fine grained sand.	SPT 3-5		18-24-37 (61)							
10												
		(SC) **CLAYEY SAND :** Medium dense, brown, moist, with fine grained sand.										
			SPT 3-6		7-8-13 (21)			17				
15												
		Becomes wet and very dense.	SPT 3-7		16-38-50 (88)			18				
20		Bottom of borehole at 20.0 feet.										

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2001 Crow Canyon Road, Suite 210
San Ramon, CA 94583-5368
Telephone: (925) 314-7180

BORING NUMBER B-4

CLIENT Oakland Unified School District
PROJECT NAME Cole Campus - Central Administrative Center
PROJECT NUMBER 84-04726-PWA
PROJECT LOCATION 1011 Union Street Oakland, California 94607
DATE STARTED 11/9/19 **COMPLETED** 11/9/19
GROUND ELEVATION 16.5 ft **HOLE SIZE** 8"
DRILLING CONTRACTOR Exploration Geoservices Inc.
GROUND WATER LEVELS:
DRILLING METHOD HSA B-53R
AT TIME OF DRILLING 19.00 ft / Elev -2.50 ft
LOGGED BY AK **CHECKED BY** AL
AT END OF DRILLING ---
NOTES Elevations from Martin M. Ron Associates (2015)
AFTER DRILLING 18.00 ft / Elev -1.50 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0	**TOPSOIL :**	GB 4-1									
	(SP) **POORLY GRADED SAND :** Loose, dark brown, moist, with fine grained sand.	MC 4-2		4-3-3 (6)							
	(SM) **SILTY SAND :** Loose, dark brown, moist, with roots, with fine grained sand.										
5	Becomes brown.	MC 4-3		3-3-4 (7)		102	8				
		MC 4-4		21-33-38 (71)							
	Becomes very dense and orangish brown.										
10		SPT 4-5		20-32-36 (68)							
	(SC) **CLAYEY SAND :** Medium dense, brown,very moist, with fine grained sand.										
15		SPT 4-6		6-7-9 (16)			17				39
	▽										
20	▽ Becomes wet and very dense.	SPT 4-7		12-24-34 (58)			19				

Bottom of borehole at 20.0 feet.

CONSOLIDATED ENGINEERING LABORATORIES
2001 Crow Canyon Road, Suite 210
San Ramon, CA 94583-5368
Telephone: (925) 314-7180

BORING NUMBER B-5

CLIENT Oakland Unified School District
PROJECT NAME Cole Campus - Central Administrative Center
PROJECT NUMBER 84-04726-PWA
PROJECT LOCATION 1011 Union Street Oakland, California 94607
DATE STARTED 5/2/20 **COMPLETED** 5/2/20
GROUND ELEVATION 16 ft **HOLE SIZE** 8"
DRILLING CONTRACTOR Exploration Geoservices Inc.
GROUND WATER LEVELS:
DRILLING METHOD HSA B-61
▽ **AT TIME OF DRILLING** 17.00 ft / Elev -1.00 ft
LOGGED BY AL **CHECKED BY** CD
▽ **AT END OF DRILLING** 14.00 ft / Elev 2.00 ft
NOTES Elevations from Martin M. Ron Associates (2015)
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0	**AC 1"** :										
	AB? 5" :										
	(SM) **SILTY SAND** : Loose, dark brown, moist, med grained with some gravel and brick pieces. [FILL]	MC 5-1		2-3-5 (8)		101	7				
	(SM) **SILTY SAND** : Loose, brown, moist, with trace gravel. Becomes med dense, light brown to orange brown.	MC 5-2		4-6-14 (20)		108	12				
5											
	Becomes very dense, orange brown. [50/6" MC]	MC 5-3		14-33							
		SPT 5-4		15-30-38 (68)							
10											
	(SC-SM) **SILTY CLAYEY SAND** : Med dense, brown with iron stains, wet, high fines, low plasticity. ▽	SPT 5-5		11-6-8 (14)			17	17	12	5	41
15											
	(SM) **SILTY SAND** : Very dense, brown, wet, corase sand. ▽	SPT 5-6		9-28-50/4"							
20											
	Becomes olive brown.	SPT 5-7		21-42-50/5"							
25											
		SPT 5-8		32-50							

Bottom of borehole at 29.5 feet.

BORING NUMBER B-1

Geosphere Consultants, Inc.
AN ETS COMPANY
Geotechnical Engineering · Engineering Geology
Environmental Management · Water Resources

2001 Crow Canyon Road
San Ramon, CA

CLIENT Oakland Unified School District
PROJECT NAME Cole Elementary School Site PEC Portables
PROJECT NUMBER 91-03424-A
PROJECT LOCATION 1011 Union Street, Oakland, CA 94607
DATE STARTED 1/23/15 **COMPLETED** 1/23/15
GROUND ELEVATION 17 ft **HOLE SIZE** 6"
DRILLING CONTRACTOR Geo-Ex
GROUND WATER LEVELS:
DRILLING METHOD Solid Flight CME-75
AT TIME OF DRILLING ---
LOGGED BY NAA **CHECKED BY** CTD
AT END OF DRILLING 20.00 ft / Elev -3.00 ft
NOTES
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0		**1" ASPHALT PAVEMENT** **2" Orange-brown SANDY GRAVEL** (SC) **CLAYEY SAND** : Dark-brown, fine, moist, very loose	MC 2-1		1-1-1 (2)							
5		(SM) **SILTY SAND** : Orange-brown, fine-to-coarse, moist, dense, friable	MC 2-2		15-15-29 (44)		116	13				
10		(SC) **CLAYEY SAND** : Mottled orange-tan-brown, fine-to-coarse, moist, dense	MC 2-3		14-16-20 (36)		119	16				
15		(SM) **SILTY SAND** : Mottled orange-tan-brown, fine-to-coarse, moist, medium dense	SPT 2-4		8-9-12 (21)							
20		(SP-SM) **SAND** : Mottled orange-tan-brown, medium coarse, wet, dense, w/ trace Silt ▽	SPT 2-5		11-19-20 (39)							
25		(SP-SM) **SAND** : Olive-brown, very dense, wet, medium coarse, w/ Silt										
30												

(Continued Next Page)

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2001 Crow Canyon Road
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BORING NUMBER B-1

CLIENT Oakland Unified School District **PROJECT NAME** Cole Elementary School Site PEC Portables

PROJECT NUMBER 91-03424-A **PROJECT LOCATION** 1011 Union Street, Oakland, CA 94607

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
30		(SP-SM) **SAND :** Olive-brown, very dense, wet, medium coarse, w/ Silt *(continued)*	SPT 2-6		20-29-40 (69)							12
35												
40			SPT 2-7		23-34-47 (81)							9
45		(CL-ML) **SILTY CLAY :** Brown & Gray, moist, very stiff, high plasticity, w/ orange stains and fine-grained sand										
50			SPT 2-8		9-9-9 (18)							

Bottom of borehole at 50.0 feet.

BORING NUMBER B-2

Geosphere Consultants, Inc.
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2001 Crow Canyon Road
San Ramon, CA

CLIENT Oakland Unified School District
PROJECT NAME Cole Elementary School Site PEC Portables
PROJECT NUMBER 91-03424-A
PROJECT LOCATION 1011 Union Street, Oakland, CA 94607
DATE STARTED 1/23/15 **COMPLETED** 1/23/15
GROUND ELEVATION 17 ft **HOLE SIZE** 6"
DRILLING CONTRACTOR Geo-Ex
GROUND WATER LEVELS:
DRILLING METHOD Solid Flight CME-75
▽ **AT TIME OF DRILLING** 15.00 ft / Elev 2.00 ft
LOGGED BY NAA **CHECKED BY** CTD
▽ **AT END OF DRILLING** 20.00 ft / Elev -3.00 ft
NOTES
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0		**1" ASPHALT PAVEMENT** **2" Orange-brown SANDY GRAVEL** (SC) **CLAYEY SAND :** Dark-brown, fine, moist, very loose, w/ fine gravel										
			MC 1-1		2-1-1 (2)							17
5		becomes light-orange brown, increasing coarseness										
		becomes dark Yellowish-Brown and dense, DS: C = 0.3 ksf, Phi = 31 deg.	MC 1-2		2-5-8 (13)							
			SPT 1-3		6-10-15 (25)			13				
10		clay content decreases, medium dense	MC 1-4		8-16-26 (42)		115	16				
15		▽ becomes very moist, increasing clay content	SPT 1-5		6-7-7 (14)							46
20		▽ becomes medium-to-coarse, very moist-to-wet	SPT 1-6		6-10-11 (21)							
		(SP-SM) **SAND :** Olive-brown, coarse, wet, very dense										
25												

(Continued Next Page)

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BORING NUMBER B-2

CLIENT Oakland Unified School District **PROJECT NAME** Cole Elementary School Site PEC Portables

PROJECT NUMBER 91-03424-A **PROJECT LOCATION** 1011 Union Street, Oakland, CA 94607

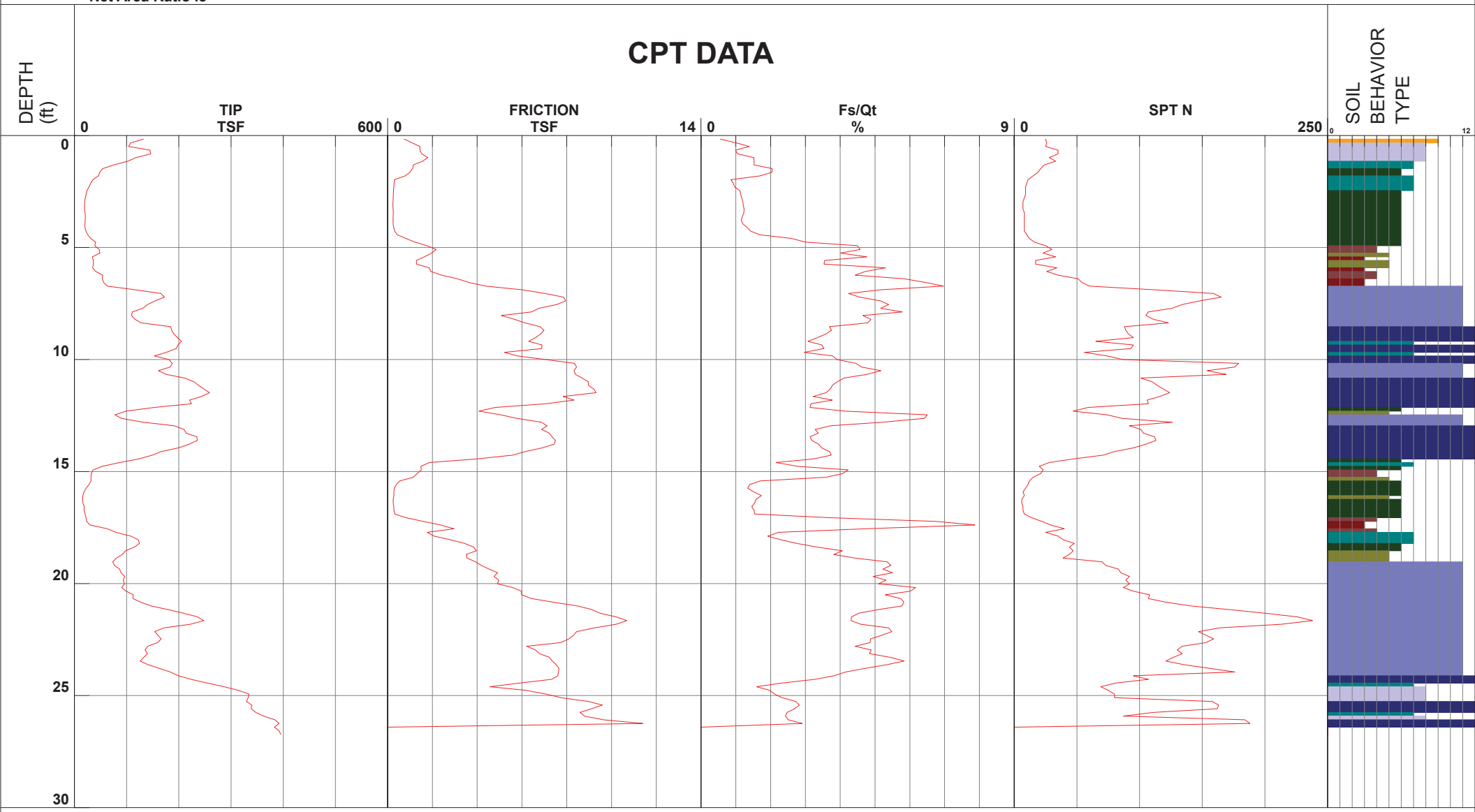
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
25		(SP-SM) **SAND :** Olive-brown, coarse, wet, very dense *(continued)*	SPT 1-7		12-25-28 (53)							
		Color changes to Tan & Orange, N=50/3" at D=29'	SPT 1-8		26							
30		Refusal at 30.0 feet. Bottom of borehole at 30.0 feet.										

CEL

Project	Cole Campus	Operator	JM-AJ	Filename	SDF(326).cpt
Job Number	84-04726-PW	Cone Number	DDG1489	GPS	
Hole Number	CPT-01	Date and Time	11/9/2019 9:27:06 AM	Maximum Depth	26.74 ft
EST GW Depth During Test		14.80 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 10cm squared

S*Soil behavior type and SPT based on data from UBC-1983

Cole Campus

Project ID: CEL
Data File: SDF(326).cpt
CPT Date: 11/9/2019 9:27:06 AM
GW During Test: 14 ft

Sounding ID: CPT-01
Project No: 84-04726-PW
Cone/Rig: DDG1489

Depth ft	qc PS tsf	qc1n PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
0.33	107.9	173.1	184.2	107.9	1.1	0.0	1.0	6	clean SAND to silty SAND	125	5.0	35	22	31	85	48	-	-	7	0.350	1.74	16
0.49	103.8	166.4	190.3	103.8	1.4	0.1	1.4	6	clean SAND to silty SAND	125	5.0	33	21	31	84	48	-	-	9	0.350	1.85	16
0.66	144.9	232.4	231.9	144.9	1.4	0.0	1.0	6	clean SAND to silty SAND	125	5.0	46	29	40	95	48	-	-	5	0.350	1.64	16
0.82	146.3	234.7	236.6	146.3	1.5	0.0	1.0	6	clean SAND to silty SAND	125	5.0	47	29	41	95	48	-	-	5	0.350	1.66	16
0.98	117.8	189.0	215.0	117.8	1.8	0.0	1.5	6	clean SAND to silty SAND	125	5.0	38	24	35	88	48	-	-	9	0.350	1.84	16
1.15	102.4	164.2	192.6	102.4	1.6	0.0	1.5	6	clean SAND to silty SAND	125	5.0	33	20	31	83	48	-	-	10	0.350	1.88	16
1.31	75.3	120.8	153.1	75.3	1.1	0.0	1.5	6	clean SAND to silty SAND	125	5.0	24	15	23	73	48	-	-	12	0.350	1.97	16
1.48	54.5	87.3	138.4	54.5	1.1	0.1	2.1	5	silty SAND to sandy SILT	120	4.0	22	14	18	63	48	-	-	18	0.200	2.16	16
1.64	48.7	78.1	129.8	48.7	1.0	0.1	2.0	5	silty SAND to sandy SILT	120	4.0	20	12	17	59	48	-	-	19	0.200	2.20	16
1.80	46.0	73.8	116.6	46.0	0.8	0.1	1.7	5	silty SAND to sandy SILT	120	4.0	18	12	15	57	47	-	-	18	0.200	2.16	16
1.97	35.6	57.1	79.9	35.6	0.3	0.0	0.9	5	silty SAND to sandy SILT	120	4.0	14	9	12	48	46	-	-	15	0.200	2.07	16
2.13	31.0	49.8	75.9	31.0	0.3	0.1	0.9	5	silty SAND to sandy SILT	120	4.0	12	8	10	44	45	-	-	17	0.200	2.14	16
2.30	27.8	44.5	73.0	27.8	0.3	0.1	1.0	5	silty SAND to sandy SILT	120	4.0	11	7	9	40	44	-	-	19	0.200	2.19	16
2.46	24.1	38.6	72.1	24.1	0.3	0.2	1.1	5	silty SAND to sandy SILT	120	4.0	10	6	8	36	43	-	-	22	0.200	2.27	16
2.62	22.5	36.1	70.8	22.5	0.3	0.2	1.2	5	silty SAND to sandy SILT	120	4.0	9	6	8	33	42	-	-	23	0.200	2.30	16
2.79	20.9	33.5	69.6	20.9	0.2	0.2	1.2	5	silty SAND to sandy SILT	120	4.0	8	5	8	31	42	-	-	24	0.200	2.34	16
2.95	19.6	31.4	68.7	19.6	0.2	0.2	1.2	5	silty SAND to sandy SILT	120	4.0	8	5	7	29	41	-	-	25	0.200	2.37	16
3.12	19.3	30.9	68.6	19.3	0.2	0.2	1.2	5	silty SAND to sandy SILT	120	4.0	8	5	7	28	41	-	-	25	0.200	2.38	16
3.28	19.5	31.2	69.5	19.5	0.2	0.2	1.3	5	silty SAND to sandy SILT	120	4.0	8	5	7	29	40	-	-	26	0.200	2.38	16
3.45	20.3	32.5	70.4	20.3	0.2	0.2	1.2	5	silty SAND to sandy SILT	120	4.0	8	5	7	30	40	-	-	25	0.200	2.36	16
3.61	21.0	33.7	70.4	21.0	0.3	0.2	1.2	5	silty SAND to sandy SILT	120	4.0	8	5	8	31	40	-	-	24	0.200	2.34	16
3.77	20.9	33.6	69.4	20.9	0.2	0.2	1.2	5	silty SAND to sandy SILT	120	4.0	8	5	8	31	40	-	-	24	0.200	2.33	16
3.94	20.1	32.3	69.4	20.1	0.2	0.2	1.2	5	silty SAND to sandy SILT	120	4.0	8	5	7	30	40	-	-	25	0.200	2.36	16
4.10	20.3	32.6	72.8	20.3	0.3	0.2	1.3	5	silty SAND to sandy SILT	120	4.0	8	5	7	30	39	-	-	26	0.200	2.38	16
4.27	22.1	35.4	77.4	22.1	0.3	0.2	1.4	5	silty SAND to sandy SILT	120	4.0	9	6	8	33	40	-	-	25	0.200	2.37	16
4.43	25.4	40.8	88.3	25.4	0.4	0.2	1.7	5	silty SAND to sandy SILT	120	4.0	10	6	9	37	40	-	-	25	0.200	2.36	16
4.59	31.1	49.9	118.7	31.1	0.8	0.2	2.6	5	silty SAND to sandy SILT	120	4.0	12	8	12	44	41	-	-	27	0.200	2.42	16
4.76	40.6	65.1	144.2	40.6	1.2	0.2	3.0	5	silty SAND to sandy SILT	120	4.0	16	10	15	53	42	-	-	25	0.200	2.38	16
4.92	39.0	62.6	178.4	39.0	1.8	0.3	4.5	4	clayy SILT to silty CLAY	115	2.0	31	20	15	-	-	2.7	9.9	31	0.070	2.52	15
5.09	47.4	76.1	197.7	47.4	2.2	0.2	4.6	4	clayy SILT to silty CLAY	115	2.0	38	24	18	-	-	3.3	9.9	29	0.070	2.47	15
5.25	48.9	78.5	185.9	48.9	2.0	-0.3	4.0	4	clayy SILT to silty CLAY	115	2.0	39	24	18	-	-	3.4	9.9	27	0.070	2.41	15
5.41	34.5	55.3	174.7	34.5	1.6	0.5	4.8	4	clayy SILT to silty CLAY	115	2.0	28	17	14	-	-	2.4	9.9	34	0.070	2.57	15
5.58	36.2	58.1	150.8	36.3	1.3	2.5	3.6	4	clayy SILT to silty CLAY	115	2.0	29	18	14	-	-	2.5	9.9	29	0.070	2.46	15
5.74	36.4	58.4	150.7	36.5	1.3	2.6	3.6	4	clayy SILT to silty CLAY	115	2.0	29	18	14	-	-	2.5	9.9	29	0.070	2.46	15
5.91	35.0	56.2	-	35.1	1.9	2.9	5.4	4	clayy SILT to silty CLAY	115	2.0	28	18	14	-	-	2.5	9.9	35	0.070	2.60	15
6.07	40.9	65.6	188.0	41.0	1.9	3.4	4.8	4	clayy SILT to silty CLAY	115	2.0	33	20	16	-	-	2.9	9.9	32	0.070	2.52	15
6.23	54.4	86.5	207.1	54.5	2.4	3.7	4.5	4	clayy SILT to silty CLAY	115	2.0	43	27	20	-	-	3.8	9.9	27	0.070	2.42	15
6.40	53.3	83.7	241.1	53.4	3.1	3.2	5.9	9	very stiff fine SOIL	120	2.0	42	27	21	61	42	-	-	32	0.250	2.52	30
6.56	56.2	87.2	262.9	56.3	3.6	3.4	6.5	9	very stiff fine SOIL	120	2.0	44	28	22	62	42	-	-	33	0.250	2.55	30
6.73	63.0	96.4	290.4	63.1	4.4	3.8	7.0	9	very stiff fine SOIL	120	2.0	48	32	24	66	43	-	-	33	0.250	2.55	30
6.89	116.7	176.5	337.5	116.8	6.0	3.6	5.2	9	very stiff fine SOIL	120	2.0	88	58	39	86	46	-	-	22	0.250	2.29	30
7.05	165.9	247.9	379.3	165.9	7.0	2.8	4.2	9	very stiff fine SOIL	120	2.0	100	83	51	95	47	-	-	17	0.250	2.14	30
7.22	172.3	254.6	401.5	172.4	7.9	1.6	4.6	9	very stiff fine SOIL	120	2.0	100	86	53	95	47	-	-	18	0.250	2.16	30
7.38	154.3	225.4	395.1	154.3	8.0	1.4	5.2	9	very stiff fine SOIL	120	2.0	100	77	49	94	47	-	-	20	0.250	2.23	30
7.55	140.1	202.5	378.2	140.2	7.6	1.8	5.4	9	very stiff fine SOIL	120	2.0	100	70	44	90	46	-	-	22	0.250	2.27	30
7.71	131.1	187.3	350.9	131.1	6.8	2.5	5.2	9	very stiff fine SOIL	120	2.0	94	66	41	88	46	-	-	22	0.250	2.28	30
7.87	111.2	157.2	338.2	111.2	6.4	2.9	5.8	9	very stiff fine SOIL	120	2.0	79	56	36	82	45	-	-	25	0.250	2.36	30
8.04	109.2	152.9	291.5	109.3	5.1	4.0	4.7	9	very stiff fine SOIL	120	2.0	76	55	34	81	45	-	-	22	0.250	2.29	30
8.20	116.1	160.9	309.1	116.2	5.7	3.5	4.9	9	very stiff fine SOIL	120	2.0	80	58	36	83	45	-	-	22	0.250	2.29	30
8.37	127.8	175.4	322.5	127.9	6.1	4.3	4.8	9	very stiff fine SOIL	120	2.0	88	64	38	86	45	-	-	21	0.250	2.26	30
8.53	184.6	250.8	358.2	184.6	6.8	1.6	3.7	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	12.2	9.9	15	0.250	2.08	16
8.69	186.2	250.7	360.6	186.2	7.0	1.5	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	12.3	9.9	16	0.250	2.09	16
8.86	190.4	254.0	357.3	190.4	6.8	1.6	3.6	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	12.6	9.9	15	0.250	2.07	16
9.02	197.6	261.4	354.1	197.7	6.6	1.7	3.4	8	stiff SAND to clayy SAND	115	1.0	100	100	52	-	-	13.1	9.9	14	0.250	2.04	16
9.19	205.1	268.9	350.0	205.1	6.3	1.6	3.1	8	stiff SAND to clayy SAND	115	1.0	100	100	53	-	-	13.6	9.9	13	0.250	2.00	16
9.35	198.3	257.8	356.1	198.3	6.9	1.6	3.5	8	stiff SAND to clayy SAND	115	1.0	100	100	52	-	-	13.1	9.9	15	0.250	2.06	16
9.51	194.9	251.3	351.8	194.9	6.9	1.0	3.5	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	12.9	9.9	15	0.250	2.07	16
9.68	176.0	225.1	301.8	176.0	5.2	-0.7	3.0	8	stiff SAND to clayy SAND	115	1.0	100	100	45	-	-	11.6	9.9	14	0.250	2.03	16
9.84	153.6	194.8	303.7	153.6	5.8	-0.9	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	41	-	-	10.1	9.9	17	0.250	2.15	16
10.01	181.1	227.8	343.7	181.0	7.1	-0.9	3.9	8	stiff SAND to clayy SAND	115	1.0	100	100	47	-	-	12.0	9.9	17	0.250	2.13	16
10.17	187.4	234.0	373.8	187.4	8.3	-3.6	4.5	9	very stiff fine SOIL	120	2.0	100	94	49	95	46	-	-	18	0.250	2.17	30
10.34	183.3	227.0	372.9	183.2	8.4	-3.2	4.6	9	very stiff fine SOIL	120	2.0	100	92	48	94	46	-	-	19	0.250	2.19	30
10.50	161.1	197.9	363.8	161.1	8.3	-2.2	5.2	9	very stiff fine SOIL	120	2.0	99	81	43	90	45	-	-	21	0.250	2.26	30
10.66	176.0	214.5	366.0	175.9	8.4	-0.8	4.8	9	very stiff fine SOIL	120	2.0	100	88	46	92	46	-	-	20	0.250	2.22	30
10.83	211.2	255.5	382.0	211.2	8.7	-2.0	4.1	8	stiff SAND to clayy SAND	115	1.0	100	100	53	-	-	13.9	9.9	16	0.250	2.12	16
10.99	228.8	274.8	393.6	228.8	9.0	-1.9	3.9	8	stiff SAND to clayy SAND	115	1.0	100	100	56	-	-	15.1	9.9	15	0.250	2.09	16
11.16	237.7	283.4	396.0	237.7	9.0	-1.9	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	57	-	-	15.7	9.9	15	0.250	2.07	16
11.32	248.2	293.9	404.1	248.2	9.2	-1.7	3.7	8	stiff SAND to clayy SAND	115	1.0	100	100	59	-	-	16.4	9.9	14	0.250	2.05	16
11.48	258.8	304.3	409.6	258.8	9.3	-1.6	3.6	8	stiff SAND to clayy SAND	115	1.0	100	100	61	-	-	17.1	9.9	14	0.250	2.03	16
11.65	243.2	284.0	371.9	243.2	7.8	-1.6	3.2	8	stiff SAND to clayy SAND	115	1.0	100	100	56	-	-	16.1	9.9	13	0.250	2.01	16
11.81	220.6	255.9	367.2	220.6	8.3	-1.2	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	52	-	-	14.6	9.9	15	0.250	2.09	16
11.98	224.0	258.1	342.7	224.0	7.1	-1.3	3.2	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	14.8	9.9	14	0.250	2.02	16
12.14	153.2	175.4	259.1	153.2	4.8	-1.6	3.2	8	stiff SAND to clayy SAND	115	1.0	100	100	36	-	-	10.1	9.9	16	0.250	2.11	16
12.30	98.9	112.4	228.2	98.8	4.1	-1.3	4.2	9	very stiff fine SOIL	120	2.0	56	49	25	71	42	-	-	23	0.250	2.32	30
12.47	77.8	87.8	265.4	77.8	5.1	-0.1	6.6	9	very stiff fine SOIL	120	2.0	44	39	22	63	41	-	-	33	0.250	2.55	30
12.63	90.0	100.9	283.1	90.0	5.8	0.2	6.5	9	very stiff fine SOIL	120	2.0	50	45	25	67	41	-	-	31	0.250	2.51	30
12.80	131.4	146.5	304.8	131.4	6.9	0.3	5.2	9	very stiff fine SOIL	120	2.0	73	66	33	80	43	-	-	24	0.250	2.34	30
12.96	191.3	211.8	319.3	191.3	7.1	-0.1	3.7	8	stiff SAND to clayy SAND	115	1.0	100	100	44	-	-	12.6	9.9	17	0.250	2.13	16
13.12	209.9	231.1	320.7	209.9	6.9	-0.6	3.3	8	stiff SAND to clayy SAND	115	1.0	100	100	46	-	-	13.9	9.9	15	0.250	2.06	16
13.29	214.1	234.3	327.7	214.1	7.2	-0.3	3.4	8	stiff SAND to clayy SAND	115	1.0	100	100	47	-	-	14.1	9.9	15	0.250	2.07	16
13.45	234.6	255.2	338.8	234.6	7.3	-0.4	3.1	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	15.5	9.9	14	0.250	2.02	16
13.62	235.2	254.4	340.3	235.2	7.5	-0.8	3.2	8	stiff SAND to clayy SAND	115	1.0	100	100	50	-	-	15.5	9.9	14	0.250	2.03	16
13.78	220.0	236.5	330.5	220.0	7.4	-0.6	3.4	8	stiff SAND to clayy SAND	115	1.0	100	100	48	-	-	14.5	9.9	15	0.250	2.07	16
13.94	199.2	212.9	309.8	199.2	6.9	-0.5	3.5	8	stiff SAND to clayy SAND	115	1.0	100	100	43	-	-	13.1	9.9	16	0.250	2.10	16
14.11	166.4	177.4	282.2	166.4	6.1	-0.4	3.7	8	stiff SAND to clayy SAND	115	1.0	100	100	37	-	-	11.0	9.9	18	0.250	2.17	16
14.27	149.3	158.7	264.7	149.3	5.6	-0.3	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	34	-	-	9.8	9.9	19	0.250	2.20	16
14.44	123.3	130.8	217.9	123.3	4.0	-0.7	3.2	5	silty SAND to sandy SILT	120	4.0	33	31	28	76	43	-	-	19	0.200	2.20	16
14.60	87.0	92.0	146.8	86.9	1.9	-0.9	2.2	5	silty SAND to sandy SILT	120	4.0	23	22	19	64	41	-	-	18	0.200	2.17	16
14.76	53.3	56.2	130.7	53.3	1.5	-0.5	2.8	5	silty SAND to sandy SILT	120	4.0	14	13	13	48	38	-	-	27	0.200	2.40	16
14.93	35.6	41.8	-	35.6	1.5	-0.2	4.3	4	clayy SILT to silty CLAY	115	2.0	21	18	11	-	-	2.5	9.9	37	0.070	2.63	15
15.09	32.3	37.7	-	32.3	1.3	-0.3	4.2	4	clayy SILT to silty CLAY	115	2.0	19	16	10	-	-	2.2	9.9	38	0.070	2.65	15
15.26	31.8	36.9	-	31.8	1.1	-0.4	3.7	4	clayy SILT to silty CLAY	115	2.0	18	16	10	-	-	2.2	9.9	36	0.070	2.62	15
15.42	31.9	33.3	83.6	31.9	0.5	-0.4	1.7	5	silty SAND to sandy SILT	120	4.0	8	8	8	31	35	-	-	28	0.200	2.45	16

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

Project ID: CEL
Data File: SDF(326).cpt
CPT Date: 11/9/2019 9:27:06 AM
GW During Test: 14 ft

Sounding ID: CPT-01
Project No: 84-04726-PW
Cone/Rig: DDG1489

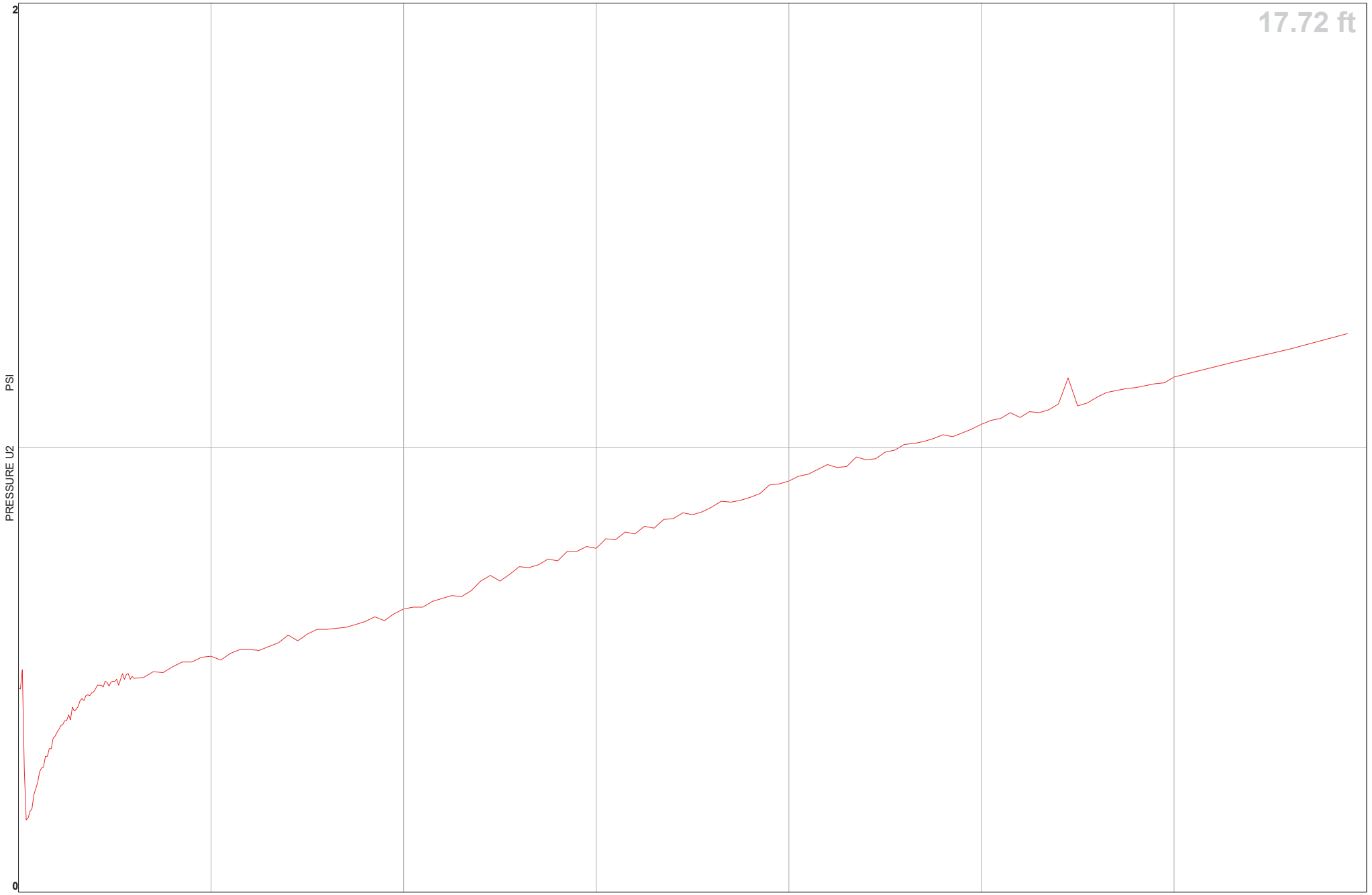
Depth ft	qc PS tsf	qc1n PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR - -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
15.58	27.8	29.0	72.9	27.8	0.4	-0.5	1.4	5	silty SAND to sandy SILT	120	4.0	7	7	7	26	34	-	-	28	0.200	2.45	16
15.75	22.4	23.3	67.2	22.4	0.3	-0.4	1.4	5	silty SAND to sandy SILT	120	4.0	6	6	6	19	32	-	-	32	0.200	2.52	16
15.91	18.3	20.8	-	18.3	0.3	-0.4	1.6	4	clayy SILT to silty CLAY	115	2.0	10	9	5	-	-	1.2	6.5	35	0.070	2.60	15
16.08	16.2	18.3	-	16.2	0.3	-0.4	1.8	4	clayy SILT to silty CLAY	115	2.0	9	8	5	-	-	1.1	5.7	40	0.070	2.68	15
16.24	15.7	17.6	-	15.7	0.2	-0.4	1.7	4	clayy SILT to silty CLAY	115	2.0	9	8	5	-	-	1.0	5.5	39	0.070	2.68	15
16.40	16.2	18.2	-	16.2	0.2	-0.4	1.6	4	clayy SILT to silty CLAY	115	2.0	9	8	5	-	-	1.1	5.6	38	0.070	2.66	15
16.57	18.8	20.0	-	18.8	0.3	-0.4	1.5	4	clayy SILT to silty CLAY	115	2.0	10	9	5	-	-	1.3	6.6	36	0.070	2.61	15
16.73	18.6	20.6	-	18.6	0.3	-0.3	1.6	4	clayy SILT to silty CLAY	115	2.0	10	9	5	-	-	1.3	6.5	36	0.070	2.60	15
16.90	20.4	21.5	70.2	20.4	0.3	-0.3	1.6	4	clayy SILT to silty CLAY	115	2.0	11	10	5	-	-	1.4	7.1	35	0.070	2.59	15
17.06	22.2	24.4	-	22.2	0.8	-0.2	3.9	4	clayy SILT to silty CLAY	115	2.0	12	11	7	-	-	1.5	7.7	44	0.070	2.77	15
17.23	23.4	25.6	-	23.4	1.6	-0.1	7.1	3	silty CLAY to CLAY	115	1.5	17	16	8	-	-	1.6	8.1	54	0.005	2.93	15
17.39	30.0	32.6	-	30.0	2.4	0.1	8.1	3	silty CLAY to CLAY	115	1.5	22	20	10	-	-	2.1	9.9	52	0.005	2.90	15
17.55	62.7	63.4	186.9	62.7	3.0	0.1	4.8	4	clayy SILT to silty CLAY	115	2.0	32	31	16	-	-	4.4	9.9	32	0.070	2.53	15
17.72	79.5	80.1	138.4	79.5	1.8	0.5	2.3	5	silty SAND to sandy SILT	120	4.0	20	20	17	60	40	-	-	20	0.200	2.22	16
17.88	108.2	108.8	155.0	108.2	2.1	1.3	1.9	5	silty SAND to sandy SILT	120	4.0	27	27	22	70	41	-	-	15	0.200	2.08	16
18.05	122.5	122.9	179.3	122.5	2.8	1.0	2.3	5	silty SAND to sandy SILT	120	4.0	31	31	25	74	42	-	-	16	0.200	2.10	16
18.21	124.7	124.8	196.4	124.7	3.4	-2.3	2.8	5	silty SAND to sandy SILT	120	4.0	31	31	26	74	42	-	-	18	0.200	2.16	16
18.37	115.2	115.0	206.1	115.1	3.8	-2.9	3.4	5	silty SAND to sandy SILT	120	4.0	29	29	25	72	42	-	-	21	0.200	2.25	16
18.54	97.7	97.3	210.0	97.6	4.0	-2.7	4.1	4	clayy SILT to silty CLAY	115	2.0	49	49	22	-	-	6.8	9.9	25	0.070	2.36	15
18.70	91.9	91.3	196.3	91.8	3.5	-2.6	3.9	4	clayy SILT to silty CLAY	115	2.0	46	46	21	-	-	6.4	9.9	25	0.070	2.36	15
18.87	80.5	79.8	199.7	80.4	3.5	-2.5	4.5	4	clayy SILT to silty CLAY	115	2.0	40	40	19	-	-	5.6	9.9	28	0.070	2.44	15
19.03	73.4	72.6	214.8	73.4	3.9	-2.2	5.4	4	clayy SILT to silty CLAY	115	2.0	36	37	18	-	-	5.1	9.9	32	0.070	2.54	15
19.19	76.6	75.6	221.7	76.6	4.2	-1.8	5.5	9	very stiff fine SOIL	120	2.0	38	38	19	58	39	-	-	32	0.250	2.53	30
19.36	86.6	85.3	229.0	86.6	4.5	-1.7	5.3	9	very stiff fine SOIL	120	2.0	43	43	21	62	40	-	-	30	0.250	2.48	30
19.52	89.1	87.5	239.5	89.1	4.9	-1.5	5.6	9	very stiff fine SOIL	120	2.0	44	45	21	63	40	-	-	30	0.250	2.49	30
19.69	96.2	94.3	232.6	96.2	4.8	-1.3	5.0	9	very stiff fine SOIL	120	2.0	47	48	22	65	40	-	-	28	0.250	2.44	30
19.85	93.4	91.3	239.4	93.4	5.0	-1.3	5.4	9	very stiff fine SOIL	120	2.0	46	47	22	64	40	-	-	29	0.250	2.47	30
20.01	96.0	93.6	236.5	96.0	4.9	-1.0	5.2	9	very stiff fine SOIL	120	2.0	47	48	22	65	40	-	-	28	0.250	2.45	30
20.18	90.5	88.0	258.1	90.5	5.6	-0.9	6.2	9	very stiff fine SOIL	120	2.0	44	45	22	63	40	-	-	32	0.250	2.53	30
20.34	99.4	96.5	266.2	99.4	6.0	-0.3	6.1	9	very stiff fine SOIL	120	2.0	48	50	23	66	40	-	-	31	0.250	2.50	30
20.51	112.9	109.3	262.2	112.9	6.0	0.1	5.4	9	very stiff fine SOIL	120	2.0	55	56	26	70	41	-	-	27	0.250	2.42	30
20.67	112.2	108.4	274.6	112.2	6.4	0.8	5.8	9	very stiff fine SOIL	120	2.0	54	56	26	70	41	-	-	29	0.250	2.45	30
20.83	126.7	122.1	295.6	126.7	7.4	1.0	5.9	9	very stiff fine SOIL	120	2.0	61	63	29	74	42	-	-	27	0.250	2.43	30
21.00	147.0	141.3	318.8	147.0	8.5	0.6	5.8	9	very stiff fine SOIL	120	2.0	71	73	33	78	42	-	-	26	0.250	2.39	30
21.16	178.8	171.5	331.0	178.8	9.1	0.6	5.1	9	very stiff fine SOIL	120	2.0	86	89	38	85	43	-	-	22	0.250	2.29	30
21.33	209.3	200.3	340.9	209.3	9.5	0.4	4.6	9	very stiff fine SOIL	120	2.0	100	100	43	90	44	-	-	19	0.250	2.21	30
21.49	236.1	225.4	359.7	236.1	10.2	0.3	4.4	9	very stiff fine SOIL	120	2.0	100	100	47	94	45	-	-	18	0.250	2.17	30
21.65	248.0	236.3	370.6	248.0	10.7	0.1	4.3	9	very stiff fine SOIL	120	2.0	100	100	49	95	45	-	-	18	0.250	2.16	30
21.82	222.3	211.3	355.6	222.3	10.2	0.1	4.6	9	very stiff fine SOIL	120	2.0	100	100	45	92	44	-	-	19	0.250	2.21	30
21.98	171.6	162.8	331.6	171.6	9.2	0.3	5.4	9	very stiff fine SOIL	120	2.0	81	86	37	83	43	-	-	24	0.250	2.33	30
22.15	153.9	145.7	314.1	153.9	8.4	0.4	5.5	9	very stiff fine SOIL	120	2.0	73	77	33	79	42	-	-	25	0.250	2.36	30
22.31	159.8	150.9	310.3	159.8	8.3	0.6	5.2	9	very stiff fine SOIL	120	2.0	75	80	34	81	43	-	-	24	0.250	2.33	30
22.47	166.0	156.4	304.8	166.0	8.1	0.5	4.9	9	very stiff fine SOIL	120	2.0	78	83	35	82	43	-	-	23	0.250	2.30	30
22.64	159.4	149.9	296.5	159.4	7.7	0.2	4.9	9	very stiff fine SOIL	120	2.0	75	80	33	80	43	-	-	23	0.250	2.31	30
22.80	140.2	131.5	260.6	140.2	6.2	0.1	4.5	9	very stiff fine SOIL	120	2.0	66	70	29	76	42	-	-	23	0.250	2.31	30
22.97	135.3	126.6	270.4	135.3	6.6	0.1	4.9	9	very stiff fine SOIL	120	2.0	63	68	29	75	42	-	-	25	0.250	2.35	30
23.13	140.1	130.8	273.8	140.1	6.8	0.0	4.9	9	very stiff fine SOIL	120	2.0	65	70	30	76	42	-	-	24	0.250	2.34	30
23.30	132.9	123.8	285.4	132.9	7.2	-0.1	5.5	9	very stiff fine SOIL	120	2.0	62	66	29	74	42	-	-	26	0.250	2.40	30
23.46	126.0	117.2	289.6	126.0	7.4	0.5	5.9	9	very stiff fine SOIL	120	2.0	59	63	28	72	41	-	-	28	0.250	2.44	30
23.62	140.5	130.4	290.8	140.6	7.5	0.6	5.4	9	very stiff fine SOIL	120	2.0	65	70	30	76	42	-	-	26	0.250	2.38	30
23.79	162.6	150.6	292.1	162.6	7.7	0.4	4.8	9	very stiff fine SOIL	120	2.0	75	81	33	81	43	-	-	22	0.250	2.30	30
23.95	183.3	169.4	292.4	183.3	7.6	0.2	4.2	9	very stiff fine SOIL	120	2.0	85	92	36	84	43	-	-	20	0.250	2.22	30
24.12	199.2	183.6	294.1	199.2	7.6	0.3	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	39	-	-	13.1	9.9	18	0.250	2.17	16
24.28	223.5	205.7	295.4	223.5	7.3	0.2	3.3	8	stiff SAND to clayy SAND	115	1.0	100	100	42	-	-	14.7	9.9	15	0.250	2.09	16
24.44	253.8	233.1	285.3	253.8	5.9	0.0	2.3	6	clean SAND to silty SAND	125	5.0	47	51	45	95	45	-	-	11	0.350	1.94	16
24.61	286.6	262.6	285.4	286.6	4.6	-0.3	1.6	6	clean SAND to silty SAND	125	5.0	53	57	47	95	45	-	-	8	0.350	1.77	16
24.77	313.5	286.6	322.3	313.5	6.2	-0.4	2.0	6	clean SAND to silty SAND	125	5.0	57	63	53	95	46	-	-	9	0.350	1.82	16
24.94	334.5	305.1	346.0	334.5	7.1	-0.6	2.1	6	clean SAND to silty SAND	125	5.0	61	67	56	95	46	-	-	9	0.350	1.84	16
25.10	332.9	302.9	352.5	332.8	7.7	-0.4	2.3	6	clean SAND to silty SAND	125	5.0	61	67	57	95	46	-	-	10	0.350	1.87	16
25.26	329.6	299.3	365.7	329.6	9.0	-0.7	2.7	8	stiff SAND to clayy SAND	115	1.0	100	100	57	-	-	21.8	9.9	11	0.250	1.93	16
25.43	339.6	307.8	378.5	339.6	9.6	-0.7	2.8	8	stiff SAND to clayy SAND	115	1.0	100	100	59	-	-	22.4	9.9	11	0.250	1.94	16
25.59	338.7	306.4	371.3	338.6	9.1	-0.9	2.7	8	stiff SAND to clayy SAND	115	1.0	100	100	58	-	-	22.4	9.9	11	0.250	1.92	16
25.76	347.4	313.7	369.1	347.3	8.6	-1.5	2.5	8	stiff SAND to clayy SAND	115	1.0	100	100	59	-	-	22.9	9.9	10	0.250	1.89	16
25.92	362.6	326.8	379.8	362.5	8.8	-1.6	2.4	8	stiff SAND to clayy SAND	115	1.0	100	100	61	-	-	23.9	9.9	10	0.250	1.87	16
26.08	384.0	345.4	401.5	383.9	9.6	-1.7	2.5	8	stiff SAND to clayy SAND	115	1.0	100	100	65	-	-	25.4	9.9	10	0.250	1.87	16
26.25	392.2	352.2	426.4	392.2	11.4	-1.9	2.9	8	stiff SAND to clayy SAND	115	1.0	100	100	67	-	-	25.9	9.9	11	0.250	1.92	16

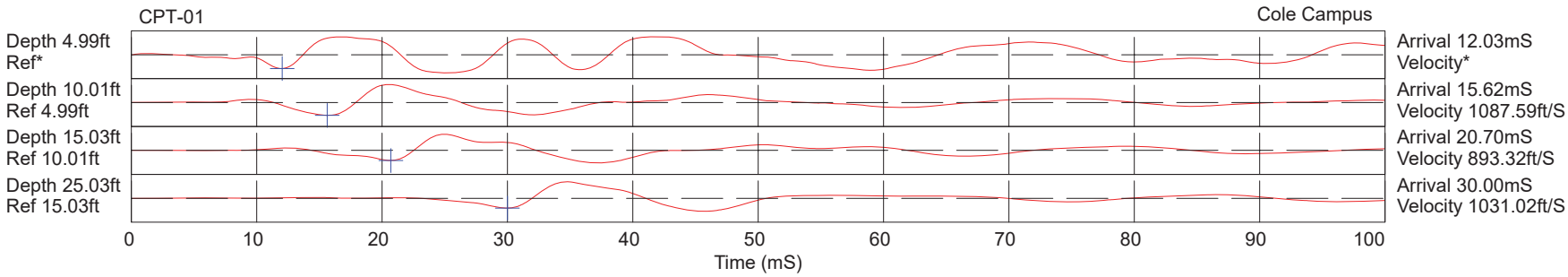
* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

CEL

Location	Cole Campus	Operator	JM-AJ	
Job Number	84-04726-PW	Cone Number	DDG1489	GPS
Hole Number	CPT-01	Date and Time	11/9/2019 9:27:06 AM	
Equilized Pressure	1.2	EST GW Depth During Test	14.8	





Hammer to Rod String Distance (ft): 5.83
* = Not Determined

COMMENT:

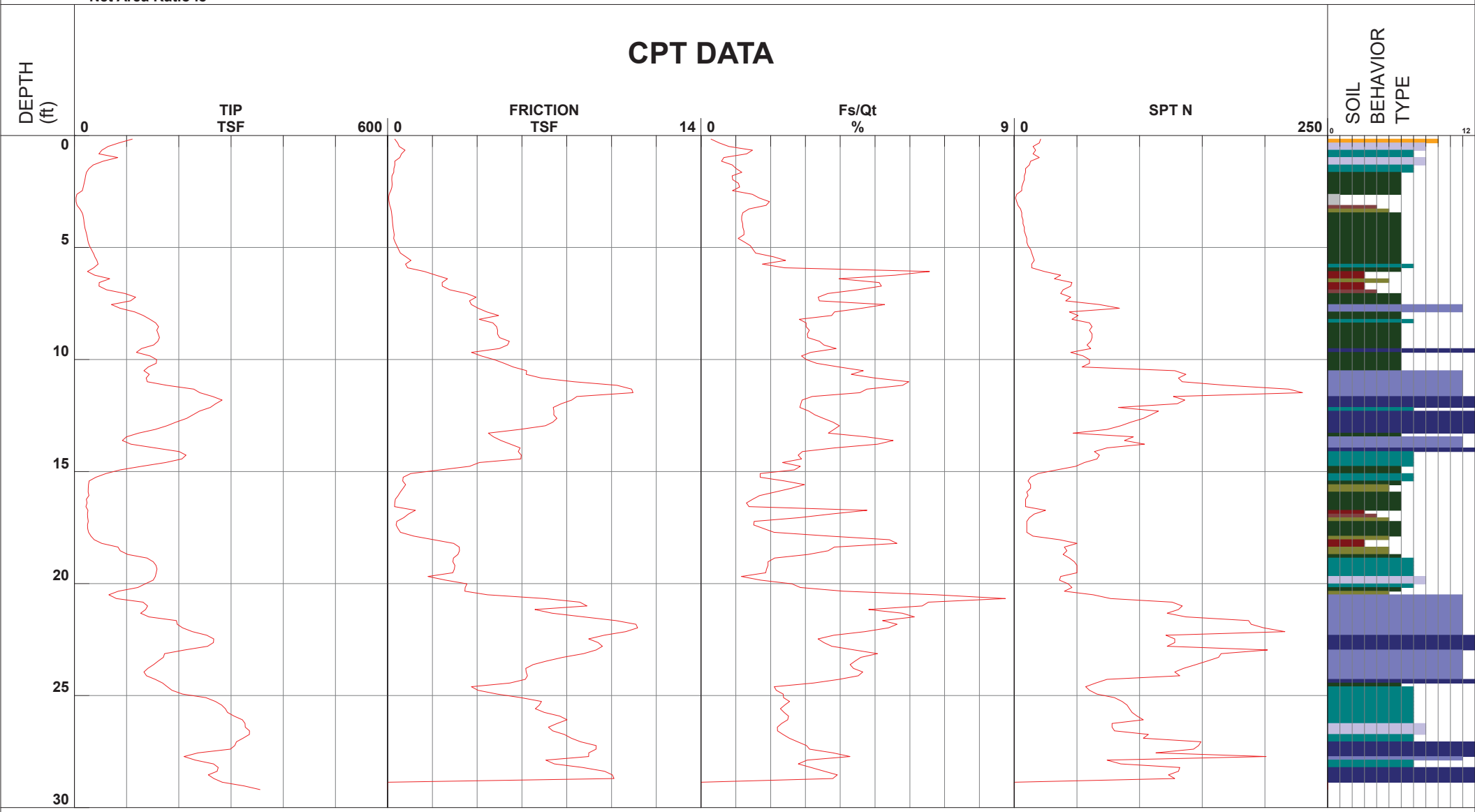
Middle Earth
Geo Testing Inc.

CEL

Project	Cole Campus	Operator	JM-AJ	Filename	SDF(325).cpt
Job Number	84-04726-PW	Cone Number	DDG1489	GPS	
Hole Number	CPT-02	Date and Time	11/9/2019 8:49:20 AM	Maximum Depth	29.20 ft
EST GW Depth During Test		13.40 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 10cm squared

S*Soil behavior type and SPT based on data from UBC-1983

Cole Campus

Project ID: CEL
Data File: SDF(325).cpt
CPT Date: 11/9/2019 8:49:20 AM
GW During Test: 13 ft

Sounding ID: CPT-02
Project No: 84-04726-PW
Cone/Rig: DDG1489

Depth ft	qc PS tsf	qc1n PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
0.33	85.2	136.6	136.6	85.2	0.4	0.0	0.5	6	clean SAND to silty SAND	125	5.0	27	17	23	77	48	-	-	5	0.350	1.63	16
0.49	64.4	103.2	117.3	64.4	0.5	0.1	0.8	6	clean SAND to silty SAND	125	5.0	21	13	19	68	48	-	-	9	0.350	1.84	16
0.66	52.6	84.4	119.5	52.6	0.8	0.2	1.5	5	silty SAND to sandy SILT	120	4.0	21	13	17	61	48	-	-	15	0.200	2.08	16
0.82	46.9	75.3	107.0	46.9	0.6	0.1	1.3	5	silty SAND to sandy SILT	120	4.0	19	12	15	58	48	-	-	15	0.200	2.08	16
0.98	83.1	133.3	138.3	83.1	0.5	0.2	0.7	6	clean SAND to silty SAND	125	5.0	27	17	23	76	48	-	-	6	0.350	1.70	16
1.15	54.8	87.9	98.5	54.8	0.3	0.0	0.6	6	clean SAND to silty SAND	125	5.0	18	11	16	63	48	-	-	9	0.350	1.82	16
1.31	36.2	58.1	81.7	36.2	0.3	0.0	0.9	5	silty SAND to sandy SILT	120	4.0	15	9	12	49	48	-	-	15	0.200	2.07	16
1.48	27.8	44.6	73.9	27.8	0.3	0.0	1.0	5	silty SAND to sandy SILT	120	4.0	11	7	9	40	46	-	-	19	0.200	2.20	16
1.64	23.2	37.2	72.4	23.2	0.3	0.0	1.2	5	silty SAND to sandy SILT	120	4.0	9	6	8	34	45	-	-	22	0.200	2.30	16
1.80	21.4	34.3	63.1	21.4	0.2	0.1	0.9	5	silty SAND to sandy SILT	120	4.0	9	5	7	32	44	-	-	21	0.200	2.27	16
1.97	20.2	32.4	62.1	20.2	0.2	0.0	0.9	5	silty SAND to sandy SILT	120	4.0	8	5	7	30	43	-	-	22	0.200	2.29	16
2.13	18.6	29.9	64.3	18.6	0.2	0.1	1.1	5	silty SAND to sandy SILT	120	4.0	7	5	7	27	42	-	-	25	0.200	2.36	16
2.30	16.9	27.1	63.0	16.9	0.2	0.1	1.1	5	silty SAND to sandy SILT	120	4.0	7	4	6	24	42	-	-	27	0.200	2.40	16
2.46	15.2	24.3	56.1	15.2	0.1	0.1	0.9	5	silty SAND to sandy SILT	120	4.0	6	4	6	20	41	-	-	26	0.200	2.40	16
2.62	4.8	7.8	-	4.8	0.1	0.1	1.5	3	silty CLAY to CLAY	115	1.5	5	3	2	-	-	0.3	9.7	55	0.005	2.95	15
2.79	3.0	4.8	-	3.0	0.0	0.1	1.8	3	silty CLAY to CLAY	115	1.5	3	2	2	-	-	0.2	5.5	71	0.005	3.18	15
2.95	3.3	5.2	-	3.3	0.1	0.1	2.1	3	silty CLAY to CLAY	115	1.5	3	2	2	-	-	0.2	5.7	71	0.005	3.17	15
3.12	5.2	8.3	-	5.2	0.1	0.2	1.9	3	silty CLAY to CLAY	115	1.5	6	3	3	-	-	0.4	8.8	57	0.005	2.98	15
3.28	10.5	16.8	-	10.5	0.1	0.2	1.4	4	clayy SILT to silty CLAY	115	2.0	8	5	4	-	-	0.7	9.9	37	0.070	2.63	15
3.45	14.8	23.7	62.6	14.8	0.2	0.2	1.2	5	silty SAND to sandy SILT	120	4.0	6	4	6	19	39	-	-	30	0.200	2.47	16
3.61	16.9	27.1	64.6	16.9	0.2	0.2	1.2	5	silty SAND to sandy SILT	120	4.0	7	4	6	24	39	-	-	27	0.200	2.42	16
3.77	17.9	28.8	65.9	17.9	0.2	0.2	1.2	5	silty SAND to sandy SILT	120	4.0	7	4	7	26	39	-	-	26	0.200	2.40	16
3.94	18.7	30.0	67.6	18.7	0.2	0.1	1.2	5	silty SAND to sandy SILT	120	4.0	7	5	7	27	39	-	-	26	0.200	2.39	16
4.10	20.1	32.2	69.7	20.1	0.2	0.2	1.2	5	silty SAND to sandy SILT	120	4.0	8	5	7	30	39	-	-	25	0.200	2.36	16
4.27	21.8	35.0	72.5	21.8	0.3	0.2	1.2	5	silty SAND to sandy SILT	120	4.0	9	5	8	32	40	-	-	24	0.200	2.34	16
4.43	23.6	37.8	74.9	23.6	0.3	0.2	1.3	5	silty SAND to sandy SILT	120	4.0	9	6	8	35	40	-	-	23	0.200	2.31	16
4.59	25.0	40.1	72.4	25.0	0.3	0.2	1.1	5	silty SAND to sandy SILT	120	4.0	10	6	9	37	40	-	-	21	0.200	2.25	16
4.76	26.6	42.7	79.2	26.6	0.3	0.2	1.3	5	silty SAND to sandy SILT	120	4.0	11	7	9	39	40	-	-	21	0.200	2.27	16
4.92	28.7	46.1	86.1	28.7	0.4	0.2	1.4	5	silty SAND to sandy SILT	120	4.0	12	7	10	41	40	-	-	22	0.200	2.27	16
5.09	32.7	52.4	93.3	32.7	0.5	0.1	1.5	5	silty SAND to sandy SILT	120	4.0	13	8	11	46	41	-	-	21	0.200	2.24	16
5.25	36.3	58.2	100.1	36.3	0.6	0.1	1.6	5	silty SAND to sandy SILT	120	4.0	15	9	12	49	41	-	-	20	0.200	2.22	16
5.41	39.2	62.9	118.2	39.2	0.8	0.1	2.1	5	silty SAND to sandy SILT	120	4.0	16	10	14	52	42	-	-	22	0.200	2.28	16
5.58	42.9	68.8	132.9	42.9	1.0	0.2	2.4	5	silty SAND to sandy SILT	120	4.0	17	11	15	55	42	-	-	22	0.200	2.29	16
5.74	45.3	72.7	117.9	45.3	0.8	0.4	1.8	5	silty SAND to sandy SILT	120	4.0	18	11	15	56	42	-	-	18	0.200	2.18	16
5.91	37.1	59.4	123.4	37.1	0.9	0.0	2.4	5	silty SAND to sandy SILT	120	4.0	15	9	13	50	41	-	-	24	0.200	2.34	16
6.07	25.0	40.1	-	25.1	1.6	2.7	6.7	3	silty CLAY to CLAY	115	1.5	27	17	11	-	-	1.7	9.9	44	0.005	2.77	15
6.23	38.6	61.4	202.0	38.7	2.2	4.5	5.6	4	clayy SILT to silty CLAY	115	2.0	31	19	16	-	-	2.7	9.9	35	0.070	2.59	15
6.40	67.6	106.1	215.6	67.6	2.7	2.5	4.0	9	very stiff fine SOIL	120	2.0	53	34	24	69	43	-	-	23	0.250	2.33	30
6.56	47.6	73.7	209.0	47.6	2.4	3.2	5.2	4	clayy SILT to silty CLAY	115	2.0	37	24	18	-	-	3.3	9.9	31	0.070	2.51	15
6.73	47.0	72.0	208.3	47.1	2.4	2.1	5.2	4	clayy SILT to silty CLAY	115	2.0	36	24	18	-	-	3.3	9.9	32	0.070	2.52	15
6.89	61.8	93.5	217.3	61.8	2.8	2.8	4.5	9	very stiff fine SOIL	120	2.0	47	31	22	65	43	-	-	27	0.250	2.40	30
7.05	96.6	144.6	246.1	96.7	3.5	2.2	3.7	8	stiff SAND to clayy SAND	115	1.0	100	97	31	-	-	6.4	9.9	19	0.250	2.21	16
7.22	117.4	173.8	265.8	117.5	4.0	1.7	3.4	8	stiff SAND to clayy SAND	115	1.0	100	100	36	-	-	7.8	9.9	17	0.250	2.14	16
7.38	107.4	157.3	250.5	107.5	3.7	1.8	3.4	8	stiff SAND to clayy SAND	115	1.0	100	100	33	-	-	7.1	9.9	18	0.250	2.17	16
7.55	70.8	102.6	251.6	70.8	3.7	2.8	5.3	9	very stiff fine SOIL	120	2.0	51	35	24	68	43	-	-	28	0.250	2.43	30
7.71	87.5	125.3	258.8	87.6	4.0	4.9	4.6	9	very stiff fine SOIL	120	2.0	63	44	28	74	44	-	-	24	0.250	2.33	30
7.87	115.5	163.8	273.1	115.6	4.4	3.4	3.9	8	stiff SAND to clayy SAND	115	1.0	100	100	35	-	-	7.6	9.9	19	0.250	2.20	16
8.04	131.9	185.2	292.5	132.0	5.0	3.0	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	39	-	-	8.7	9.9	18	0.250	2.16	16
8.20	144.7	201.2	272.7	144.8	4.1	3.6	2.8	5	silty SAND to sandy SILT	120	4.0	50	36	40	90	46	-	-	14	0.200	2.04	16
8.37	155.7	214.4	293.3	155.8	4.7	4.0	3.0	8	stiff SAND to clayy SAND	115	1.0	100	100	43	-	-	10.3	9.9	14	0.250	2.05	16
8.53	161.2	219.8	298.7	161.3	4.9	3.9	3.0	8	stiff SAND to clayy SAND	115	1.0	100	100	44	-	-	10.6	9.9	14	0.250	2.04	16
8.69	157.8	213.2	295.8	157.8	4.9	2.4	3.1	8	stiff SAND to clayy SAND	115	1.0	100	100	43	-	-	10.4	9.9	15	0.250	2.06	16
8.86	160.6	215.0	295.4	160.6	4.9	2.8	3.1	8	stiff SAND to clayy SAND	115	1.0	100	100	43	-	-	10.6	9.9	14	0.250	2.05	16
9.02	162.8	216.1	297.1	162.9	5.0	2.7	3.1	8	stiff SAND to clayy SAND	115	1.0	100	100	43	-	-	10.8	9.9	14	0.250	2.05	16
9.19	159.6	210.0	304.3	159.7	5.4	2.2	3.4	8	stiff SAND to clayy SAND	115	1.0	100	100	43	-	-	10.5	9.9	16	0.250	2.10	16
9.35	151.8	198.0	296.9	151.8	5.4	0.6	3.5	8	stiff SAND to clayy SAND	115	1.0	100	100	41	-	-	10.0	9.9	17	0.250	2.12	16
9.51	128.3	166.0	277.3	128.3	5.0	-1.4	3.9	8	stiff SAND to clayy SAND	115	1.0	100	100	35	-	-	8.5	9.9	19	0.250	2.20	16
9.68	118.7	152.3	236.6	118.7	3.7	0.0	3.2	5	silty SAND to sandy SILT	120	4.0	38	30	32	81	44	-	-	17	0.200	2.15	16
9.84	144.7	184.1	258.4	144.7	4.2	0.1	2.9	5	silty SAND to sandy SILT	120	4.0	46	36	37	87	45	-	-	15	0.200	2.07	16
10.01	157.4	198.5	277.8	157.4	4.8	-0.7	3.0	8	stiff SAND to clayy SAND	115	1.0	100	100	40	-	-	10.4	9.9	15	0.250	2.07	16
10.17	156.8	196.2	286.9	156.8	5.2	-2.4	3.3	8	stiff SAND to clayy SAND	115	1.0	100	100	40	-	-	10.3	9.9	16	0.250	2.10	16
10.34	141.4	175.6	290.8	141.3	5.6	-3.6	4.0	8	stiff SAND to clayy SAND	115	1.0	100	100	37	-	-	9.3	9.9	19	0.250	2.20	16
10.50	133.3	164.2	304.8	133.2	6.2	-3.4	4.7	9	very stiff fine SOIL	120	2.0	82	67	36	83	44	-	-	21	0.250	2.27	30
10.66	143.4	175.3	304.0	143.3	6.2	-3.0	4.3	9	very stiff fine SOIL	120	2.0	88	72	38	86	45	-	-	20	0.250	2.23	30
10.83	137.3	166.6	320.5	137.3	6.9	-2.8	5.0	9	very stiff fine SOIL	120	2.0	83	69	37	84	44	-	-	22	0.250	2.29	30
10.99	139.5	167.9	359.2	139.5	8.3	-1.3	6.0	9	very stiff fine SOIL	120	2.0	84	70	38	84	44	-	-	25	0.250	2.36	30
11.16	176.8	211.3	406.5	176.8	10.2	0.6	5.8	9	very stiff fine SOIL	120	2.0	100	88	47	92	45	-	-	22	0.250	2.29	30
11.32	228.7	271.3	429.8	228.7	10.9	0.2	4.8	9	very stiff fine SOIL	120	2.0	100	100	57	95	46	-	-	18	0.250	2.16	30
11.48	240.2	282.8	432.8	240.2	11.0	0.1	4.6	9	very stiff fine SOIL	120	2.0	100	100	59	95	47	-	-	17	0.250	2.14	30
11.65	264.8	309.6	396.3	264.8	8.5	0.1	3.2	8	stiff SAND to clayy SAND	115	1.0	100	100	60	-	-	17.5	9.9	13	0.250	1.98	16
11.81	282.9	328.5	402.4	282.9	8.2	0.0	2.9	8	stiff SAND to clayy SAND	115	1.0	100	100	63	-	-	18.7	9.9	11	0.250	1.94	16
11.98	270.6	312.2	384.3	270.6	7.8	-0.1	2.9	8	stiff SAND to clayy SAND	115	1.0	100	100	60	-	-	17.9	9.9	11	0.250	1.94	16
12.14	260.3	298.2	369.4	260.2	7.4	-1.3	2.8	8	stiff SAND to clayy SAND	115	1.0	100	100	57	-	-	17.2	9.9	12	0.250	1.95	16
12.30	239.5	272.6	355.0	239.5	7.4	-0.8	3.1	8	stiff SAND to clayy SAND	115	1.0	100	100	54	-	-	15.8	9.9	13	0.250	2.00	16
12.47	227.0	256.7	346.2	227.0	7.4	-0.7	3.3	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	15.0	9.9	14	0.250	2.03	16
12.63	214.9	241.6	341.4	214.9	7.6	-0.7	3.5	8	stiff SAND to clayy SAND	115	1.0	100	100	49	-	-	14.2	9.9	15	0.250	2.08	16
12.80	194.4	217.1	327.7	194.4	7.4	-0.4	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	45	-	-	12.8	9.9	17	0.250	2.13	16
12.96	177.3	196.8	313.7	177.3	7.0	-0.2	4.0	8	stiff SAND to clayy SAND	115	1.0	100	100	41	-	-	11.7	9.9	18	0.250	2.17	16
13.12	154.4	170.9	280.3	154.4	5.9	-0.2	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	36	-	-	10.2	9.9	19	0.250	2.19	16
13.29	122.9	135.7	237.7	122.9	4.5	-0.7	3.7	8	stiff SAND to clayy SAND	115	1.0	100	100	29	-	-	8.1	9.9	20	0.250	2.23	16
13.45	99.7	109.7	244.7	99.7	4.7	-0.4	4.8	9	very stiff fine SOIL	120	2.0	55	50	25	70	42	-	-	26	0.250	2.38	30
13.62	91.8	100.7	256.9	91.8	5.1	0.4	5.6	9	very stiff fine SOIL	120	2.0	50	46	24	67	41	-	-	29	0.250	2.45	30
13.78	108.2	118.4	265.8	108.2	5.5	1.3	5.1	9	very stiff fine SOIL	120	2.0	59	54	27	73	42	-	-	26	0.250	2.38	30
13.94	153.9	167.9	278.3	154.0	5.9	1.4	3.9	8	stiff SAND to clayy SAND	115	1.0	100	100	36	-	-	10.1	9.9	19	0.250	2.20	16
14.11	200.5	218.1	293.0	200.5	5.8	0.0	2.9	8	stiff SAND to clayy SAND	115	1.0	100	100	43	-	-	13.2	9.9	14	0.250	2.03	16
14.27	213.9	232.1	302.0	213.9	6.0	-0.8	2.8	8	stiff SAND to clayy SAND	115	1.0	100	100	46	-	-	14.1	9.9	13	0.250	2.00	16
14.44	205.9	222.8	296.8	205.9	6.0	-1.1	2.9	8	stiff SAND to clayy SAND	115	1.0	100	100	44	-	-	13.6	9.9	14	0.250	2.02	16
14.60	175.1	188.9	243.3	175.0	4.1	-1.1	2.4	5	silty SAND to sandy SILT	120	4.0	47	44	37	88	44	-	-	13	0.200	1.99	16
14.76	128.6	138.3	212.6	128.6	3.7	-0.6	2.9	5	silty SAND to sandy SILT	120	4.0	35	32	29	78	43	-	-	17	0.200	2.14	16
14.93	87.8	94.2	164.8	87.8	2.4	-0.4	2.7	5	silty SAND to sandy SILT	120	4.0	24	22	20	65	41	-	-	20	0.200	2.23	16
15.09	60.4	64.7	109.9	60.5	1.0	0.2	1.7	5	silty SAND to sandy SILT	120	4.0	16	15	14	53	39	-	-	19	0.200	2.21	16
15.26	40.9	43.7	92.3	40.9	0.7	0.5	1.7	5	silty SAND to sandy SILT	120	4.0	11	10	10	40	37	-	-	24	0.200	2.35	16
15.42	28.2	30.0	95.4	28.2	0.7	0.6	2.5	4	clayy SILT to silty CLAY	115	2.0	15	14	8	-	-	1.9	9.9	34	0.070	2.58	15

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

Project ID: CEL
Data File: SDF(325).cpt
CPT Date: 11/9/2019 8:49:20 AM
GW During Test: 13 ft

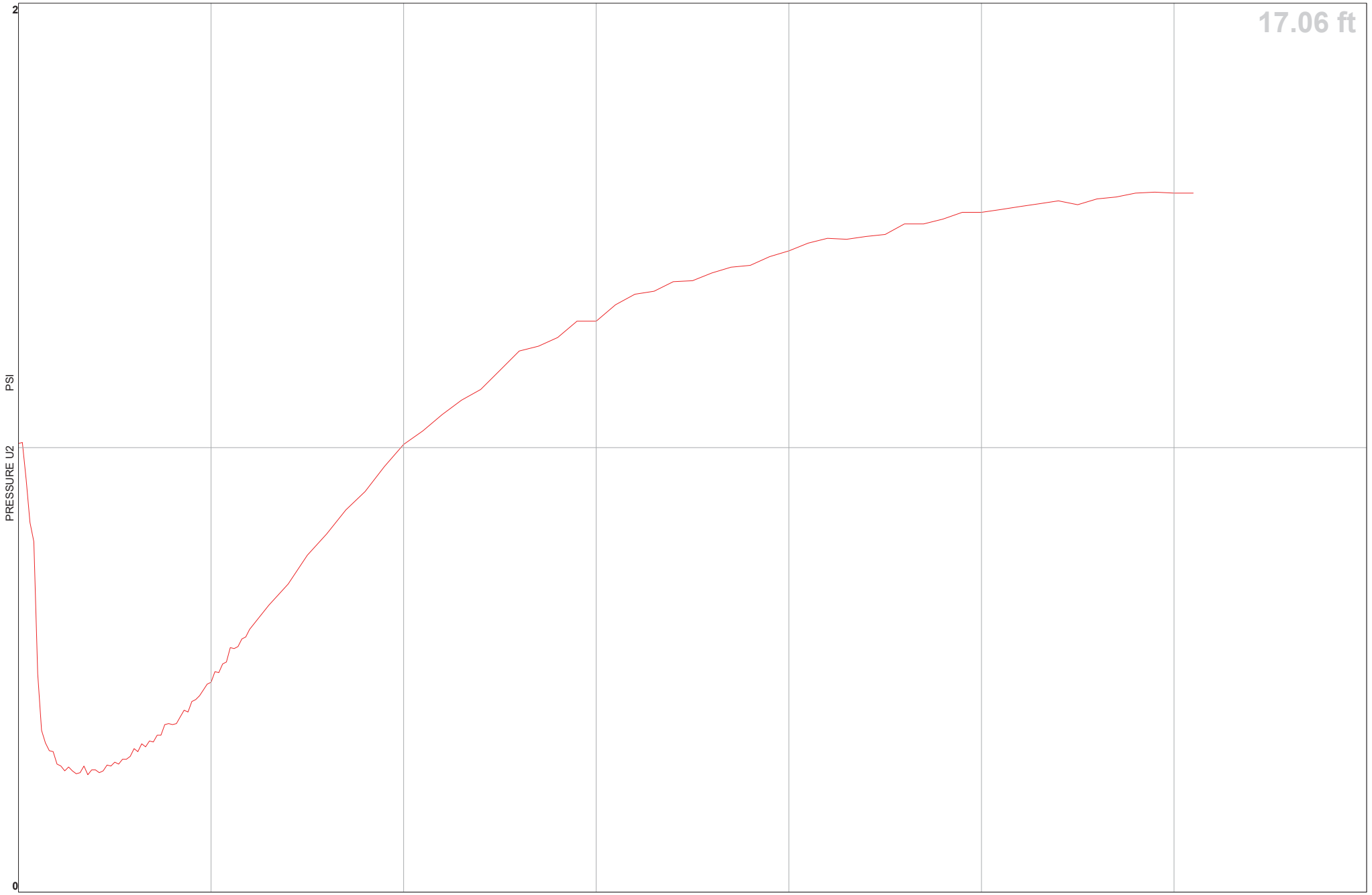
Sounding ID: CPT-02
Project No: 84-04726-PW
Cone/Rig: DDG1489

Depth ft	qc PS tsf	qc1n PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR - -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk - -
15.58	27.0	32.2	-	27.0	0.8	0.7	3.1	4	clayy SILT to silty CLAY	115	2.0	16	14	8	-	-	1.8	9.9	36	0.070	2.61	15
15.75	26.6	29.4	-	26.6	0.7	0.8	2.7	4	clayy SILT to silty CLAY	115	2.0	15	13	8	-	-	1.8	9.9	36	0.070	2.61	15
15.91	26.4	27.9	88.1	26.5	0.6	0.8	2.2	4	clayy SILT to silty CLAY	115	2.0	14	13	7	-	-	1.8	9.9	34	0.070	2.57	15
16.08	27.8	29.3	79.8	27.8	0.5	0.7	1.7	5	silty SAND to sandy SILT	120	4.0	7	7	7	26	34	-	-	30	0.200	2.49	16
16.24	23.1	24.2	71.2	23.1	0.3	0.8	1.5	5	silty SAND to sandy SILT	120	4.0	6	6	6	20	33	-	-	32	0.200	2.53	16
16.40	24.2	25.4	68.3	24.3	0.3	0.7	1.4	5	silty SAND to sandy SILT	120	4.0	6	6	6	22	33	-	-	30	0.200	2.48	16
16.57	22.2	23.2	68.2	22.2	0.3	0.8	1.4	5	silty SAND to sandy SILT	120	4.0	6	6	6	19	32	-	-	32	0.200	2.53	16
16.73	25.9	29.8	-	25.9	1.2	0.8	5.0	3	silty CLAY to CLAY	115	1.5	20	17	8	-	-	1.8	9.4	45	0.005	2.78	15
16.90	24.9	28.5	-	25.0	0.9	0.9	3.9	4	clayy SILT to silty CLAY	115	2.0	14	12	8	-	-	1.7	9.0	42	0.070	2.72	15
17.06	25.6	29.1	-	25.6	0.7	1.0	2.9	4	clayy SILT to silty CLAY	115	2.0	15	13	8	-	-	1.7	9.2	37	0.070	2.63	15
17.23	26.7	27.6	75.1	26.7	0.4	2.2	1.6	5	silty SAND to sandy SILT	120	4.0	7	7	7	24	33	-	-	30	0.200	2.49	16
17.39	24.9	25.7	73.3	25.0	0.4	2.8	1.6	5	silty SAND to sandy SILT	120	4.0	6	6	6	22	33	-	-	31	0.200	2.52	16
17.55	25.6	26.3	80.2	25.6	0.5	2.9	1.9	4	clayy SILT to silty CLAY	115	2.0	13	13	7	-	-	1.7	9.1	33	0.070	2.55	15
17.72	27.3	28.0	87.7	27.4	0.6	3.3	2.2	4	clayy SILT to silty CLAY	115	2.0	14	14	7	-	-	1.9	9.7	34	0.070	2.57	15
17.88	31.7	35.2	-	31.8	1.2	3.3	3.8	4	clayy SILT to silty CLAY	115	2.0	18	16	9	-	-	2.2	9.9	38	0.070	2.65	15
18.05	37.9	41.8	-	37.9	2.0	3.6	5.6	3	silty CLAY to CLAY	115	1.5	28	25	11	-	-	2.6	9.9	41	0.005	2.71	15
18.21	52.4	57.6	-	52.5	3.0	3.7	5.7	4	clayy SILT to silty CLAY	115	2.0	29	26	15	-	-	3.6	9.9	36	0.070	2.62	15
18.37	83.5	84.9	189.6	83.6	3.2	3.0	3.9	4	clayy SILT to silty CLAY	115	2.0	42	42	20	-	-	5.8	9.9	26	0.070	2.38	15
18.54	87.8	89.0	188.8	87.8	3.2	2.7	3.7	4	clayy SILT to silty CLAY	115	2.0	44	44	20	-	-	6.1	9.9	24	0.070	2.35	15
18.70	102.2	103.3	186.0	102.2	3.1	3.1	3.1	5	silty SAND to sandy SILT	120	4.0	26	26	22	68	41	-	-	21	0.200	2.25	16
18.87	139.0	140.2	190.0	139.0	2.9	1.6	2.1	5	silty SAND to sandy SILT	120	4.0	35	35	28	78	43	-	-	14	0.200	2.04	16
19.03	151.0	152.0	194.8	151.0	2.9	-1.2	1.9	6	clean SAND to silty SAND	125	5.0	30	30	30	81	43	-	-	13	0.350	1.99	16
19.19	156.3	156.8	199.1	156.2	3.0	-4.9	1.9	6	clean SAND to silty SAND	125	5.0	31	31	31	82	43	-	-	12	0.350	1.98	16
19.36	158.2	158.3	199.2	158.1	3.0	-6.4	1.9	6	clean SAND to silty SAND	125	5.0	32	32	31	82	43	-	-	12	0.350	1.97	16
19.52	156.6	156.3	196.5	156.5	2.9	-6.3	1.9	6	clean SAND to silty SAND	125	5.0	31	31	30	82	43	-	-	12	0.350	1.97	16
19.69	155.0	154.3	173.0	154.9	1.8	-6.3	1.2	6	clean SAND to silty SAND	125	5.0	31	31	28	81	43	-	-	9	0.350	1.82	16
19.85	150.9	149.8	186.0	150.8	2.6	-6.6	1.7	6	clean SAND to silty SAND	125	5.0	30	30	29	80	43	-	-	12	0.350	1.95	16
20.01	135.8	134.4	201.0	135.7	3.5	-6.5	2.6	5	silty SAND to sandy SILT	120	4.0	34	34	28	77	42	-	-	16	0.200	2.12	16
20.18	121.3	119.8	195.2	121.2	3.5	-5.9	2.9	5	silty SAND to sandy SILT	120	4.0	30	30	25	73	42	-	-	18	0.200	2.18	16
20.34	84.2	83.0	195.1	84.1	3.4	-5.8	4.2	4	clayy SILT to silty CLAY	115	2.0	41	42	19	-	-	5.9	9.9	27	0.070	2.41	15
20.51	65.9	67.5	-	65.8	4.5	-4.9	6.9	9	very stiff fine SOIL	120	2.0	34	33	18	54	38	-	-	37	0.250	2.64	30
20.67	80.4	82.0	-	80.4	7.0	-4.1	8.9	9	very stiff fine SOIL	120	2.0	41	40	22	60	39	-	-	39	0.250	2.67	30
20.83	131.4	128.5	327.3	131.3	8.6	-2.8	6.6	9	very stiff fine SOIL	120	2.0	64	66	31	75	42	-	-	29	0.250	2.45	30
21.00	140.2	136.8	332.8	140.1	8.9	-3.2	6.4	9	very stiff fine SOIL	120	2.0	68	70	32	77	42	-	-	28	0.250	2.43	30
21.16	136.5	132.9	275.4	136.5	6.6	-2.9	4.9	9	very stiff fine SOIL	120	2.0	66	68	30	76	42	-	-	24	0.250	2.34	30
21.33	127.0	123.3	295.9	126.9	7.3	-3.0	5.8	9	very stiff fine SOIL	120	2.0	62	63	29	74	42	-	-	27	0.250	2.42	30
21.49	142.8	138.3	327.4	142.8	8.8	-1.1	6.2	9	very stiff fine SOIL	120	2.0	69	71	32	78	42	-	-	27	0.250	2.41	30
21.65	195.4	188.9	356.2	195.4	10.2	-1.7	5.3	9	very stiff fine SOIL	120	2.0	94	98	42	88	44	-	-	22	0.250	2.28	30
21.82	196.8	189.8	374.3	196.8	11.1	-1.5	5.7	9	very stiff fine SOIL	120	2.0	95	98	42	88	44	-	-	23	0.250	2.31	30
21.98	207.3	199.5	375.6	207.3	11.2	-1.4	5.4	9	very stiff fine SOIL	120	2.0	100	100	44	90	44	-	-	22	0.250	2.28	30
22.15	225.9	216.9	366.9	225.9	10.6	-1.4	4.7	9	very stiff fine SOIL	120	2.0	100	100	46	93	44	-	-	19	0.250	2.21	30
22.31	253.5	242.8	355.9	253.5	9.7	-1.3	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	50	-	-	16.7	9.9	16	0.250	2.11	16
22.47	266.9	255.1	349.0	266.9	9.0	-1.4	3.4	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	17.6	9.9	14	0.250	2.05	16
22.64	266.3	254.0	355.0	266.2	9.4	-1.7	3.5	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	17.6	9.9	15	0.250	2.07	16
22.80	255.2	242.9	353.6	255.2	9.6	-2.0	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	50	-	-	16.8	9.9	16	0.250	2.10	16
22.97	211.2	200.6	336.2	211.2	9.3	-2.0	4.4	9	very stiff fine SOIL	120	2.0	100	100	43	90	44	-	-	19	0.250	2.20	30
23.13	172.6	163.6	320.6	172.6	8.7	-1.5	5.1	9	very stiff fine SOIL	120	2.0	82	86	36	83	43	-	-	23	0.250	2.30	30
23.30	170.3	161.0	299.7	170.3	7.8	-1.7	4.6	9	very stiff fine SOIL	120	2.0	81	85	35	83	43	-	-	21	0.250	2.27	30
23.46	160.5	151.4	282.7	160.4	7.1	-2.2	4.5	9	very stiff fine SOIL	120	2.0	76	80	33	81	43	-	-	22	0.250	2.27	30
23.62	151.8	142.9	268.1	151.7	6.5	-2.4	4.3	9	very stiff fine SOIL	120	2.0	71	76	31	79	42	-	-	22	0.250	2.28	30
23.79	140.8	132.3	259.9	140.7	6.2	-2.7	4.4	9	very stiff fine SOIL	120	2.0	66	70	29	76	42	-	-	23	0.250	2.30	30
23.95	133.2	124.9	260.5	133.2	6.2	-3.0	4.7	9	very stiff fine SOIL	120	2.0	62	67	28	74	42	-	-	24	0.250	2.34	30
24.12	138.1	129.2	261.1	138.1	6.2	-3.1	4.6	9	very stiff fine SOIL	120	2.0	65	69	29	75	42	-	-	23	0.250	2.32	30
24.28	154.9	144.5	258.7	154.8	6.1	-3.3	4.0	8	stiff SAND to clayy SAND	115	1.0	100	100	31	-	-	10.2	9.9	21	0.250	2.25	16
24.44	168.8	157.2	245.2	168.8	5.5	-3.8	3.3	5	silty SAND to sandy SILT	120	4.0	39	42	33	82	43	-	-	17	0.200	2.15	16
24.61	177.8	165.2	213.1	177.7	3.7	-4.8	2.1	5	silty SAND to sandy SILT	120	4.0	41	44	32	84	43	-	-	13	0.200	1.99	16
24.77	186.8	173.2	222.6	186.7	4.0	-6.2	2.2	5	silty SAND to sandy SILT	120	4.0	43	47	34	85	43	-	-	13	0.200	1.99	16
24.94	207.3	191.8	247.2	207.1	4.9	-6.2	2.4	5	silty SAND to sandy SILT	120	4.0	48	52	38	88	44	-	-	13	0.200	1.99	16
25.10	251.9	232.5	286.5	251.7	6.0	-6.5	2.4	6	clean SAND to silty SAND	125	5.0	47	50	45	95	45	-	-	11	0.350	1.94	16
25.26	270.0	248.7	308.9	269.9	6.9	-7.0	2.6	8	stiff SAND to clayy SAND	115	1.0	100	100	48	-	-	17.8	9.9	12	0.250	1.95	16
25.43	281.8	259.1	313.4	281.7	6.8	-7.5	2.4	6	clean SAND to silty SAND	125	5.0	52	56	49	95	45	-	-	11	0.350	1.92	16
25.59	289.1	265.1	314.5	288.9	6.6	-7.7	2.3	6	clean SAND to silty SAND	125	5.0	53	58	50	95	45	-	-	10	0.350	1.90	16
25.76	293.3	268.4	321.7	293.1	7.0	-8.1	2.4	6	clean SAND to silty SAND	125	5.0	54	59	51	95	45	-	-	11	0.350	1.91	16
25.92	305.8	279.2	337.4	305.6	7.7	-8.1	2.5	8	stiff SAND to clayy SAND	115	1.0	100	100	53	-	-	20.2	9.9	11	0.250	1.92	16
26.08	321.8	293.3	350.1	321.6	8.0	-8.2	2.5	8	stiff SAND to clayy SAND	115	1.0	100	100	56	-	-	21.2	9.9	11	0.250	1.91	16
26.25	326.9	297.4	346.8	326.8	7.6	-8.1	2.3	6	clean SAND to silty SAND	125	5.0	59	65	56	95	46	-	-	10	0.350	1.88	16
26.41	327.3	297.1	341.5	327.2	7.2	-8.2	2.2	6	clean SAND to silty SAND	125	5.0	59	65	55	95	46	-	-	9	0.350	1.86	16
26.58	335.4	303.7	348.0	335.2	7.4	-8.2	2.2	6	clean SAND to silty SAND	125	5.0	61	67	56	95	46	-	-	9	0.350	1.85	16
26.74	335.1	302.7	353.6	334.9	7.9	-8.3	2.4	6	clean SAND to silty SAND	125	5.0	61	67	57	95	46	-	-	10	0.350	1.88	16
26.90	323.1	291.3	350.1	322.9	8.2	-8.3	2.6	8	stiff SAND to clayy SAND	115	1.0	100	100	55	-	-	21.3	9.9	11	0.250	1.91	16
27.07	310.4	279.3	348.3	310.2	8.6	-8.3	2.8	8	stiff SAND to clayy SAND	115	1.0	100	100	54	-	-	20.5	9.9	12	0.250	1.96	16
27.23	307.1	275.8	355.8	306.9	9.3	-8.4	3.0	8	stiff SAND to clayy SAND	115	1.0	100	100	54	-	-	20.3	9.9	13	0.250	1.99	16
27.40	298.5	267.6	351.3	298.4	9.3	-8.4	3.1	8	stiff SAND to clayy SAND	115	1.0	100	100	53	-	-	19.7	9.9	13	0.250	2.01	16
27.56	237.0	212.1	323.1	236.8	9.0	-8.3	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	44	-	-	15.6	9.9	17	0.250	2.14	16
27.72	209.9	187.5	316.9	209.8	9.0	-7.4	4.3	9	very stiff fine SOIL	120	2.0	94	100	40	88	43	-	-	19	0.250	2.21	30
27.89	231.7	206.6	287.5	231.6	7.1	-7.0	3.1	8	stiff SAND to clayy SAND	115	1.0	100	100	42	-	-	15.3	9.9	15	0.250	2.06	16
28.05	266.4	237.1	307.5	266.3	7.4	-7.3	2.8	8	stiff SAND to clayy SAND	115	1.0	100	100	47	-	-	17.6	9.9	13	0.250	2.00	16
28.22	275.5	244.7	330.1	275.3	8.7	-8.1	3.2	8	stiff SAND to clayy SAND	115	1.0	100	100	49	-	-	18.2	9.9	14	0.250	2.04	16
28.38	273.2	242.3	344.0	273.1	9.7	-8.3	3.6	8	stiff SAND to clayy SAND	115	1.0	100	100	49	-	-	18.0	9.9	15	0.250	2.08	16
28.54	256.5	227.0	343.9	256.3	10.0	-8.2	3.9	8	stiff SAND to clayy SAND	115	1.0	100	100	47	-	-	16.9	9.9	17	0.250	2.13	16
28.71	267.2	236.1	347.8	267.1	10.1	-8.0	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	48	-	-	17.6	9.9	16	0.250	2.11	16

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

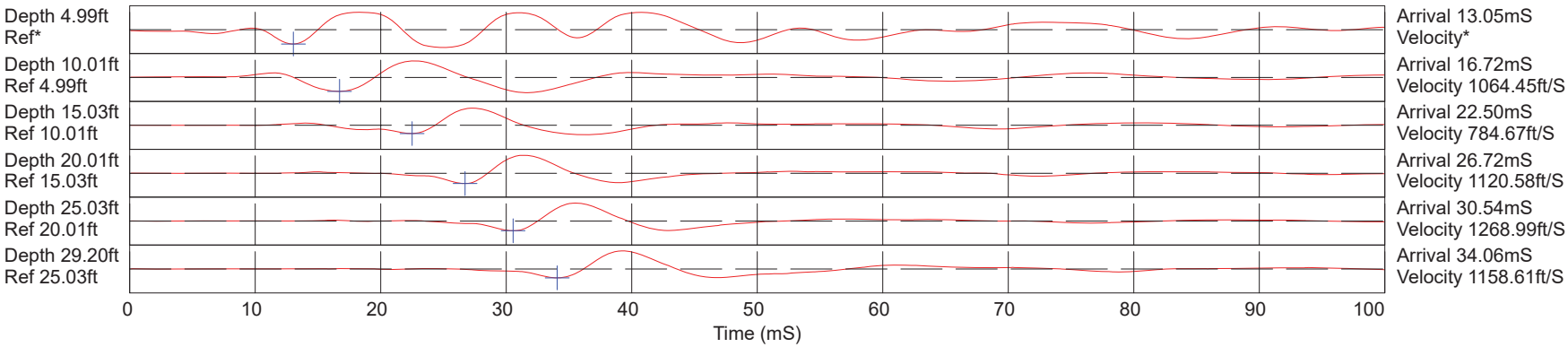
CEL

Location	Cole Campus	Operator	JM-AJ	
Job Number	84-04726-PW	Cone Number	DDG1489	GPS
Hole Number	CPT-02	Date and Time	11/9/2019 8:49:20 AM	
Equilized Pressure	1.5	EST GW Depth During Test	13.4	



CPT-01

Cole Campus



Hammer to Rod String Distance (ft): 5.83

* = Not Determined

COMMENT:

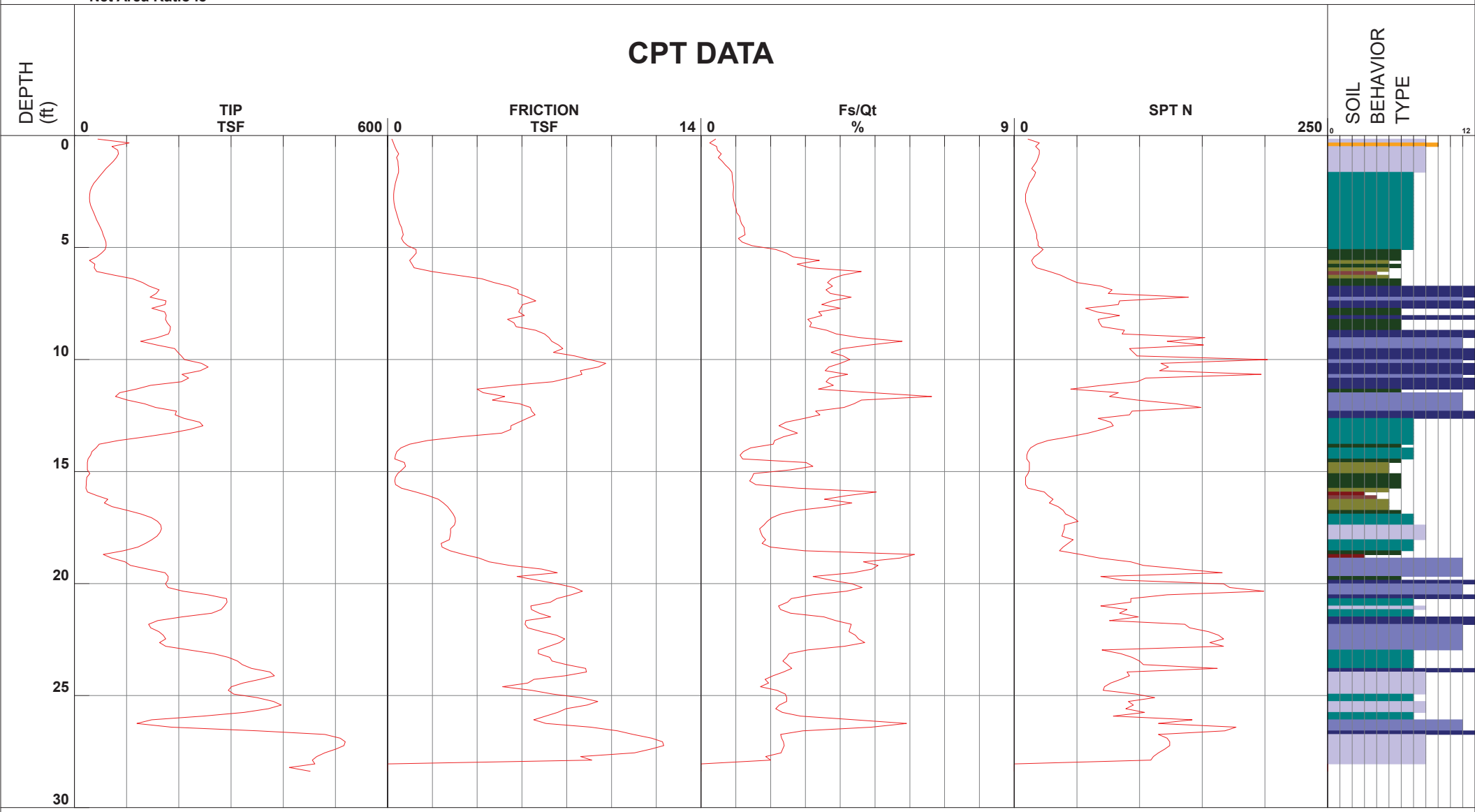
Middle Earth
Geo Testing Inc.

CEL

Project	Cole Campus	Operator	JM-AJ	Filename	SDF(324).cpt
Job Number	84-04726-PW	Cone Number	DDG1489	GPS	
Hole Number	CPT-03	Date and Time	11/9/2019 7:51:37 AM	Maximum Depth	28.38 ft
EST GW Depth During Test		14.00 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 10cm squared

S*Soil behavior type and SPT based on data from UBC-1983

Cole Campus

Project ID: CEL
Data File: SDF(324).cpt
CPT Date: 11/9/2019 7:51:37 AM
GW During Test: 14 ft

Sounding ID: CPT-03
Project No: 84-04726-PW
Cone/Rig: DDG1489

Depth ft	qc PS tsf	qc1n PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
0.33	104.9	168.3	168.3	104.9	0.3	0.1	0.2	6	clean SAND to silty SAND	125	5.0	34	21	27	84	48	-	-	5	0.350	1.39	16
0.49	71.9	115.3	116.1	71.9	0.3	0.8	0.4	6	clean SAND to silty SAND	125	5.0	23	14	20	72	48	-	-	5	0.350	1.66	16
0.66	83.1	133.3	133.3	83.1	0.4	0.5	0.5	6	clean SAND to silty SAND	125	5.0	27	17	23	76	48	-	-	5	0.350	1.62	16
0.82	84.3	135.2	136.9	84.3	0.5	0.1	0.6	6	clean SAND to silty SAND	125	5.0	27	17	24	77	48	-	-	5	0.350	1.66	16
0.98	80.5	129.1	129.1	80.5	0.4	-0.1	0.5	6	clean SAND to silty SAND	125	5.0	26	16	22	75	48	-	-	5	0.350	1.64	16
1.15	74.7	119.8	125.8	74.7	0.5	-0.2	0.6	6	clean SAND to silty SAND	125	5.0	24	15	21	73	48	-	-	6	0.350	1.72	16
1.31	67.5	108.3	118.9	67.5	0.5	-0.2	0.7	6	clean SAND to silty SAND	125	5.0	22	14	20	70	48	-	-	8	0.350	1.79	16
1.48	60.3	96.7	111.9	60.3	0.5	-0.1	0.8	6	clean SAND to silty SAND	125	5.0	19	12	18	66	48	-	-	10	0.350	1.87	16
1.64	54.6	87.5	106.1	54.5	0.5	-0.2	0.9	6	clean SAND to silty SAND	125	5.0	17	11	17	63	48	-	-	11	0.350	1.92	16
1.80	48.9	78.4	98.6	48.9	0.4	-0.2	0.9	6	clean SAND to silty SAND	125	5.0	16	10	15	59	48	-	-	12	0.350	1.97	16
1.97	43.0	68.9	90.8	43.0	0.4	-0.1	0.9	6	clean SAND to silty SAND	125	5.0	14	9	14	55	47	-	-	13	0.350	2.01	16
2.13	37.2	59.7	83.7	37.2	0.3	-0.2	0.9	5	silty SAND to sandy SILT	120	4.0	15	9	12	50	46	-	-	15	0.200	2.07	16
2.30	33.1	53.1	78.8	33.1	0.3	-0.2	0.9	5	silty SAND to sandy SILT	120	4.0	13	8	11	46	45	-	-	16	0.200	2.12	16
2.46	30.6	49.0	75.5	30.6	0.3	-0.2	0.9	5	silty SAND to sandy SILT	120	4.0	12	8	10	43	44	-	-	17	0.200	2.14	16
2.62	29.2	46.9	73.5	29.2	0.3	-0.2	0.9	5	silty SAND to sandy SILT	120	4.0	12	7	10	42	44	-	-	18	0.200	2.16	16
2.79	28.9	46.4	73.3	28.9	0.3	-0.1	0.9	5	silty SAND to sandy SILT	120	4.0	12	7	10	42	43	-	-	18	0.200	2.16	16
2.95	29.4	47.1	74.5	29.4	0.3	-0.1	1.0	5	silty SAND to sandy SILT	120	4.0	12	7	10	42	43	-	-	18	0.200	2.16	16
3.12	31.0	49.7	77.3	31.0	0.3	-0.1	1.0	5	silty SAND to sandy SILT	120	4.0	12	8	10	44	43	-	-	17	0.200	2.15	16
3.28	33.8	54.2	81.8	33.8	0.3	-0.1	1.0	5	silty SAND to sandy SILT	120	4.0	14	8	11	47	43	-	-	17	0.200	2.13	16
3.45	37.1	59.5	86.5	37.1	0.4	-0.1	1.0	5	silty SAND to sandy SILT	120	4.0	15	9	12	50	43	-	-	16	0.200	2.10	16
3.61	39.8	63.8	92.2	39.8	0.4	-0.1	1.1	5	silty SAND to sandy SILT	120	4.0	16	10	13	52	44	-	-	16	0.200	2.09	16
3.77	42.6	68.3	96.5	42.6	0.5	-0.1	1.1	5	silty SAND to sandy SILT	120	4.0	17	11	14	54	44	-	-	15	0.200	2.08	16
3.94	46.2	74.1	102.3	46.2	0.5	-0.1	1.2	5	silty SAND to sandy SILT	120	4.0	19	12	15	57	44	-	-	15	0.200	2.06	16
4.10	49.7	79.7	109.1	49.7	0.6	0.0	1.2	5	silty SAND to sandy SILT	120	4.0	20	12	16	60	44	-	-	14	0.200	2.05	16
4.27	52.7	84.5	113.5	52.7	0.7	-0.1	1.3	6	clean SAND to silty SAND	125	5.0	17	11	17	61	44	-	-	14	0.350	2.03	16
4.43	55.1	88.4	117.4	55.1	0.7	-0.1	1.3	6	clean SAND to silty SAND	125	5.0	18	11	17	63	44	-	-	14	0.350	2.02	16
4.59	57.8	92.6	115.8	57.8	0.6	-0.1	1.1	6	clean SAND to silty SAND	125	5.0	19	12	18	64	44	-	-	12	0.350	1.96	16
4.76	60.2	96.6	122.2	60.2	0.7	-0.1	1.2	6	clean SAND to silty SAND	125	5.0	19	12	19	66	44	-	-	12	0.350	1.97	16
4.92	60.8	97.4	130.9	60.8	0.9	-0.1	1.5	5	silty SAND to sandy SILT	120	4.0	24	15	19	66	44	-	-	14	0.200	2.03	16
5.09	58.8	94.4	148.4	58.8	1.3	-0.2	2.2	5	silty SAND to sandy SILT	120	4.0	24	15	20	65	44	-	-	18	0.200	2.16	16
5.25	52.1	83.6	147.1	52.1	1.3	-0.2	2.5	5	silty SAND to sandy SILT	120	4.0	21	13	18	61	43	-	-	20	0.200	2.24	16
5.41	42.9	68.7	138.6	42.9	1.1	0.1	2.7	5	silty SAND to sandy SILT	120	4.0	17	11	15	55	42	-	-	23	0.200	2.32	16
5.58	28.8	46.3	133.4	29.0	1.0	6.1	3.4	4	clayy SILT to silty CLAY	115	2.0	23	14	11	-	-	2.0	9.9	32	0.070	2.52	15
5.74	39.3	63.1	136.3	39.7	1.1	20.2	2.8	5	silty SAND to sandy SILT	120	4.0	16	10	14	52	41	-	-	25	0.200	2.36	16
5.91	37.8	60.7	143.1	38.0	1.2	11.0	3.2	4	clayy SILT to silty CLAY	115	2.0	30	19	14	-	-	2.6	9.9	27	0.070	2.41	15
6.07	42.6	68.1	188.7	43.5	2.0	46.2	4.6	4	clayy SILT to silty CLAY	115	2.0	34	21	17	-	-	3.0	9.9	31	0.070	2.50	15
6.23	76.2	120.2	234.1	77.0	3.1	43.6	4.1	9	very stiff fine SOIL	120	2.0	60	38	27	73	44	-	-	23	0.250	2.30	30
6.40	111.8	174.1	281.0	112.0	4.2	10.6	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	37	-	-	7.4	9.9	18	0.250	2.18	16
6.56	130.6	201.0	304.1	130.7	4.7	7.3	3.6	8	stiff SAND to clayy SAND	115	1.0	100	100	42	-	-	8.6	9.9	17	0.250	2.13	16
6.73	143.2	217.9	327.5	143.4	5.4	8.6	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	45	-	-	9.5	9.9	17	0.250	2.13	16
6.89	162.3	244.2	346.9	162.5	5.8	7.0	3.6	8	stiff SAND to clayy SAND	115	1.0	100	100	49	-	-	10.7	9.9	15	0.250	2.08	16
7.05	156.6	232.8	340.7	156.6	5.8	1.2	3.7	8	stiff SAND to clayy SAND	115	1.0	100	100	48	-	-	10.3	9.9	16	0.250	2.10	16
7.22	144.9	213.2	345.1	145.1	6.3	9.0	4.3	9	very stiff fine SOIL	120	2.0	100	72	45	92	46	-	-	18	0.250	2.18	30
7.38	175.5	255.2	366.4	175.9	6.6	22.9	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	52	-	-	11.6	9.9	15	0.250	2.09	16
7.55	173.7	250.1	347.9	173.9	6.0	9.1	3.5	8	stiff SAND to clayy SAND	115	1.0	100	100	50	-	-	11.5	9.9	15	0.250	2.06	16
7.71	148.4	211.5	330.0	148.7	5.9	13.1	4.0	8	stiff SAND to clayy SAND	115	1.0	100	100	44	-	-	9.8	9.9	17	0.250	2.15	16
7.87	173.1	244.2	338.1	173.2	5.9	7.1	3.4	8	stiff SAND to clayy SAND	115	1.0	100	100	49	-	-	11.4	9.9	15	0.250	2.06	16
8.04	175.9	245.7	343.5	176.0	6.1	2.5	3.5	8	stiff SAND to clayy SAND	115	1.0	100	100	50	-	-	11.6	9.9	15	0.250	2.07	16
8.20	174.5	241.3	322.1	174.5	5.4	1.6	3.1	8	stiff SAND to clayy SAND	115	1.0	100	100	48	-	-	11.5	9.9	14	0.250	2.03	16
8.37	177.9	243.8	328.9	177.9	5.6	0.7	3.2	8	stiff SAND to clayy SAND	115	1.0	100	100	49	-	-	11.8	9.9	14	0.250	2.04	16
8.53	183.8	249.6	332.6	183.8	5.7	-0.5	3.1	8	stiff SAND to clayy SAND	115	1.0	100	100	49	-	-	12.1	9.9	14	0.250	2.02	16
8.69	183.1	246.3	350.0	183.1	6.6	-1.4	3.6	8	stiff SAND to clayy SAND	115	1.0	100	100	50	-	-	12.1	9.9	15	0.250	2.08	16
8.86	180.2	240.3	355.7	180.2	7.0	-1.8	3.9	8	stiff SAND to clayy SAND	115	1.0	100	100	49	-	-	11.9	9.9	16	0.250	2.11	16
9.02	158.7	209.8	350.9	158.7	7.2	-1.3	4.6	9	very stiff fine SOIL	120	2.0	100	79	45	91	46	-	-	19	0.250	2.20	30
9.19	127.0	166.3	349.5	127.1	7.3	4.1	5.8	9	very stiff fine SOIL	120	2.0	83	63	38	84	45	-	-	24	0.250	2.35	30
9.35	157.6	204.6	358.0	158.2	7.6	31.3	4.9	9	very stiff fine SOIL	120	2.0	100	79	44	91	46	-	-	20	0.250	2.23	30
9.51	192.1	247.3	371.3	192.4	7.8	12.0	4.1	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	12.7	9.9	17	0.250	2.12	16
9.68	198.1	252.8	362.4	198.3	7.4	10.7	3.7	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	13.1	9.9	15	0.250	2.09	16
9.84	204.8	259.2	384.7	204.9	8.4	9.1	4.1	8	stiff SAND to clayy SAND	115	1.0	100	100	53	-	-	13.5	9.9	16	0.250	2.12	16
10.01	210.8	264.8	399.4	211.0	9.0	10.9	4.3	9	very stiff fine SOIL	120	2.0	100	100	55	95	47	-	-	17	0.250	2.13	30
10.17	243.3	303.1	427.7	243.7	9.7	18.4	4.0	8	stiff SAND to clayy SAND	115	1.0	100	100	61	-	-	16.1	9.9	15	0.250	2.07	16
10.34	256.2	316.7	426.1	256.3	9.4	6.4	3.7	8	stiff SAND to clayy SAND	115	1.0	100	100	63	-	-	16.9	9.9	14	0.250	2.03	16
10.50	241.4	296.2	399.7	241.4	8.6	1.1	3.6	8	stiff SAND to clayy SAND	115	1.0	100	100	59	-	-	15.9	9.9	14	0.250	2.04	16
10.66	206.1	251.0	381.7	206.1	8.7	1.4	4.2	9	very stiff fine SOIL	120	2.0	100	100	52	95	46	-	-	17	0.250	2.13	30
10.83	218.9	264.6	372.6	219.0	8.1	2.1	3.7	8	stiff SAND to clayy SAND	115	1.0	100	100	53	-	-	14.5	9.9	15	0.250	2.07	16
10.99	205.1	246.0	349.2	205.0	7.4	-1.4	3.6	8	stiff SAND to clayy SAND	115	1.0	100	100	50	-	-	13.5	9.9	15	0.250	2.08	16
11.16	146.1	174.1	282.9	146.1	5.6	0.4	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	37	-	-	9.6	9.9	18	0.250	2.18	16
11.32	118.4	140.0	232.1	118.4	4.0	2.2	3.4	5	silty SAND to sandy SILT	120	4.0	35	30	30	78	43	-	-	19	0.200	2.20	16
11.48	86.7	101.9	240.6	87.0	4.3	11.2	5.0	9	very stiff fine SOIL	120	2.0	51	43	24	68	42	-	-	27	0.250	2.41	30
11.65	78.9	92.0	275.2	79.7	5.2	40.6	6.7	9	very stiff fine SOIL	120	2.0	46	39	23	64	41	-	-	33	0.250	2.54	30
11.81	101.5	117.5	249.6	102.3	4.7	39.1	4.6	9	very stiff fine SOIL	120	2.0	59	51	27	72	42	-	-	24	0.250	2.35	30
11.98	134.1	154.2	283.8	134.6	5.9	25.4	4.4	9	very stiff fine SOIL	120	2.0	77	67	34	81	44	-	-	21	0.250	2.26	30
12.14	155.3	177.3	298.0	155.6	6.4	15.5	4.1	8	stiff SAND to clayy SAND	115	1.0	100	100	38	-	-	10.2	9.9	19	0.250	2.21	16
12.30	195.5	221.8	311.8	195.5	6.4	1.3	3.3	8	stiff SAND to clayy SAND	115	1.0	100	100	45	-	-	12.9	9.9	15	0.250	2.07	16
12.47	192.8	217.3	312.4	192.9	6.6	4.8	3.4	8	stiff SAND to clayy SAND	115	1.0	100	100	44	-	-	12.7	9.9	16	0.250	2.09	16
12.63	210.1	235.3	312.2	210.1	6.2	1.1	3.0	8	stiff SAND to clayy SAND	115	1.0	100	100	47	-	-	13.9	9.9	13	0.250	2.02	16
12.80	240.0	267.1	322.4	239.9	5.9	-1.0	2.4	6	clean SAND to silty SAND	125	5.0	53	48	51	95	46	-	-	11	0.350	1.92	16
12.96	246.1	272.1	319.2	246.0	5.5	-3.1	2.2	6	clean SAND to silty SAND	125	5.0	54	49	51	95	46	-	-	10	0.350	1.88	16
13.12	220.8	242.6	300.5	220.8	5.5	-3.0	2.5	6	clean SAND to silty SAND	125	5.0	49	44	47	95	46	-	-	12	0.350	1.95	16
13.29	184.0	200.8	270.5	183.9	5.1	-3.1	2.8	5	silty SAND to sandy SILT	120	4.0	50	46	40	90	45	-	-	14	0.200	2.03	16
13.45	136.7	148.3	205.6	136.6	3.2	-3.7	2.4	5	silty SAND to sandy SILT	120	4.0	37	34	30	80	43	-	-	15	0.200	2.06	16
13.62	84.4	91.0	144.7	84.4	1.8	-3.5	2.1	5	silty SAND to sandy SILT	120	4.0	23	21	19	64	41	-	-	18	0.200	2.17	16
13.78	47.4	50.8	107.8	47.4	1.0	1.1	2.1	5	silty SAND to sandy SILT	120	4.0	13	12	12	45	37	-	-	24	0.200	2.35	16
13.94	41.6	44.3	85.7	41.6	0.6	1.9	1.5	5	silty SAND to sandy SILT	120	4.0	11	10	10	40	37	-	-	22	0.200	2.30	16
14.11	33.6	35.7	73.8	33.7	0.4	2.0	1.3	5	silty SAND to sandy SILT	120	4.0	9	8	8	33	35	-	-	24	0.200	2.34	16
14.27	31.0	32.8	69.3	31.0	0.3	2.1	1.2	5	silty SAND to sandy SILT	120	4.0	8	8	7	30	35	-	-	24	0.200	2.35	16
14.44	26.3	27.8	67.3	26.3	0.3	2.1	1.2	5	silty SAND to sandy SILT	120	4.0	7	7	7	25	34	-	-	27	0.200	2.43	16
14.60	24.8	29.1	-	24.8	0.7	2.1	3.1	4	clayy SILT to silty CLAY	115	2.0	15	12	8	-	-	1.7	9.3	38	0.070	2.65	15
14.76	24.8	29.0	-	24.8	0.8	2.1	3.3	4	clayy SILT to silty CLAY	115	2.0	15	12	8	-	-	1.7	9.2	39	0.070	2.67	15
14.93	24.8	28.9	-	24.9	0.6	2.1	2.7	4	clayy SILT to silty CLAY	115	2.0	14	12	7	-	-	1.7	9.2	36	0.070	2.61	15
15.09	29.6	30.9	77.3	29.6	0.4	1.3	1.6	5	silty SAND to sandy SILT	120	4.0	8	7	7	28	34	-	-	28	0.200	2.44	16
15.26	23.7	24.7	71.1	23.7	0.3	2.2	1.5	5	silty SAND to sandy SILT	120	4.0	6	6	6	21	33	-	-	32	0.200	2.52	16
15.42	22.8	23.7	68.8	22.8	0.3	2.1	1.5	5	silty SAND to sandy SILT	120	4.0	6	6	6	19	32	-	-	32	0.200	2.53	16

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

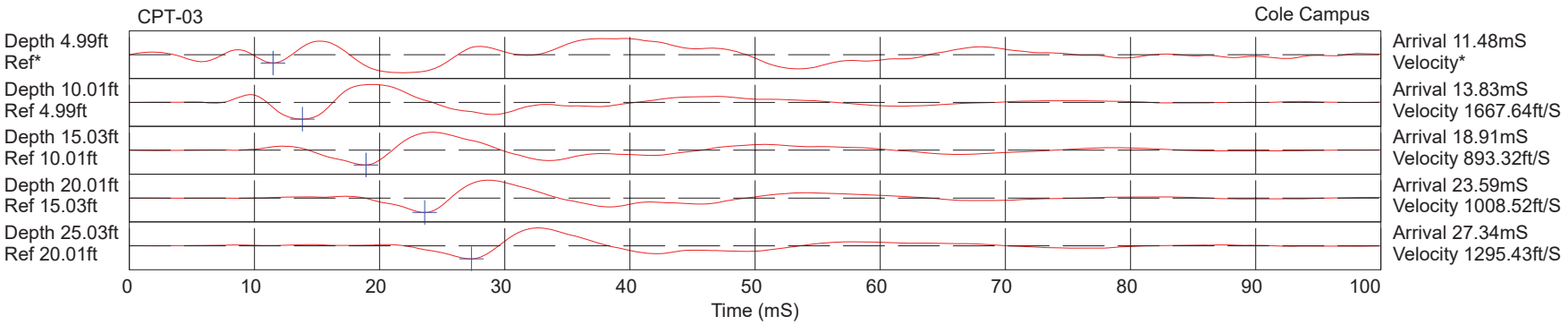
Middle Earth Geo Testing

Project ID: CEL
Data File: SDF(324).cpt
CPT Date: 11/9/2019 7:51:37 AM
GW During Test: 14 ft

Sounding ID: CPT-03
Project No: 84-04726-PW
Cone/Rig: DDG1489

Depth ft	qc PS tsf	qc1n PS - *	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
15.58	22.6	23.4	72.3	22.6	0.4	1.9	1.6	4	clayy SILT to silty CLAY	115	2.0	12	11	6	-	-	1.5	8.1	33	0.070	2.56	15
15.75	22.2	25.1	-	22.2	0.6	2.0	2.9	4	clayy SILT to silty CLAY	115	2.0	13	11	7	-	-	1.5	7.9	40	0.070	2.68	15
15.91	24.9	28.2	-	25.0	1.3	2.2	5.2	3	silty CLAY to CLAY	115	1.5	19	17	8	-	-	1.7	8.9	47	0.005	2.81	15
16.08	43.0	45.8	151.6	43.0	1.8	2.5	4.3	4	clayy SILT to silty CLAY	115	2.0	23	21	12	-	-	3.0	9.9	35	0.070	2.60	15
16.24	64.0	65.7	160.4	64.0	2.3	0.5	3.6	4	clayy SILT to silty CLAY	115	2.0	33	32	15	-	-	4.5	9.9	28	0.070	2.43	15
16.40	57.4	58.8	171.6	57.5	2.5	0.9	4.4	4	clayy SILT to silty CLAY	115	2.0	29	29	15	-	-	4.0	9.9	32	0.070	2.53	15
16.57	72.2	73.8	173.6	72.3	2.7	1.9	3.8	4	clayy SILT to silty CLAY	115	2.0	37	36	17	-	-	5.0	9.9	27	0.070	2.41	15
16.73	101.0	103.0	176.2	101.0	2.8	-0.3	2.8	5	silty SAND to sandy SILT	120	4.0	26	25	22	68	41	-	-	20	0.200	2.22	16
16.90	127.5	129.7	185.9	127.5	2.9	-3.1	2.3	5	silty SAND to sandy SILT	120	4.0	32	32	26	76	42	-	-	15	0.200	2.09	16
17.06	147.6	149.7	196.2	147.5	3.0	-3.5	2.1	5	silty SAND to sandy SILT	120	4.0	37	37	29	80	43	-	-	13	0.200	2.01	16
17.23	159.3	161.2	202.4	159.2	3.0	-3.9	1.9	6	clean SAND to silty SAND	125	5.0	32	32	31	83	43	-	-	12	0.350	1.96	16
17.39	165.2	166.6	204.4	165.1	3.0	-4.5	1.8	6	clean SAND to silty SAND	125	5.0	33	33	32	84	43	-	-	11	0.350	1.94	16
17.55	166.8	167.8	201.5	166.7	2.8	-5.2	1.7	6	clean SAND to silty SAND	125	5.0	34	33	32	84	43	-	-	11	0.350	1.91	16
17.72	164.0	164.5	199.5	163.9	2.8	-5.3	1.7	6	clean SAND to silty SAND	125	5.0	33	33	31	83	43	-	-	11	0.350	1.92	16
17.88	158.3	158.4	195.4	158.2	2.8	-5.5	1.8	6	clean SAND to silty SAND	125	5.0	32	32	30	82	43	-	-	11	0.350	1.94	16
18.05	148.3	148.0	188.8	148.2	2.8	-5.8	1.9	6	clean SAND to silty SAND	125	5.0	30	30	29	80	43	-	-	12	0.350	1.98	16
18.21	136.1	135.5	174.1	136.0	2.4	-6.1	1.8	6	clean SAND to silty SAND	125	5.0	27	27	26	77	42	-	-	13	0.350	1.99	16
18.37	121.7	120.8	168.3	121.6	2.4	-6.5	2.0	5	silty SAND to sandy SILT	120	4.0	30	30	24	73	42	-	-	15	0.200	2.06	16
18.54	94.0	93.1	172.7	93.9	2.8	-6.5	3.0	5	silty SAND to sandy SILT	120	4.0	23	24	20	65	40	-	-	21	0.200	2.27	16
18.70	55.3	57.2	-	55.4	3.4	3.2	6.3	3	silty CLAY to CLAY	115	1.5	38	37	15	-	-	3.8	9.9	38	0.005	2.65	15
18.87	71.3	70.2	220.4	71.3	4.1	2.7	5.8	9	very stiff fine SOIL	120	2.0	35	36	18	55	39	-	-	34	0.250	2.57	30
19.03	97.0	95.3	226.0	97.0	4.5	0.4	4.7	9	very stiff fine SOIL	120	2.0	48	48	22	65	40	-	-	27	0.250	2.41	30
19.19	107.1	105.0	250.2	107.1	5.4	0.8	5.1	9	very stiff fine SOIL	120	2.0	53	54	25	69	41	-	-	27	0.250	2.42	30
19.36	140.0	137.0	283.4	140.0	6.9	0.5	5.0	9	very stiff fine SOIL	120	2.0	68	70	31	77	42	-	-	24	0.250	2.34	30
19.52	173.8	169.6	300.0	173.7	7.6	-1.1	4.4	9	very stiff fine SOIL	120	2.0	85	87	37	84	43	-	-	20	0.250	2.24	30
19.69	179.6	174.9	262.0	179.6	5.8	-2.9	3.2	8	stiff SAND to clayy SAND	115	1.0	100	100	36	-	-	11.8	9.9	17	0.250	2.12	16
19.85	178.9	173.8	280.4	178.8	6.7	-4.1	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	37	-	-	11.8	9.9	18	0.250	2.18	16
20.01	174.5	169.2	298.8	174.4	7.6	-4.9	4.4	9	very stiff fine SOIL	120	2.0	85	87	37	84	43	-	-	20	0.250	2.24	30
20.18	179.7	173.8	315.1	179.6	8.3	-5.1	4.7	9	very stiff fine SOIL	120	2.0	87	90	38	85	43	-	-	21	0.250	2.26	30
20.34	208.1	200.8	326.9	208.0	8.7	-4.0	4.2	9	very stiff fine SOIL	120	2.0	100	100	42	90	44	-	-	18	0.250	2.18	30
20.51	255.6	246.1	333.2	255.5	8.2	-4.8	3.2	8	stiff SAND to clayy SAND	115	1.0	100	100	49	-	-	16.9	9.9	14	0.250	2.04	16
20.67	291.3	279.8	341.1	291.1	7.6	-6.3	2.6	8	stiff SAND to clayy SAND	115	1.0	100	100	54	-	-	19.2	9.9	11	0.250	1.93	16
20.83	292.4	280.3	337.3	292.3	7.3	-7.4	2.5	8	stiff SAND to clayy SAND	115	1.0	100	100	53	-	-	19.3	9.9	11	0.250	1.91	16
21.00	287.2	274.7	321.3	287.0	6.4	-8.1	2.2	6	clean SAND to silty SAND	125	5.0	55	57	52	95	46	-	-	10	0.350	1.88	16
21.16	281.0	268.2	317.4	280.9	6.4	-8.7	2.3	6	clean SAND to silty SAND	125	5.0	54	56	51	95	45	-	-	10	0.350	1.89	16
21.33	263.1	250.4	311.6	262.9	6.8	-9.2	2.6	8	stiff SAND to clayy SAND	115	1.0	100	100	48	-	-	17.4	9.9	12	0.250	1.95	16
21.49	206.1	195.8	295.5	205.9	7.3	-9.1	3.6	8	stiff SAND to clayy SAND	115	1.0	100	100	40	-	-	13.6	9.9	17	0.250	2.13	16
21.65	159.6	151.3	262.0	159.4	6.2	-9.2	3.9	8	stiff SAND to clayy SAND	115	1.0	100	100	33	-	-	10.5	9.9	20	0.250	2.23	16
21.82	142.2	134.5	260.0	142.0	6.1	-8.9	4.4	9	very stiff fine SOIL	120	2.0	67	71	30	77	42	-	-	22	0.250	2.29	30
21.98	146.2	138.0	262.5	146.0	6.3	-8.9	4.3	9	very stiff fine SOIL	120	2.0	69	73	30	78	42	-	-	22	0.250	2.29	30
22.15	161.8	152.4	277.3	161.7	6.9	-8.6	4.3	9	very stiff fine SOIL	120	2.0	76	81	33	81	43	-	-	21	0.250	2.26	30
22.31	170.1	159.9	292.3	169.9	7.5	-9.0	4.5	9	very stiff fine SOIL	120	2.0	80	85	35	82	43	-	-	21	0.250	2.26	30
22.47	174.8	163.9	300.3	174.6	7.9	-9.4	4.6	9	very stiff fine SOIL	120	2.0	82	87	36	83	43	-	-	21	0.250	2.26	30
22.64	163.1	152.6	294.3	163.0	7.7	-9.6	4.7	9	very stiff fine SOIL	120	2.0	76	82	34	81	43	-	-	22	0.250	2.29	30
22.80	174.9	163.2	284.2	174.7	7.2	-9.5	4.2	8	stiff SAND to clayy SAND	115	1.0	100	100	35	-	-	11.5	9.9	20	0.250	2.23	16
22.97	220.0	205.0	286.1	219.8	6.7	-9.6	3.1	8	stiff SAND to clayy SAND	115	1.0	100	100	41	-	-	14.5	9.9	15	0.250	2.07	16
23.13	266.2	247.6	307.1	266.0	6.7	-9.9	2.5	8	stiff SAND to clayy SAND	115	1.0	100	100	48	-	-	17.6	9.9	12	0.250	1.95	16
23.30	294.9	273.6	329.5	294.7	7.2	-10.3	2.5	8	stiff SAND to clayy SAND	115	1.0	100	100	52	-	-	19.5	9.9	11	0.250	1.92	16
23.46	312.3	289.3	340.4	312.1	7.3	-10.6	2.4	6	clean SAND to silty SAND	125	5.0	58	62	54	95	46	-	-	10	0.350	1.89	16
23.62	321.5	297.1	353.4	321.3	8.0	-10.8	2.5	8	stiff SAND to clayy SAND	115	1.0	100	100	56	-	-	21.2	9.9	10	0.250	1.90	16
23.79	339.2	312.8	374.0	339.0	8.8	-10.9	2.6	8	stiff SAND to clayy SAND	115	1.0	100	100	59	-	-	22.4	9.9	11	0.250	1.91	16
23.95	374.6	344.8	394.8	374.4	8.9	-11.1	2.4	8	stiff SAND to clayy SAND	115	1.0	100	100	64	-	-	24.7	9.9	9	0.250	1.85	16
24.12	383.2	352.0	388.1	382.9	7.9	-11.1	2.1	6	clean SAND to silty SAND	125	5.0	70	77	64	95	47	-	-	8	0.350	1.79	16
24.28	355.4	325.8	353.4	355.2	6.5	-11.3	1.8	6	clean SAND to silty SAND	125	5.0	65	71	59	95	46	-	-	7	0.350	1.77	16
24.44	323.0	295.4	329.4	322.7	6.3	-11.4	1.9	6	clean SAND to silty SAND	125	5.0	59	65	54	95	46	-	-	8	0.350	1.81	16
24.61	300.7	274.4	300.5	300.4	5.1	-11.8	1.7	6	clean SAND to silty SAND	125	5.0	55	60	50	95	45	-	-	8	0.350	1.78	16
24.77	294.6	268.2	313.4	294.3	6.4	-11.8	2.2	6	clean SAND to silty SAND	125	5.0	54	59	50	95	45	-	-	10	0.350	1.88	16
24.94	305.1	277.1	331.5	304.9	7.4	-11.8	2.4	6	clean SAND to silty SAND	125	5.0	55	61	53	95	45	-	-	11	0.350	1.91	16
25.10	350.3	317.5	372.4	350.1	8.6	-11.5	2.5	8	stiff SAND to clayy SAND	115	1.0	100	100	60	-	-	23.1	9.9	10	0.250	1.88	16
25.26	381.6	345.2	399.2	381.4	9.4	-12.1	2.5	8	stiff SAND to clayy SAND	115	1.0	100	100	64	-	-	25.2	9.9	10	0.250	1.86	16
25.43	396.2	357.7	401.7	395.9	8.9	-12.3	2.3	8	stiff SAND to clayy SAND	115	1.0	100	100	66	-	-	26.2	9.9	9	0.250	1.82	16
25.59	371.6	334.9	375.3	371.3	8.0	-12.3	2.2	6	clean SAND to silty SAND	125	5.0	67	74	61	95	46	-	-	9	0.350	1.82	16
25.76	324.9	292.2	342.6	324.6	7.6	-12.3	2.3	6	clean SAND to silty SAND	125	5.0	58	65	55	95	46	-	-	10	0.350	1.88	16
25.92	247.0	221.6	294.7	246.8	7.1	-12.3	2.9	8	stiff SAND to clayy SAND	115	1.0	100	100	44	-	-	16.3	9.9	14	0.250	2.02	16
26.08	148.0	132.5	261.3	147.7	6.5	-13.1	4.5	9	very stiff fine SOIL	120	2.0	66	74	30	76	42	-	-	23	0.250	2.31	30
26.25	119.7	107.0	278.4	119.5	7.1	-12.8	6.0	9	very stiff fine SOIL	120	2.0	54	60	26	69	41	-	-	29	0.250	2.47	30
26.41	185.5	165.4	316.2	185.2	9.1	-12.2	4.9	9	very stiff fine SOIL	120	2.0	83	93	37	84	43	-	-	22	0.250	2.29	30
26.58	351.3	312.8	387.8	351.1	10.3	-12.2	2.9	8	stiff SAND to clayy SAND	115	1.0	100	100	60	-	-	23.2	9.9	12	0.250	1.95	16
26.74	479.5	426.2	468.8	479.3	11.0	-12.1	2.3	8	stiff SAND to clayy SAND	115	1.0	100	100	77	-	-	31.7	9.9	8	0.250	1.79	16
26.90	509.1	451.7	494.7	508.9	11.8	-12.1	2.3	8	stiff SAND to clayy SAND	115	1.0	100	100	82	-	-	33.7	9.9	8	0.250	1.78	16
27.07	518.8	459.4	504.8	518.6	12.3	-11.9	2.4	8	stiff SAND to clayy SAND	115	1.0	100	100	83	-	-	34.3	9.9	8	0.250	1.79	16
27.23	516.4	456.5	503.1	516.2	12.3	-11.7	2.4	8	stiff SAND to clayy SAND	115	1.0	100	100	83	-	-	34.1	9.9	8	0.250	1.79	16
27.40	500.5	441.6	486.6	500.2	11.7	-11.6	2.4	8	stiff SAND to clayy SAND	115	1.0	100	100	80	-	-	33.1	9.9	8	0.250	1.79	16
27.56	479.5	422.3	465.8	479.2	11.0	-11.6	2.3	8	stiff SAND to clayy SAND	115	1.0	100	100	77	-	-	31.7	9.9	8	0.250	1.80	16
27.72	464.3	408.2	429.4	464.0	8.6	-11.5	1.9	6	clean SAND to silty SAND	125	5.0	82	93	72	95	47	-	-	7	0.350	1.72	16
27.89	455.7	399.8	429.4	455.4	9.1	-11.4	2.0	6	clean SAND to silty SAND	125	5.0	80	91	72	95	47	-	-	7	0.350	1.75	16

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.



Hammer to Rod String Distance (ft): 5.83
* = Not Determined

COMMENT:

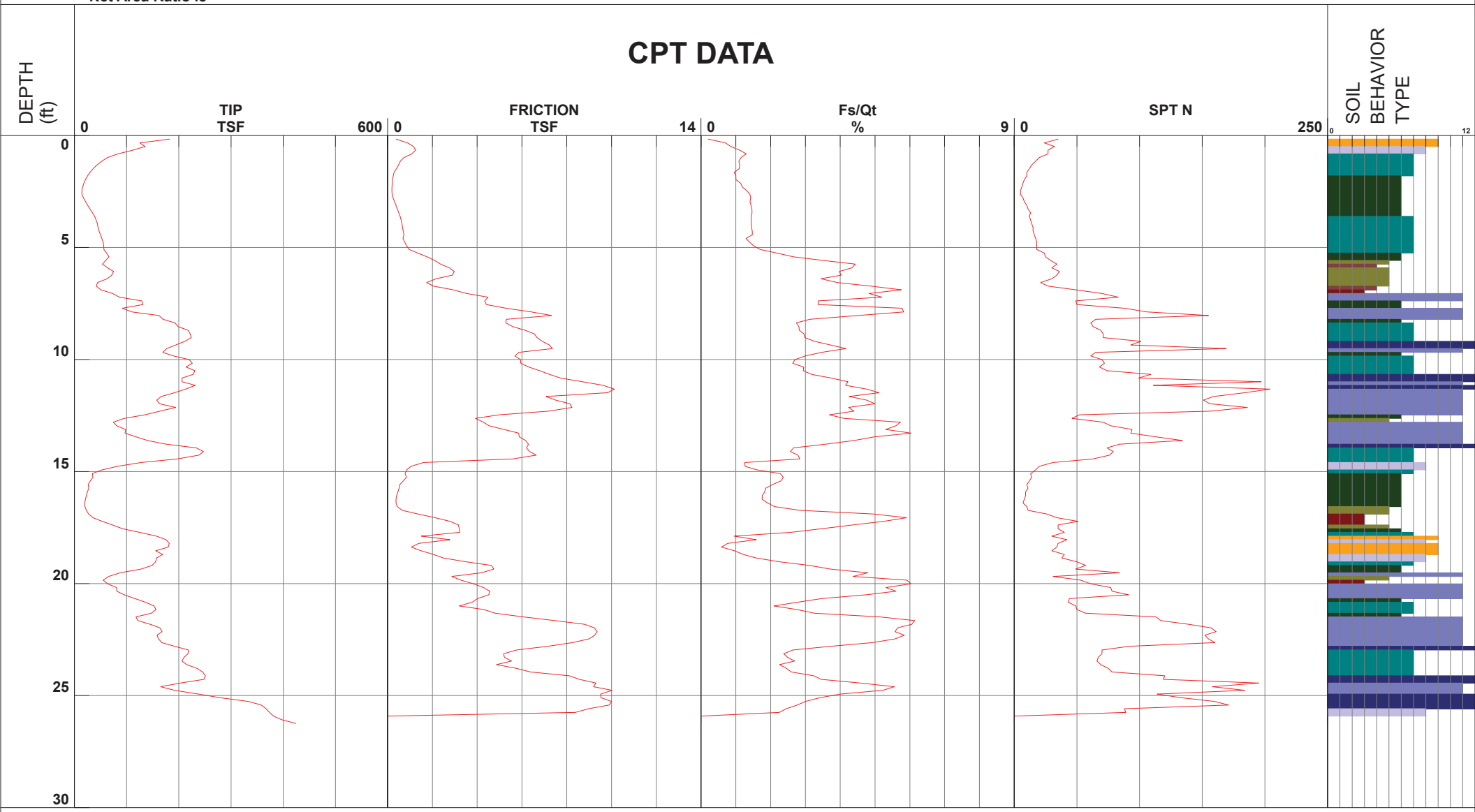
Middle Earth
Geo Testing Inc.

CEL

Project	Cole Campus	Operator	JM-AJ	Filename	SDF(327).cpt
Job Number	84-04726-PW	Cone Number	DDG1489	GPS	
Hole Number	CPT-04	Date and Time	11/9/2019 10:51:04 AM	Maximum Depth	26.25 ft
EST GW Depth During Test		13.00 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 10cm squared

S*Soil behavior type and SPT based on data from UBC-1983

Cole Campus

Project ID: CEL
Data File: SDF(327).cpt
CPT Date: 11/9/2019 10:51:04 AM
GW During Test: 13 ft

Sounding ID: CPT-04
Project No: 84-04726-PW
Cone/Rig: DDG1489

Depth ft	qc PS tsf	qc1n PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
0.33	125.4	201.1	201.1	125.4	0.9	0.0	0.7	6	clean SAND to silty SAND	125	5.0	40	25	34	90	48	-	-	5	0.350	1.58	16
0.49	135.3	217.0	217.0	135.3	1.2	0.0	0.9	6	clean SAND to silty SAND	125	5.0	43	27	37	93	48	-	-	5	0.350	1.62	16
0.66	112.1	179.8	193.3	112.1	1.2	0.1	1.1	6	clean SAND to silty SAND	125	5.0	36	22	32	86	48	-	-	7	0.350	1.76	16
0.82	83.4	133.8	158.1	83.4	1.1	0.0	1.3	6	clean SAND to silty SAND	125	5.0	27	17	25	77	48	-	-	10	0.350	1.89	16
0.98	63.3	101.5	125.4	63.3	0.7	0.1	1.2	6	clean SAND to silty SAND	125	5.0	20	13	20	68	48	-	-	12	0.350	1.95	16
1.15	52.4	84.0	108.4	52.4	0.6	0.1	1.1	6	clean SAND to silty SAND	125	5.0	17	10	16	61	48	-	-	13	0.350	1.99	16
1.31	43.6	70.0	97.2	43.6	0.5	0.0	1.1	5	silty SAND to sandy SILT	120	4.0	17	11	14	55	48	-	-	15	0.200	2.06	16
1.48	36.2	58.1	87.0	36.2	0.4	0.0	1.1	5	silty SAND to sandy SILT	120	4.0	15	9	12	49	47	-	-	17	0.200	2.12	16
1.64	30.0	48.1	75.2	30.0	0.3	0.0	1.0	5	silty SAND to sandy SILT	120	4.0	12	8	10	43	46	-	-	18	0.200	2.15	16
1.80	25.0	40.2	70.3	25.0	0.3	0.1	1.0	5	silty SAND to sandy SILT	120	4.0	10	6	9	37	45	-	-	20	0.200	2.23	16
1.97	21.4	34.3	65.9	21.4	0.2	0.1	1.0	5	silty SAND to sandy SILT	120	4.0	9	5	8	32	43	-	-	22	0.200	2.29	16
2.13	17.9	28.6	64.8	17.9	0.2	0.1	1.1	5	silty SAND to sandy SILT	120	4.0	7	4	7	26	42	-	-	26	0.200	2.39	16
2.30	16.1	25.7	63.7	16.1	0.2	0.1	1.2	5	silty SAND to sandy SILT	120	4.0	6	4	6	22	41	-	-	28	0.200	2.44	16
2.46	14.3	22.9	64.1	14.3	0.2	0.1	1.3	5	silty SAND to sandy SILT	120	4.0	6	4	6	18	40	-	-	31	0.200	2.50	16
2.62	14.3	22.9	65.9	14.3	0.2	0.1	1.4	5	silty SAND to sandy SILT	120	4.0	6	4	6	18	40	-	-	32	0.200	2.52	16
2.79	17.4	27.8	70.8	17.4	0.2	0.1	1.4	5	silty SAND to sandy SILT	120	4.0	7	4	7	25	41	-	-	29	0.200	2.45	16
2.95	21.5	34.4	76.0	21.5	0.3	0.2	1.4	5	silty SAND to sandy SILT	120	4.0	9	5	8	32	41	-	-	25	0.200	2.37	16
3.12	25.5	40.9	82.1	25.5	0.4	0.2	1.4	5	silty SAND to sandy SILT	120	4.0	10	6	9	38	42	-	-	23	0.200	2.32	16
3.28	29.7	47.7	88.3	29.7	0.4	0.2	1.5	5	silty SAND to sandy SILT	120	4.0	12	7	10	43	43	-	-	21	0.200	2.27	16
3.45	34.4	55.1	94.6	34.4	0.5	0.2	1.5	5	silty SAND to sandy SILT	120	4.0	14	9	12	47	43	-	-	20	0.200	2.22	16
3.61	38.7	62.0	99.6	38.7	0.6	0.2	1.4	5	silty SAND to sandy SILT	120	4.0	16	10	13	51	43	-	-	18	0.200	2.17	16
3.77	41.6	66.7	103.7	41.6	0.6	0.2	1.5	5	silty SAND to sandy SILT	120	4.0	17	10	14	54	44	-	-	17	0.200	2.15	16
3.94	44.0	70.5	107.0	44.0	0.6	0.3	1.5	5	silty SAND to sandy SILT	120	4.0	18	11	15	55	44	-	-	17	0.200	2.13	16
4.10	45.6	73.1	109.5	45.6	0.7	0.3	1.5	5	silty SAND to sandy SILT	120	4.0	18	11	15	57	44	-	-	16	0.200	2.12	16
4.27	47.0	75.4	111.9	47.0	0.7	0.3	1.5	5	silty SAND to sandy SILT	120	4.0	19	12	16	58	44	-	-	16	0.200	2.12	16
4.43	49.4	79.2	115.2	49.4	0.7	0.3	1.5	5	silty SAND to sandy SILT	120	4.0	20	12	16	59	44	-	-	16	0.200	2.10	16
4.59	52.8	84.6	114.9	52.8	0.7	0.3	1.3	5	silty SAND to sandy SILT	120	4.0	21	13	17	61	44	-	-	14	0.200	2.04	16
4.76	54.9	88.0	120.5	54.9	0.8	0.3	1.4	5	silty SAND to sandy SILT	120	4.0	22	14	18	63	44	-	-	14	0.200	2.05	16
4.92	56.1	90.0	125.6	56.1	0.8	0.4	1.5	5	silty SAND to sandy SILT	120	4.0	23	14	18	64	44	-	-	15	0.200	2.06	16
5.09	56.5	90.7	131.8	56.5	1.0	0.1	1.7	5	silty SAND to sandy SILT	120	4.0	23	14	19	64	44	-	-	16	0.200	2.10	16
5.25	61.7	99.0	153.4	61.7	1.3	0.1	2.2	5	silty SAND to sandy SILT	120	4.0	25	15	21	67	44	-	-	17	0.200	2.15	16
5.41	66.3	106.3	175.0	66.3	1.8	0.1	2.7	5	silty SAND to sandy SILT	120	4.0	27	17	23	69	44	-	-	19	0.200	2.19	16
5.58	59.9	96.1	190.9	59.9	2.1	0.2	3.5	5	silty SAND to sandy SILT	120	4.0	24	15	21	66	43	-	-	23	0.200	2.31	16
5.74	53.4	85.7	206.1	53.4	2.4	0.9	4.5	4	clayy SILT to silty CLAY	115	2.0	43	27	20	-	-	3.8	9.9	27	0.070	2.42	15
5.91	63.5	101.9	222.4	63.6	2.8	1.5	4.4	9	very stiff fine SOIL	120	2.0	51	32	23	68	43	-	-	25	0.250	2.37	30
6.07	75.0	120.2	231.3	75.0	3.0	0.4	4.0	8	stiff SAND to clayy SAND	115	1.0	100	75	27	-	-	4.9	9.9	22	0.250	2.29	16
6.23	71.6	113.4	225.7	71.6	2.9	1.0	4.0	9	very stiff fine SOIL	120	2.0	57	36	25	71	44	-	-	23	0.250	2.31	30
6.40	62.7	98.1	191.4	62.7	2.2	1.2	3.5	5	silty SAND to sandy SILT	120	4.0	25	16	22	66	43	-	-	23	0.200	2.30	16
6.56	44.4	68.6	172.1	44.4	1.7	1.9	4.0	4	clayy SILT to silty CLAY	115	2.0	34	22	16	-	-	3.1	9.9	28	0.070	2.45	15
6.73	41.9	64.0	190.0	42.0	2.0	3.1	4.9	4	clayy SILT to silty CLAY	115	2.0	32	21	16	-	-	2.9	9.9	32	0.070	2.54	15
6.89	50.8	76.7	229.0	50.9	2.9	3.5	5.8	9	very stiff fine SOIL	120	2.0	38	25	19	58	42	-	-	33	0.250	2.54	30
7.05	73.1	109.0	245.9	73.2	3.5	3.7	4.9	9	very stiff fine SOIL	120	2.0	55	37	25	70	43	-	-	26	0.250	2.39	30
7.22	86.3	127.3	280.2	86.4	4.5	3.5	5.2	9	very stiff fine SOIL	120	2.0	64	43	29	75	44	-	-	25	0.250	2.37	30
7.38	128.8	187.7	280.1	128.8	4.3	3.9	3.4	8	stiff SAND to clayy SAND	115	1.0	100	100	39	-	-	8.5	9.9	16	0.250	2.12	16
7.55	131.2	189.4	281.5	131.3	4.4	0.9	3.4	8	stiff SAND to clayy SAND	115	1.0	100	100	39	-	-	8.7	9.9	16	0.250	2.12	16
7.71	91.7	130.9	304.0	91.7	5.3	1.4	5.8	9	very stiff fine SOIL	120	2.0	65	46	30	76	44	-	-	27	0.250	2.40	30
7.87	110.3	155.9	338.0	110.4	6.4	3.1	5.9	9	very stiff fine SOIL	120	2.0	78	55	36	82	45	-	-	25	0.250	2.36	30
8.04	162.1	226.7	368.5	162.2	7.3	2.8	4.5	9	very stiff fine SOIL	120	2.0	100	81	48	94	46	-	-	18	0.250	2.18	30
8.20	169.7	235.0	318.1	169.8	5.3	2.2	3.1	8	stiff SAND to clayy SAND	115	1.0	100	100	47	-	-	11.2	9.9	14	0.250	2.04	16
8.37	192.6	264.1	331.3	192.6	5.3	1.2	2.7	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	12.7	9.9	12	0.250	1.96	16
8.53	198.8	270.1	340.3	198.8	5.6	-0.3	2.8	8	stiff SAND to clayy SAND	115	1.0	100	100	52	-	-	13.1	9.9	12	0.250	1.97	16
8.69	217.6	292.9	363.2	217.6	6.1	-0.8	2.8	8	stiff SAND to clayy SAND	115	1.0	100	100	56	-	-	14.4	9.9	12	0.250	1.95	16
8.86	221.6	295.7	371.9	221.6	6.6	-0.6	3.0	8	stiff SAND to clayy SAND	115	1.0	100	100	57	-	-	14.6	9.9	12	0.250	1.97	16
9.02	223.8	296.0	373.2	223.8	6.7	-0.5	3.0	8	stiff SAND to clayy SAND	115	1.0	100	100	57	-	-	14.8	9.9	12	0.250	1.97	16
9.19	211.6	277.5	366.8	211.6	6.9	-0.5	3.3	8	stiff SAND to clayy SAND	115	1.0	100	100	55	-	-	14.0	9.9	13	0.250	2.02	16
9.35	194.0	252.3	361.1	194.0	7.2	-1.0	3.7	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	12.8	9.9	15	0.250	2.09	16
9.51	176.7	227.8	354.5	176.7	7.4	-1.1	4.2	8	stiff SAND to clayy SAND	115	1.0	100	100	48	-	-	11.7	9.9	17	0.250	2.15	16
9.68	169.3	216.5	313.3	169.3	5.9	-0.9	3.5	8	stiff SAND to clayy SAND	115	1.0	100	100	44	-	-	11.2	9.9	16	0.250	2.10	16
9.84	189.7	240.6	318.4	189.7	5.7	-1.1	3.0	8	stiff SAND to clayy SAND	115	1.0	100	100	48	-	-	12.5	9.9	13	0.250	2.02	16
10.01	219.8	276.6	342.0	219.8	5.9	-2.2	2.7	8	stiff SAND to clayy SAND	115	1.0	100	100	53	-	-	14.5	9.9	12	0.250	1.95	16
10.17	225.8	281.9	344.5	225.7	5.9	-5.2	2.6	8	stiff SAND to clayy SAND	115	1.0	100	100	54	-	-	14.9	9.9	11	0.250	1.93	16
10.34	213.9	265.0	340.8	213.8	6.3	-5.0	3.0	8	stiff SAND to clayy SAND	115	1.0	100	100	52	-	-	14.1	9.9	13	0.250	1.99	16
10.50	230.8	283.8	359.3	230.7	6.8	-5.1	2.9	8	stiff SAND to clayy SAND	115	1.0	100	100	55	-	-	15.3	9.9	12	0.250	1.97	16
10.66	227.7	277.8	363.5	227.6	7.2	-5.1	3.2	8	stiff SAND to clayy SAND	115	1.0	100	100	55	-	-	15.0	9.9	13	0.250	2.01	16
10.83	206.2	249.7	359.5	206.1	7.7	-4.8	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	13.6	9.9	16	0.250	2.09	16
10.99	206.1	247.8	378.8	206.0	8.7	-4.7	4.2	9	very stiff fine SOIL	120	2.0	100	100	51	95	46	-	-	17	0.250	2.14	30
11.16	231.8	276.6	406.5	231.7	9.6	-5.0	4.2	8	stiff SAND to clayy SAND	115	1.0	100	100	57	-	-	15.3	9.9	16	0.250	2.11	16
11.32	212.9	252.3	408.1	212.8	10.1	-5.5	4.8	9	very stiff fine SOIL	120	2.0	100	100	53	95	46	-	-	18	0.250	2.18	30
11.48	191.9	225.8	394.3	191.8	9.8	-5.5	5.1	9	very stiff fine SOIL	120	2.0	100	96	49	94	46	-	-	20	0.250	2.23	30
11.65	166.3	194.2	322.2	166.2	7.1	-5.3	4.3	9	very stiff fine SOIL	120	2.0	97	83	41	89	45	-	-	19	0.250	2.20	30
11.81	157.8	183.0	329.8	157.7	7.5	-4.9	4.8	9	very stiff fine SOIL	120	2.0	91	79	40	87	45	-	-	21	0.250	2.25	30
11.98	162.9	187.6	344.9	162.8	8.1	-4.7	5.0	9	very stiff fine SOIL	120	2.0	94	81	41	88	45	-	-	21	0.250	2.26	30
12.14	194.3	222.2	351.9	194.2	8.2	-4.7	4.3	9	very stiff fine SOIL	120	2.0	100	97	47	93	45	-	-	18	0.250	2.16	30
12.30	163.9	186.2	319.1	163.8	7.2	-4.9	4.4	9	very stiff fine SOIL	120	2.0	93	82	40	88	45	-	-	20	0.250	2.22	30
12.47	135.0	152.4	256.2	134.9	5.0	-4.9	3.7	8	stiff SAND to clayy SAND	115	1.0	100	100	32	-	-	8.9	9.9	19	0.250	2.21	16
12.63	95.5	107.1	221.8	95.4	3.9	-4.8	4.1	9	very stiff fine SOIL	120	2.0	54	48	24	69	42	-	-	24	0.250	2.34	30
12.80	74.6	83.1	238.5	74.5	4.3	-4.4	5.8	9	very stiff fine SOIL	120	2.0	42	37	20	61	40	-	-	32	0.250	2.52	30
12.96	80.9	89.6	244.1	80.8	4.5	-4.2	5.7	9	very stiff fine SOIL	120	2.0	45	40	22	63	41	-	-	30	0.250	2.49	30
13.12	97.7	107.9	260.0	97.7	5.2	-4.4	5.4	9	very stiff fine SOIL	120	2.0	54	49	25	70	42	-	-	27	0.250	2.42	30
13.29	97.0	106.7	280.2	96.9	5.9	-4.4	6.1	9	very stiff fine SOIL	120	2.0	53	48	26	69	42	-	-	29	0.250	2.47	30
13.45	117.9	129.3	276.1	117.8	5.9	-4.4	5.0	9	very stiff fine SOIL	120	2.0	65	59	29	75	43	-	-	25	0.250	2.35	30
13.62	140.1	153.2	283.0	140.0	6.2	-4.4	4.4	9	very stiff fine SOIL	120	2.0	77	70	34	81	43	-	-	21	0.250	2.27	30
13.78	175.8	191.7	292.6	175.7	6.3	-4.4	3.6	8	stiff SAND to clayy SAND	115	1.0	100	100	40	-	-	11.6	9.9	17	0.250	2.14	16
13.94	233.3	253.8	318.0	233.3	6.2	-4.7	2.7	8	stiff SAND to clayy SAND	115	1.0	100	100	49	-	-	15.4	9.9	12	0.250	1.96	16
14.11	247.1	268.0	328.3	247.0	6.3	-5.0	2.6	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	16.3	9.9	11	0.250	1.94	16
14.27	238.4	257.9	327.2	238.3	6.6	-5.2	2.8	8	stiff SAND to clayy SAND	115	1.0	100	100	50	-	-	15.7	9.9	12	0.250	1.98	16
14.44	196.9	212.4	284.4	196.8	5.6	-5.3	2.9	8	stiff SAND to clayy SAND	115	1.0	100	100	42	-	-	13.0	9.9	14	0.250	2.03	16
14.60	127.7	137.4	160.7	127.6	1.6	-5.7	1.3	6	clean SAND to silty SAND	125	5.0	27	26	26	77	43	-	-	10	0.350	1.88	16
14.76	82.6	88.6	118.0	82.5	1.0	-5.4	1.3	6	clean SAND to silty SAND	125	5.0	18	17	18	63	41	-	-	14	0.350	2.02	16
14.93	52.8	56.5	100.5	52.7	0.8	-5.0	1.6	5	silty SAND to sandy SILT	120	4.0	14	13	12	48	38	-	-	20	0.200	2.24	16
15.09	34.2	36.5	99.5	34.1	0.8	-4.5	2.3	4	clayy SILT to silty CLAY	115	2.0	18	17	9	-	-	2.4	9.9	30	0.070	2.49	15
15.26	35.5	37.7	102.7	35.4	0.8	-4.4	2.4	4	clayy SILT to silty CLAY	115	2.0	19	18	9	-	-	2.4	9.9	30	0.070	2.49	15
15.42	30.6	32.4	95.8	30.5	0.7	-4.5	2.4	4	clayy SILT to silty CLAY	115	2.0	16	15	8	-	-	2.1	9.9	32	0.070	2.54	15

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

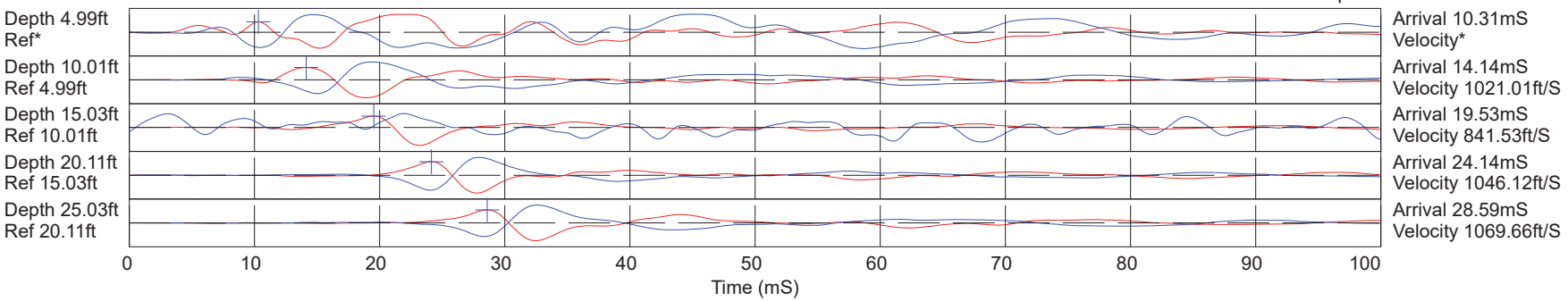
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Data File: SDF(327).cpt
CPT Date: 11/9/2019 10:51:04 AM
GW During Test: 13 ft

Sounding ID: CPT-04
Project No: 84-04726-PW
Cone/Rig: DDG1489

Depth ft	qc PS tsf	qc1n PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
15.58	26.4	28.0	86.3	26.4	0.5	-4.5	2.1	4	clayy SILT to silty CLAY	115	2.0	14	13	7	-	-	1.8	9.9	33	0.070	2.56	15
15.75	27.6	29.2	83.5	27.6	0.5	-4.5	1.9	4	clayy SILT to silty CLAY	115	2.0	15	14	7	-	-	1.9	9.9	31	0.070	2.52	15
15.91	24.7	26.0	80.0	24.6	0.5	-4.6	1.9	4	clayy SILT to silty CLAY	115	2.0	13	12	7	-	-	1.7	9.2	33	0.070	2.56	15
16.08	22.8	24.0	76.7	22.8	0.4	-4.6	1.8	4	clayy SILT to silty CLAY	115	2.0	12	11	6	-	-	1.6	8.4	34	0.070	2.58	15
16.24	21.2	23.2	76.0	21.2	0.4	-4.6	1.8	4	clayy SILT to silty CLAY	115	2.0	12	11	6	-	-	1.4	7.8	35	0.070	2.59	15
16.40	19.6	22.7	-	19.5	0.4	-4.7	2.0	4	clayy SILT to silty CLAY	115	2.0	11	10	6	-	-	1.3	7.1	37	0.070	2.62	15
16.57	20.1	23.2	-	20.1	0.4	-4.6	2.2	4	clayy SILT to silty CLAY	115	2.0	12	10	6	-	-	1.4	7.3	37	0.070	2.64	15
16.73	23.0	26.3	-	22.9	0.7	-4.6	3.0	4	clayy SILT to silty CLAY	115	2.0	13	11	7	-	-	1.6	8.3	39	0.070	2.67	15
16.90	27.4	31.2	-	27.3	1.4	-4.6	5.1	3	silty CLAY to CLAY	115	1.5	21	18	9	-	-	1.9	9.9	45	0.005	2.78	15
17.06	35.8	40.6	-	35.7	2.1	-4.6	6.1	3	silty CLAY to CLAY	115	1.5	27	24	11	-	-	2.5	9.9	43	0.005	2.74	15
17.23	53.3	57.0	-	53.2	2.8	-4.6	5.3	4	clayy SILT to silty CLAY	115	2.0	28	27	15	-	-	3.7	9.9	35	0.070	2.60	15
17.39	72.7	74.8	192.2	72.6	3.2	-4.7	4.4	4	clayy SILT to silty CLAY	115	2.0	37	36	18	-	-	5.1	9.9	29	0.070	2.46	15
17.55	92.5	95.0	189.4	92.4	3.2	-4.8	3.5	5	silty SAND to sandy SILT	120	4.0	24	23	21	65	41	-	-	23	0.200	2.31	16
17.72	124.6	127.6	193.4	124.5	3.2	-4.9	2.6	5	silty SAND to sandy SILT	120	4.0	32	31	26	75	42	-	-	17	0.200	2.13	16
17.88	157.1	160.5	171.8	157.0	1.5	-5.2	1.0	6	clean SAND to silty SAND	125	5.0	32	31	29	83	43	-	-	7	0.350	1.75	16
18.05	175.4	178.7	208.4	175.3	2.8	-5.3	1.6	6	clean SAND to silty SAND	125	5.0	36	35	33	86	44	-	-	10	0.350	1.87	16
18.21	181.7	184.6	184.6	181.6	1.4	-5.4	0.8	6	clean SAND to silty SAND	125	5.0	37	36	32	87	44	-	-	5	0.350	1.64	16
18.37	179.8	182.1	182.1	179.7	1.1	-5.3	0.6	6	clean SAND to silty SAND	125	5.0	36	36	31	87	44	-	-	5	0.350	1.57	16
18.54	155.8	157.4	169.2	155.7	1.5	-5.3	1.0	6	clean SAND to silty SAND	125	5.0	31	31	28	82	43	-	-	7	0.350	1.76	16
18.70	169.0	170.2	188.7	168.9	2.1	-2.0	1.2	6	clean SAND to silty SAND	125	5.0	34	34	31	85	44	-	-	8	0.350	1.80	16
18.87	157.3	158.1	189.5	157.3	2.5	-1.9	1.6	6	clean SAND to silty SAND	125	5.0	32	31	30	82	43	-	-	11	0.350	1.91	16
19.03	155.3	155.6	209.3	155.3	3.5	-2.1	2.3	5	silty SAND to sandy SILT	120	4.0	39	39	31	82	43	-	-	14	0.200	2.03	16
19.19	148.7	148.6	232.0	148.7	4.6	-2.1	3.1	5	silty SAND to sandy SILT	120	4.0	37	37	31	80	43	-	-	17	0.200	2.15	16
19.36	127.7	127.3	231.4	127.7	4.7	-2.2	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	28	-	-	8.4	9.9	21	0.250	2.26	16
19.52	87.6	87.1	219.3	87.6	4.2	-1.6	4.9	9	very stiff fine SOIL	120	2.0	44	44	21	62	40	-	-	28	0.250	2.45	30
19.69	65.6	65.1	180.9	65.6	2.9	-0.9	4.4	4	clayy SILT to silty CLAY	115	2.0	33	33	16	-	-	4.6	9.9	31	0.070	2.50	15
19.85	55.4	57.5	-	55.4	3.3	-0.8	6.0	3	silty CLAY to CLAY	115	1.5	38	37	15	-	-	3.8	9.9	37	0.005	2.64	15
20.01	63.6	65.8	-	63.6	3.8	-0.4	6.1	9	very stiff fine SOIL	120	2.0	33	32	17	53	38	-	-	36	0.250	2.61	30
20.18	80.6	79.4	223.4	80.6	4.3	-0.8	5.4	9	very stiff fine SOIL	120	2.0	40	40	19	59	39	-	-	31	0.250	2.51	30
20.34	81.4	80.0	231.9	81.4	4.6	-0.5	5.7	9	very stiff fine SOIL	120	2.0	40	41	20	60	40	-	-	32	0.250	2.53	30
20.51	95.2	93.3	226.0	95.2	4.5	-0.3	4.8	9	very stiff fine SOIL	120	2.0	47	48	22	65	40	-	-	27	0.250	2.43	30
20.67	116.0	113.4	208.8	116.0	4.0	-0.3	3.5	5	silty SAND to sandy SILT	120	4.0	28	29	25	71	41	-	-	21	0.200	2.26	16
20.83	135.7	132.4	205.0	135.7	3.8	-0.6	2.8	5	silty SAND to sandy SILT	120	4.0	33	34	28	76	42	-	-	17	0.200	2.15	16
21.00	152.5	148.5	197.1	152.5	3.2	-1.0	2.1	5	silty SAND to sandy SILT	120	4.0	37	38	29	80	43	-	-	14	0.200	2.02	16
21.16	156.2	151.7	222.4	156.1	4.3	-1.2	2.8	5	silty SAND to sandy SILT	120	4.0	38	39	31	81	43	-	-	16	0.200	2.11	16
21.33	147.5	142.9	231.6	147.5	4.8	-1.2	3.3	5	silty SAND to sandy SILT	120	4.0	36	37	30	79	43	-	-	18	0.200	2.18	16
21.49	117.9	113.9	263.2	117.8	6.1	-0.2	5.2	9	very stiff fine SOIL	120	2.0	57	59	26	71	41	-	-	26	0.250	2.40	30
21.65	121.7	117.4	299.2	121.7	7.5	1.5	6.2	9	very stiff fine SOIL	120	2.0	59	61	28	72	41	-	-	29	0.250	2.45	30
21.82	145.1	139.6	326.5	145.2	8.8	1.8	6.1	9	very stiff fine SOIL	120	2.0	70	73	32	78	42	-	-	27	0.250	2.41	30
21.98	163.5	156.9	334.2	163.5	9.2	1.7	5.7	9	very stiff fine SOIL	120	2.0	78	82	36	82	43	-	-	25	0.250	2.35	30
22.15	168.0	160.9	336.2	168.0	9.4	1.1	5.6	9	very stiff fine SOIL	120	2.0	80	84	36	83	43	-	-	24	0.250	2.34	30
22.31	158.3	151.2	334.1	158.3	9.2	1.3	5.9	9	very stiff fine SOIL	120	2.0	76	79	35	81	43	-	-	25	0.250	2.37	30
22.47	161.3	153.8	327.6	161.3	9.0	1.5	5.6	9	very stiff fine SOIL	120	2.0	77	81	35	81	43	-	-	25	0.250	2.35	30
22.64	167.5	159.4	310.4	167.6	8.3	1.4	5.0	9	very stiff fine SOIL	120	2.0	80	84	35	82	43	-	-	23	0.250	2.30	30
22.80	191.7	181.9	289.1	191.7	7.2	1.4	3.8	8	stiff SAND to clayy SAND	115	1.0	100	100	38	-	-	12.6	9.9	18	0.250	2.17	16
22.97	218.3	206.7	271.8	218.3	5.8	0.9	2.7	5	silty SAND to sandy SILT	120	4.0	52	55	41	91	44	-	-	13	0.200	2.01	16
23.13	217.8	205.8	261.1	217.8	5.2	0.0	2.4	5	silty SAND to sandy SILT	120	4.0	51	54	40	91	44	-	-	12	0.200	1.97	16
23.30	209.9	197.9	257.5	209.9	5.2	-0.3	2.5	5	silty SAND to sandy SILT	120	4.0	49	52	39	90	44	-	-	13	0.200	2.00	16
23.46	205.8	193.6	260.8	205.8	5.5	-0.3	2.7	5	silty SAND to sandy SILT	120	4.0	48	51	39	89	44	-	-	14	0.200	2.03	16
23.62	215.0	201.8	253.2	215.0	4.9	-0.3	2.3	6	clean SAND to silty SAND	125	5.0	40	43	39	90	44	-	-	12	0.350	1.96	16
23.79	234.6	219.7	277.3	234.6	5.8	-0.4	2.5	5	silty SAND to sandy SILT	120	4.0	55	59	43	93	44	-	-	12	0.200	1.97	16
23.95	245.8	229.7	292.3	245.8	6.4	-0.4	2.6	8	stiff SAND to clayy SAND	115	1.0	100	100	45	-	-	16.2	9.9	12	0.250	1.98	16
24.12	250.7	233.8	322.1	250.7	8.1	-1.0	3.3	8	stiff SAND to clayy SAND	115	1.0	100	100	47	-	-	16.5	9.9	14	0.250	2.05	16
24.28	248.3	231.1	328.2	248.3	8.6	-0.9	3.5	8	stiff SAND to clayy SAND	115	1.0	100	100	47	-	-	16.4	9.9	15	0.250	2.08	16
24.44	203.2	188.8	330.1	203.2	9.3	-0.6	4.6	9	very stiff fine SOIL	120	2.0	94	100	41	88	44	-	-	20	0.250	2.23	30
24.61	165.4	153.3	326.6	165.5	9.2	1.7	5.6	9	very stiff fine SOIL	120	2.0	77	83	35	81	43	-	-	25	0.250	2.35	30
24.77	191.8	177.4	343.0	191.9	10.0	2.8	5.3	9	very stiff fine SOIL	120	2.0	89	96	39	86	43	-	-	22	0.250	2.30	30
24.94	238.0	219.7	339.6	238.1	9.5	1.6	4.0	8	stiff SAND to clayy SAND	115	1.0	100	100	46	-	-	15.7	9.9	17	0.250	2.15	16
25.10	278.6	256.6	353.1	278.6	9.5	0.2	3.4	8	stiff SAND to clayy SAND	115	1.0	100	100	51	-	-	18.4	9.9	14	0.250	2.05	16
25.26	333.6	306.7	385.0	333.6	10.0	-0.7	3.0	8	stiff SAND to clayy SAND	115	1.0	100	100	59	-	-	22.0	9.9	12	0.250	1.96	16
25.43	357.8	328.2	396.2	357.7	9.9	-0.4	2.8	8	stiff SAND to clayy SAND	115	1.0	100	100	63	-	-	23.6	9.9	11	0.250	1.92	16
25.59	367.0	336.1	389.7	367.0	9.0	-0.1	2.5	8	stiff SAND to clayy SAND	115	1.0	100	100	63	-	-	24.2	9.9	10	0.250	1.87	16
25.76	373.6	341.5	386.0	373.6	8.4	0.1	2.3	6	clean SAND to silty SAND	125	5.0	68	75	63	95	46	-	-	9	0.350	1.83	16

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

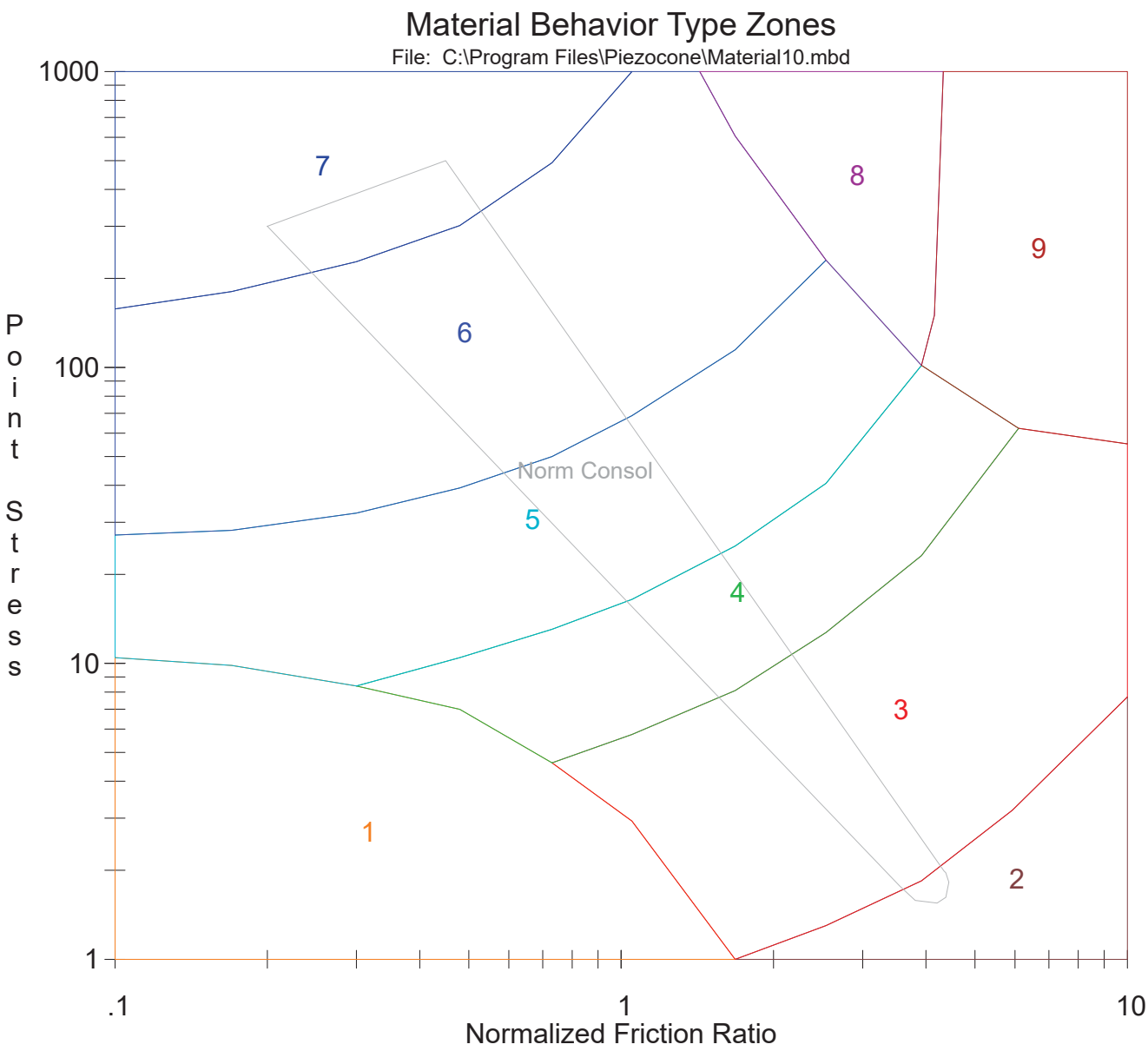
CPT-04 Cole Campus



Hammer to Rod String Distance (ft): 5.83
* = Not Determined

COMMENT:

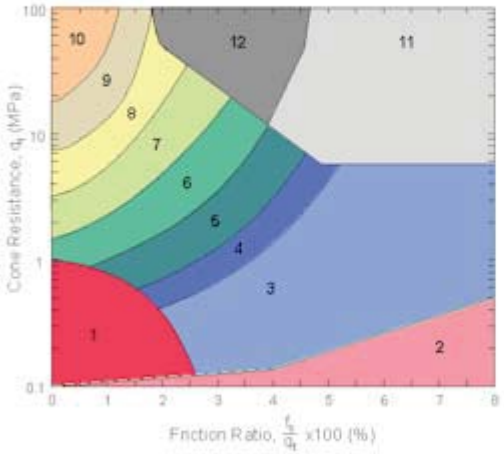
Middle Earth
Geo Testing Inc.

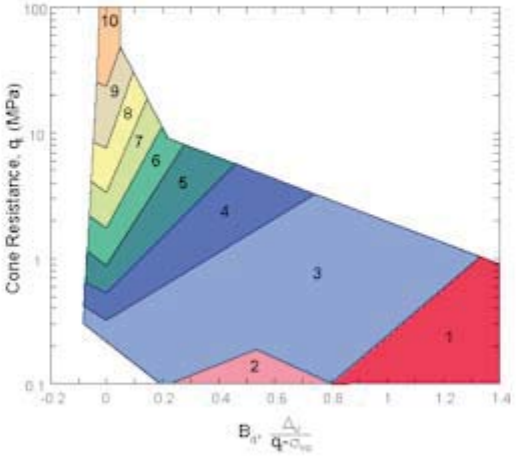


1. sensitive fine SOIL
2. Organic SOILS - Peats
3. silty CLAY to CLAY
4. clayy SILT to silty CLAY
5. silty SAND to sandy SILT
6. clean SAND to silty SAND
7. grvly SAND to dense SAND
8. stiff SAND to clayy SAND
9. very stiff fine SOIL

CPT Soil Behavior Type Legend

Robertson et al. 1986

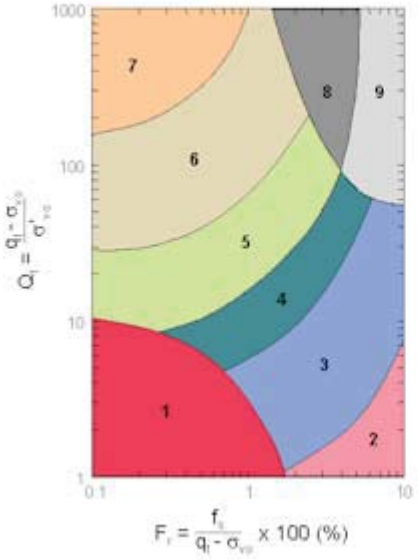


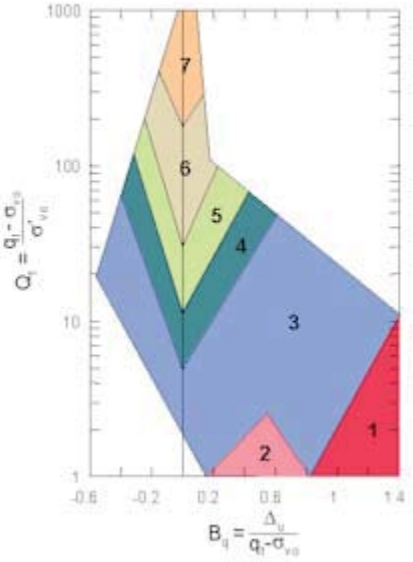


Zone	Soil Behavior Type
1	Sensitive, Fine Grained
2	Organic Material
3	Clay
4	Silty Clay to Clay
5	Clayey Silt to Silty Clay
6	Sandy Silt to Clayey Silt
7	Silty Sand to Sandy Silt
8	Sand to Silty Sand
9	Sand
10	Gravelly Sand to Sand
11	Very Stiff Fine Grained*
12	Sand to Clayey Sand*

*Overconsolidated or Cemented

Robertson et al. 1990





Zone	Soil Behavior Type
1	Sensitive, Fine Grained
2	Organic Soils-Peats
3	Clays; Clay to Silty Clay
4	Silt Mixtures; Clayey Silt to Silty Clay
5	Sand Mixtures; Silty Sand to Sandy Silt
6	Sands; Clean Sands to Silty Sands
7	Gravelly Sand to Sand
8	Very Stiff Sand to Clayey Sand*
9	Very Stiff Fine Grained*

*Overconsolidated or Cemented

APPENDIX B

LABORATORY TEST RESULTS
Atterberg Limits Results
Particle Size Distribution Report
Consolidated Undrained Direct Shear Report (2)
R-Value Test Report
Corrosivity Tests Summary

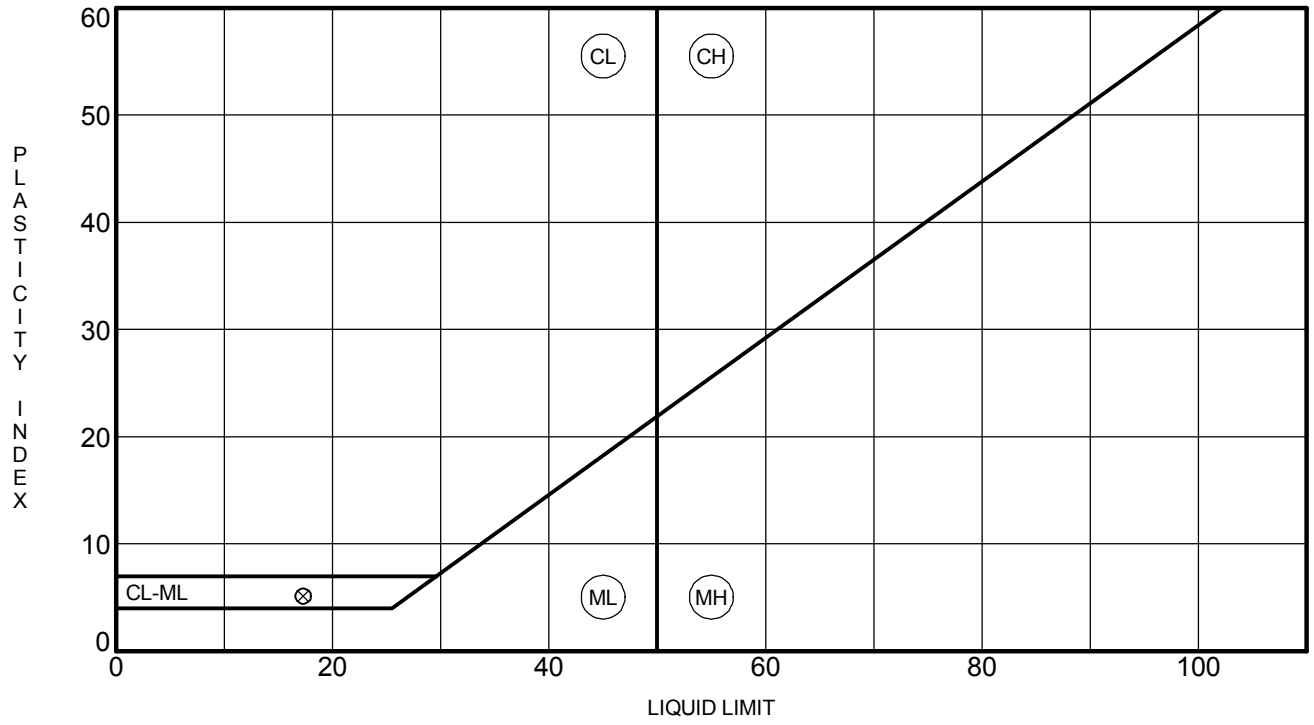
ATTERBERG LIMITS RESULTS

CONSOLIDATED ENGINEERING
LABORATORIES

2001 Crow Canyon Road, Suite 200
San Ramon, CA 94583-5368
Telephone: (925) 314-7100

CLIENT Oakland Unified School District **PROJECT NAME** Cole Campus - Central Administrative Center

PROJECT NUMBER 84-04726-PWA **PROJECT LOCATION** 1011 Union Street Oakland, California 94607

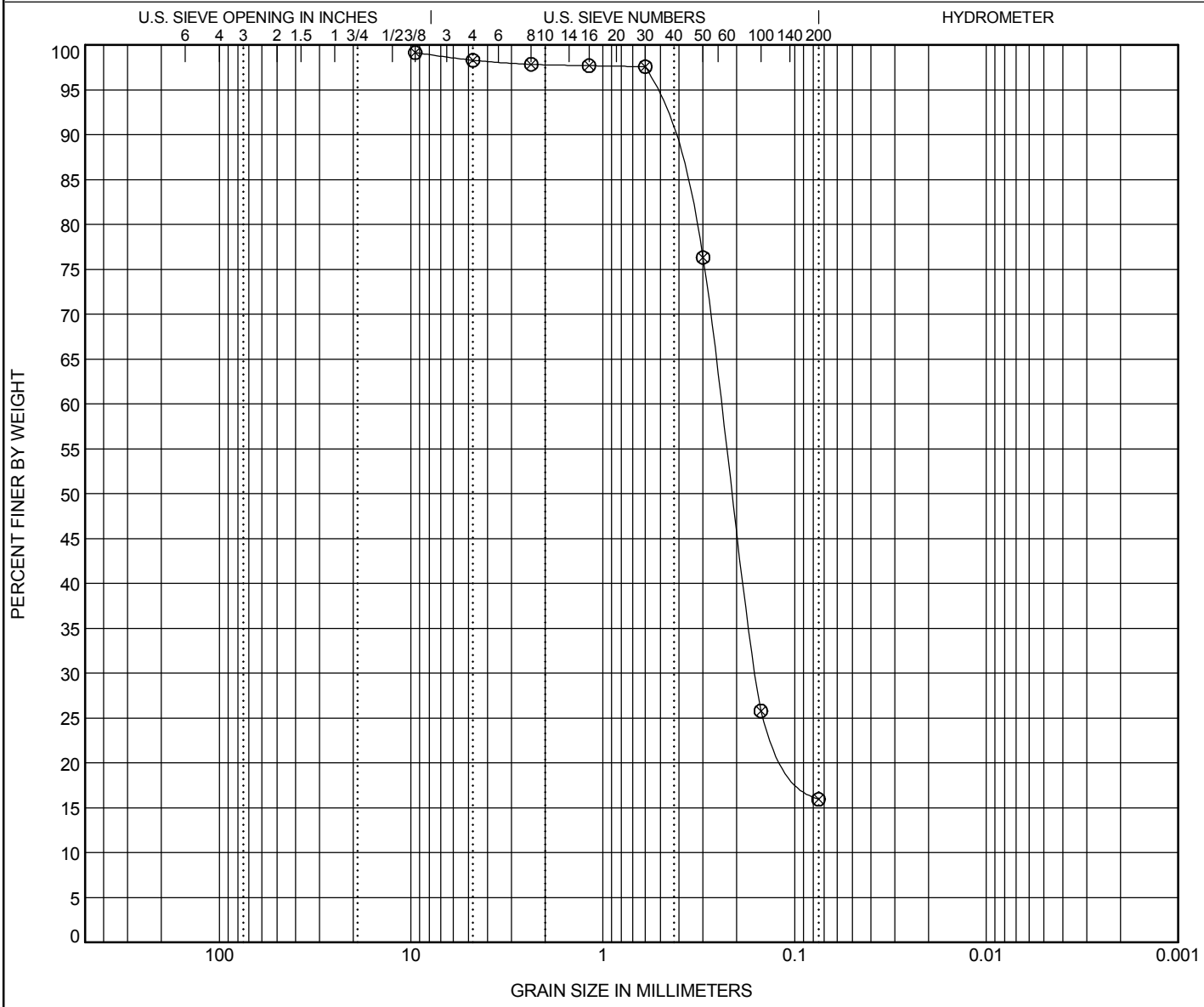


	Specimen Identification		LL	PL	PI	Fines	Classification
⊗	**B-5**	**14.0**	**17**	**12**	**5**	**41**	**SILTY CLAYEY SAND(SC-SM)**

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Environmental Management · Water Resources

PARTICLE SIZE DISTRIBUTION

CLIENT Oakland Unified School District
PROJECT NAME Cole Campus - Central Administrative Center
PROJECT NUMBER 84-04726-PWA
PROJECT LOCATION 1011 Union Street Oakland, California 94607



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification	Classification	LL	PL	PI	Cc	Cu
⊗ **B-1 Depth: 4.5'**	**CLAYEY SAND (SC)**					

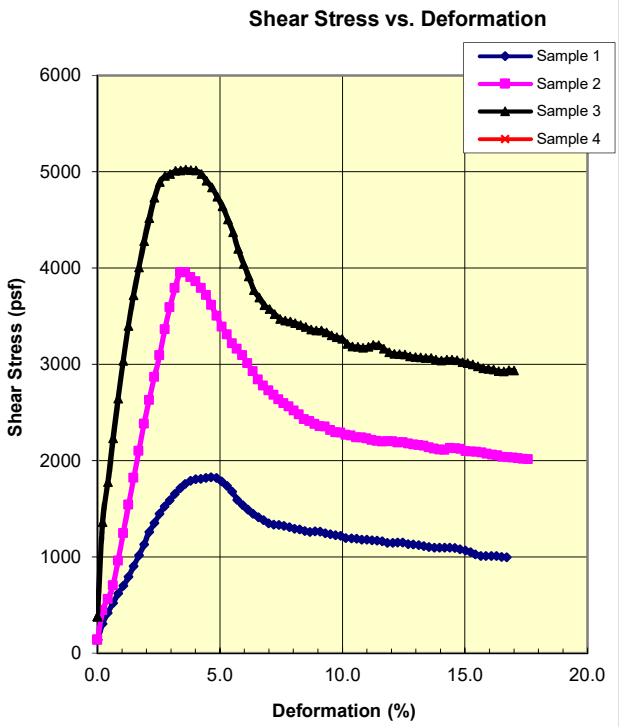
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
⊗ **B-1 Depth: 4.5'**	**9.5**	**0.24**	**0.159**		**0.9**	**82.4**	**16.0**	

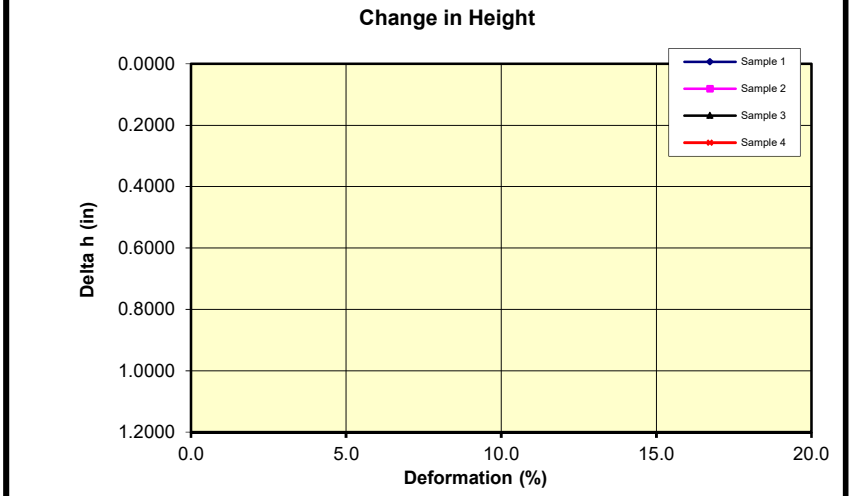
Consolidated Undrained Direct Shear (ASTM D3080M)

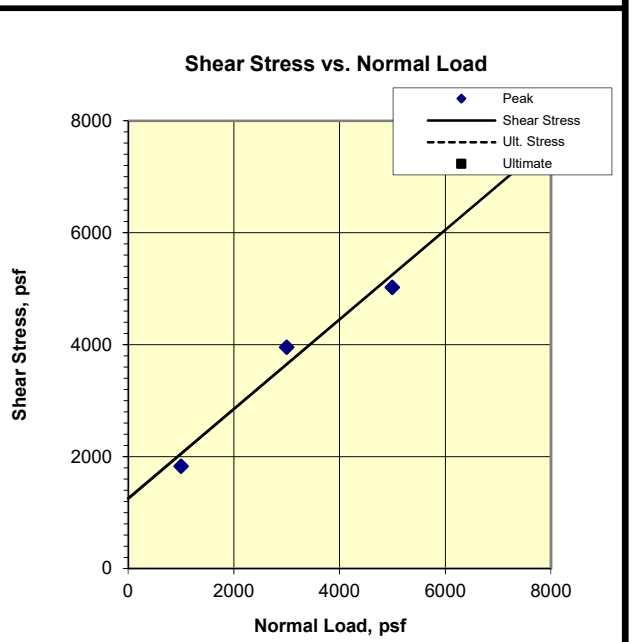
CTL Job #:	291-124	Project #:	84-04726-PWA	By:	MD
Client:	Consolidated Engineering	Date:	11/26/2019	Checked:	PJ
Project Name:	Cole Campus	Remolding Info:			

Specimen Data	1	2	3	4
Boring:	1	1	1	
Sample:	1-4	1-4	1-4	
Depth (ft):	7	7	7	
Visual Description:	Yellowish Brown Clayey SAND	Yellowish Brown Clayey SAND	Yellowish Brown Clayey SAND	
Normal Load (psf)	1000	3000	5000	
Dry Mass of Specimen (g)	137.4	140.8	139.4	
Initial Height (in)	1.01	1.00	1.00	
Initial Diameter (in)	2.41	2.41	2.41	
Initial Void Ratio	0.478	0.437	0.443	
Initial Moisture (%)	14.9	14.7	14.2	
Initial Wet Density (pcf)	131.0	134.5	133.4	
Initial Dry Density (pcf)	114.1	117.3	116.8	
Initial Saturation (%)	84.0	90.7	86.4	
ΔHeight Consol (in)	0.0084	0.0258	0.0263	
At Test Void Ratio	0.465	0.400	0.405	
At Test Moisture (%)	15.6	14.6	14.5	
At Test Wet Density (pcf)	132.9	138.0	137.4	
At Test Dry Density (pcf)	115.0	120.4	120.0	
At Test Saturation (%)	90.3	98.6	96.7	
Strain Rate (%/min)	1.1	1.1	1.2	
Strengths Picked at	Peak	Peak	Peak	
Shear Stress (psf)	1828	3955	5022	
ΔHeight (in) at Peak				
Ultimate Stress (psf)				

Phi (deg)	38.7	Ult. Phi (deg)	
Cohesion (psf)	1250	Ult. Cohesion (psf)	







Remarks: *DS-CU* A fully undrained condition may not be attained in this test. ΔH is not measured during undrained direct shear tests.

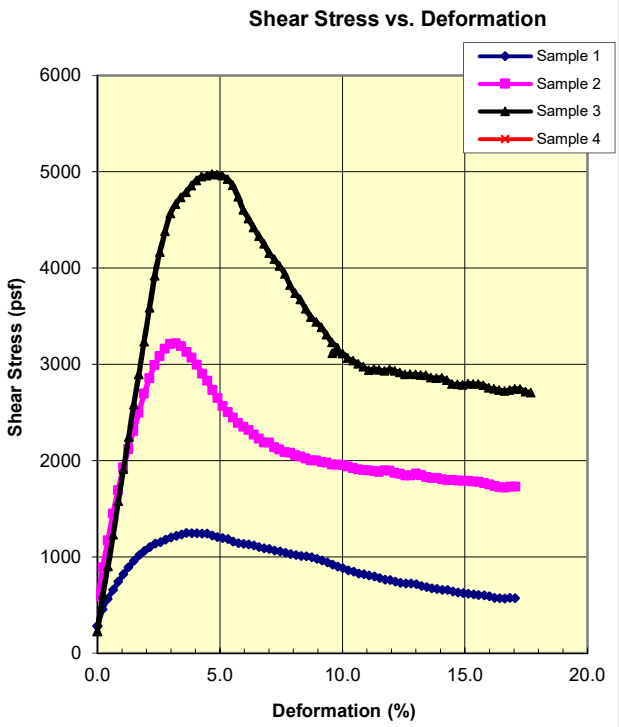
©

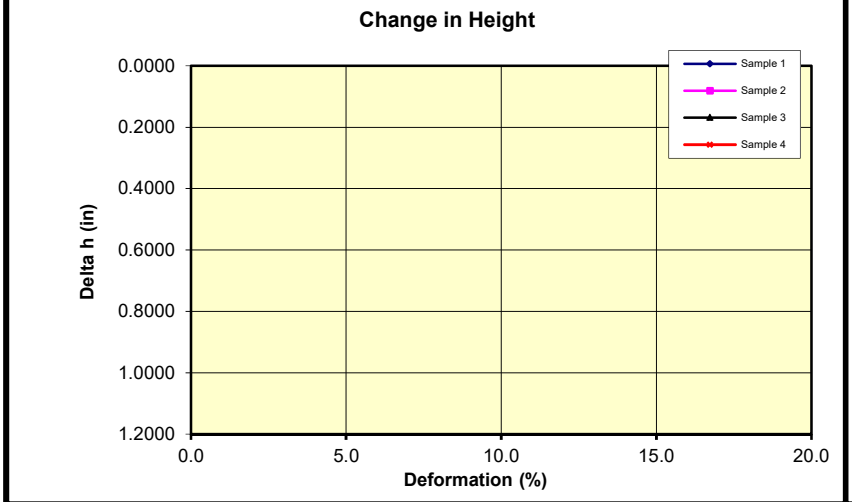
Consolidated Undrained Direct Shear (ASTM D3080M)

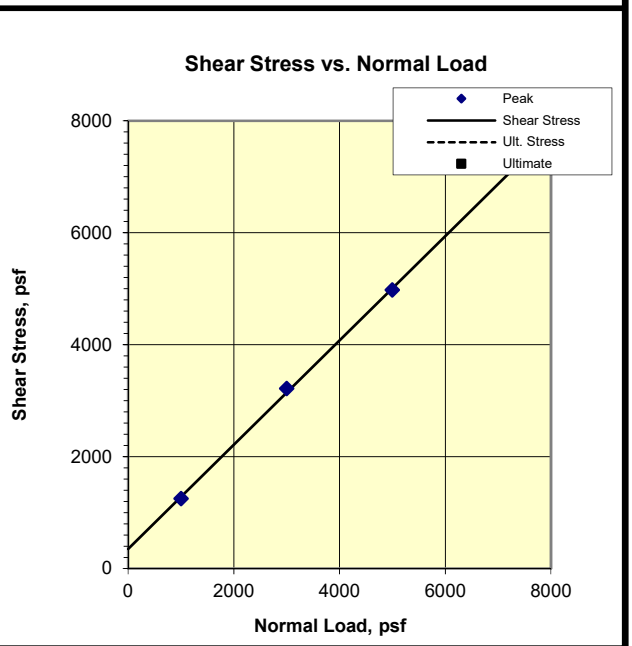
CTL Job #:	291-124	Project #:	84-04726-PWA	By:	MD
Client:	Consolidated Engineering	Date:	11/26/2019	Checked:	PJ
Project Name:	Cole Campus	Remolding Info:			

Specimen Data	1	2	3	4
Boring:	2	2	2	
Sample:	2-4	2-4	2-4	
Depth (ft):	7	7	7	
Visual Description:	Yellowish Brown Clayey SAND	Yellowish Brown Clayey SAND	Yellowish Brown Clayey SAND	
Normal Load (psf)	1000	3000	5000	
Dry Mass of Specimen (g)	132.5	138.0	139.1	
Initial Height (in)	1.00	1.01	1.00	
Initial Diameter (in)	2.40	2.40	2.40	
Initial Void Ratio	0.508	0.457	0.438	
Initial Moisture (%)	12.7	12.8	13.4	
Initial Wet Density (pcf)	125.9	130.5	132.9	
Initial Dry Density (pcf)	111.8	115.7	117.2	
Initial Saturation (%)	67.3	75.5	82.5	
ΔHeight Consol (in)	0.0147	0.0134	0.0303	
At Test Void Ratio	0.486	0.438	0.394	
At Test Moisture (%)	14.1	13.6	13.7	
At Test Wet Density (pcf)	129.5	133.2	137.5	
At Test Dry Density (pcf)	113.4	117.2	120.9	
At Test Saturation (%)	78.5	83.9	94.0	
Strain Rate (%/min)	1.2	1.2	1.1	
Strengths Picked at	Peak	Peak	Peak	
Shear Stress (psf)	1248	3215	4975	
ΔHeight (in) at Peak				
Ultimate Stress (psf)				

Phi (deg)	43.0	Ult. Phi (deg)	
Cohesion (psf)	350	Ult. Cohesion (psf)	



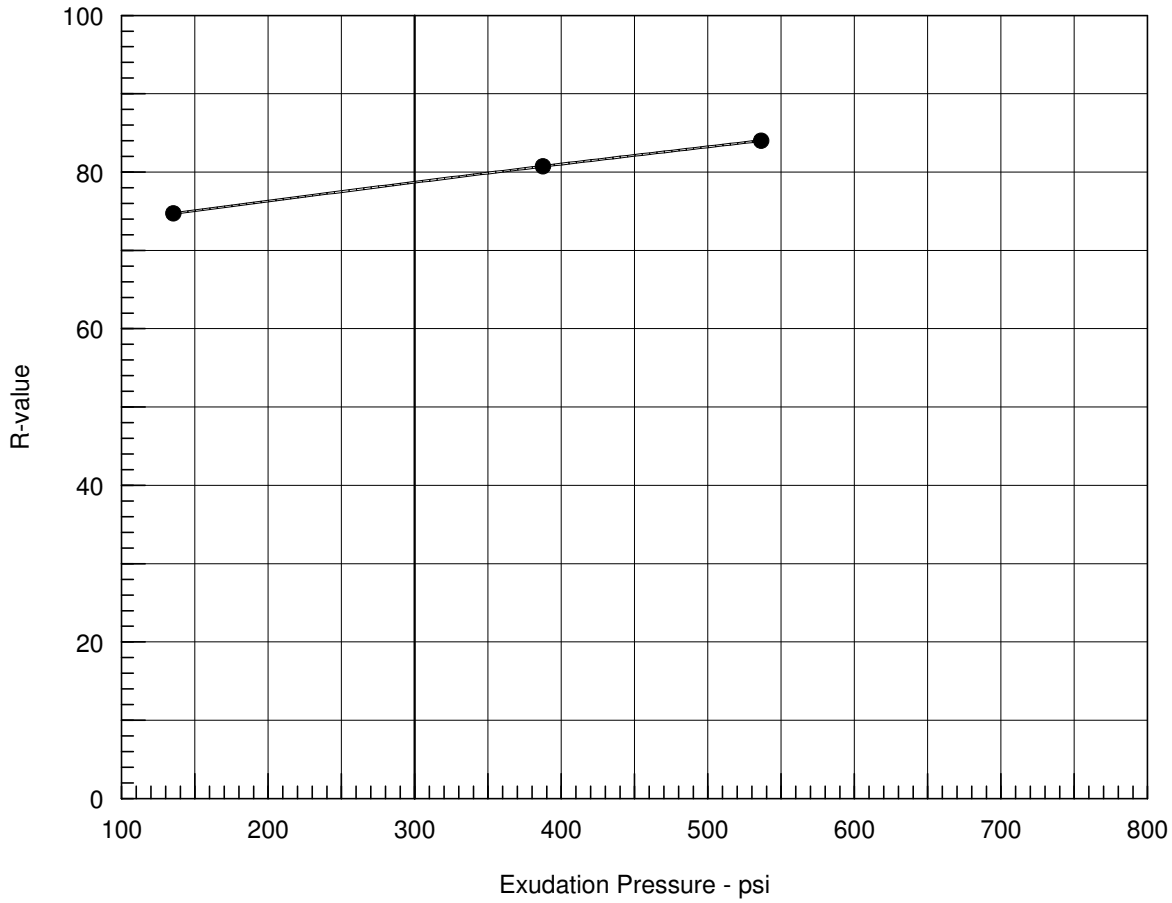




Remarks: *DS-CU* A fully undrained condition may not be attained in this test. ΔH is not measured during undrained direct shear tests.

©

R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - ASTM D2844

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	300	118.5	11.1	0.00	31	2.45	135	75	75
2	300	118.7	9.8	0.00	20	2.50	536	84	84
3	300	120.1	10.5	0.00	24	2.45	388	81	81

Test Results	Material Description
R-value at 300 psi exudation pressure = 79	Brown Sand Sampled by A. Knox on 11/9/19

Project No.: 8404726PWA

Project: OUSD - Cole Campus Central Admin Center (GES & GHR)

Location: 1011 Union St. Oakland, CA / Boring 1 0-5'

Sample Number: 10S191127-2

Date: 11/27/2019

Tested by: MT

Checked by: KC

Remarks:

R-VALUE TEST REPORT

CONSOLIDATED ENGINEERING LABORATORIES

Figure 10S191127-2

Corrosivity Tests Summary

CTL # 291-124 **Date:** 11/21/2019 **Tested By:** PJ **Checked:** PJ
Client: Consolidated Engineering **Project:** Cole Campus **Proj. No:** 84-04726-PWA
Remarks:

Sample Location or ID			Resistivity @ 15.5 °C (Ohm-cm)			Chloride	Sulfate		pH	ORP (Redox)		Sulfide	Moisture	Soil Visual Description
			As Rec.	Min	Sat.	mg/kg	mg/kg	%				Qualitative	At Test	
						Dry Wt.	Dry Wt.	Dry Wt.		E_H (mv)	At Test	by Lead	%	
Boring	Sample, No.	Depth, ft.	ASTM G57	Cal 643	ASTM G57	ASTM D4327	ASTM D4327	ASTM D4327	ASTM G51	ASTM G200	Temp °C	Acetate Paper	ASTM D2216	
2	2-1	0.0-5.0	-	-	23,762	2	47	0.0047	8.1	501	20	Negtaive	6.0	Very Dark Brown Silty SAND

APPENDIX C

SEISMIC SETTLEMENT ANALYSIS RESULT

TABLE OF CONTENTS

CPT-01 results
Summary data report 1
Vertical settlements summary report 8
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Summary data report 23
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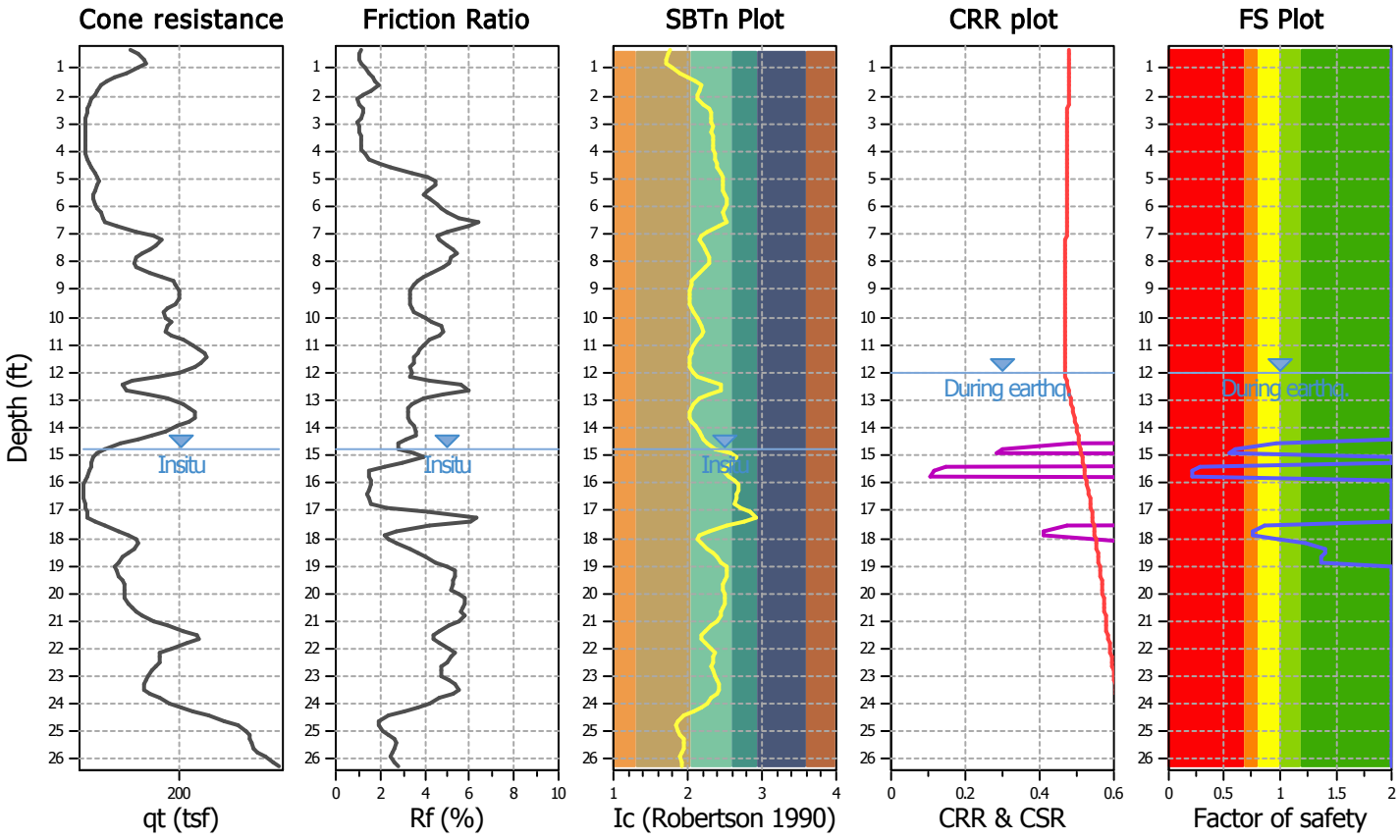
GEOLOGISMIKI Geotechnical Software

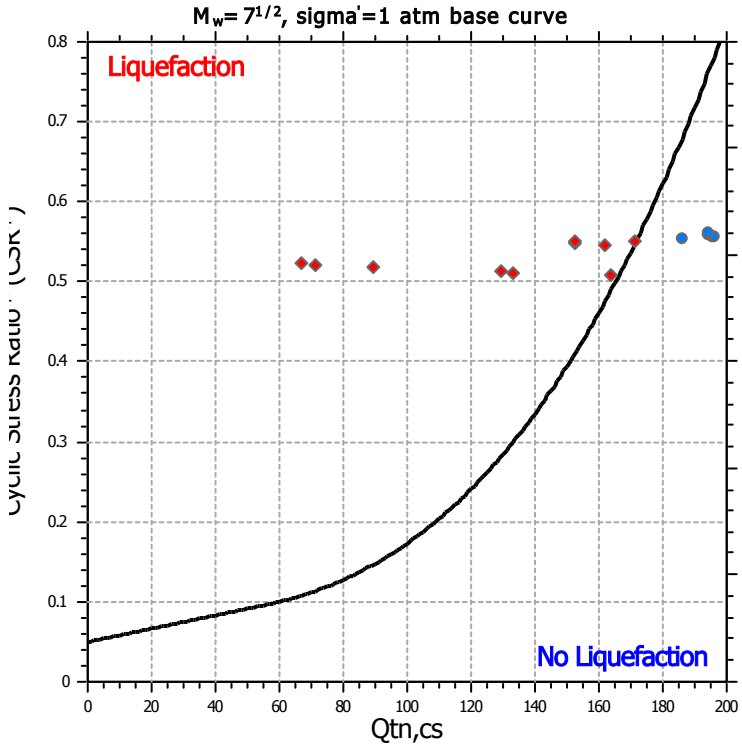
LIQUEFACTION ANALYSIS REPORT

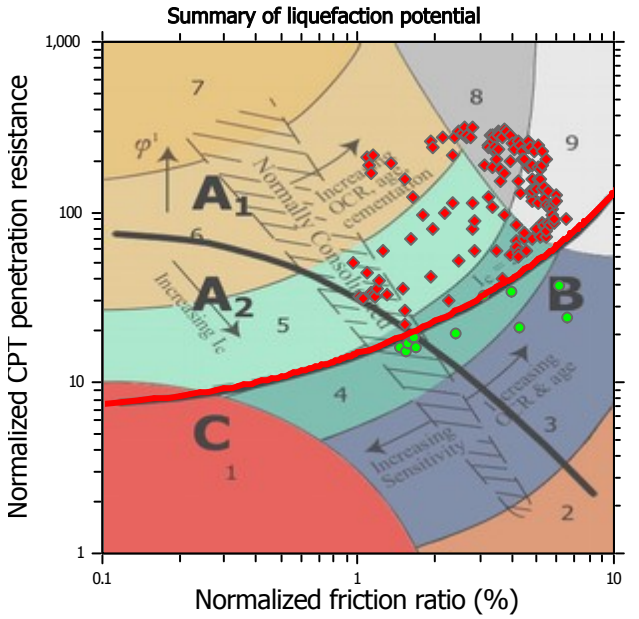
Project title : Cole CampusCole Campus – Central **Location : Oakland**
CPT file : CPT-01

Input parameters and analysis data

Analysis method:	**NCEER (1998)**	**G.W.T. (in-situ):**	**14.80 ft**	**Use fill:**	**No**	**Clay like behavior applied:**	**Sands only**
Fines correction method:	**NCEER (1998)**	**G.W.T. (earthq.):**	**12.00 ft**	**Fill height:**	**N/A**	**Limit depth applie**	**No**
Points to test:	**Based on Ic value**	**Average results interva**	**3**	**Fill weight:**	**N/A**	**Limit depth:**	**N/A**
Earthquake magnitude M_w:	**6.90**	**Ic cut-off value:**	**2.60**	**Trans. detect. applied:**	**No**	**MSF method:**	**Method based**
Peak ground acceleration:	**0.70**	**Unit weight calculatior**	**Based on SBT**	**K_o applied:**	**Yes**		

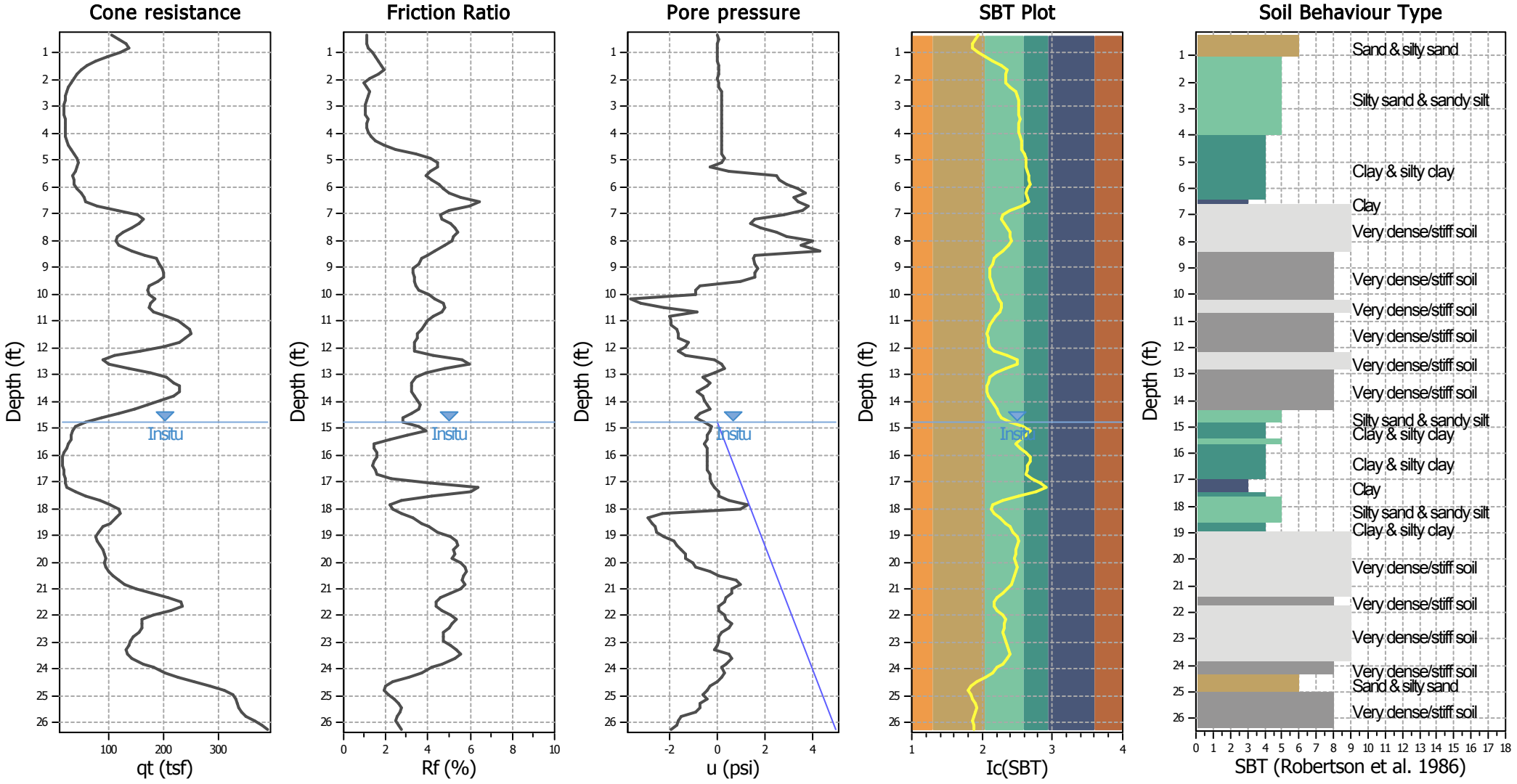






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



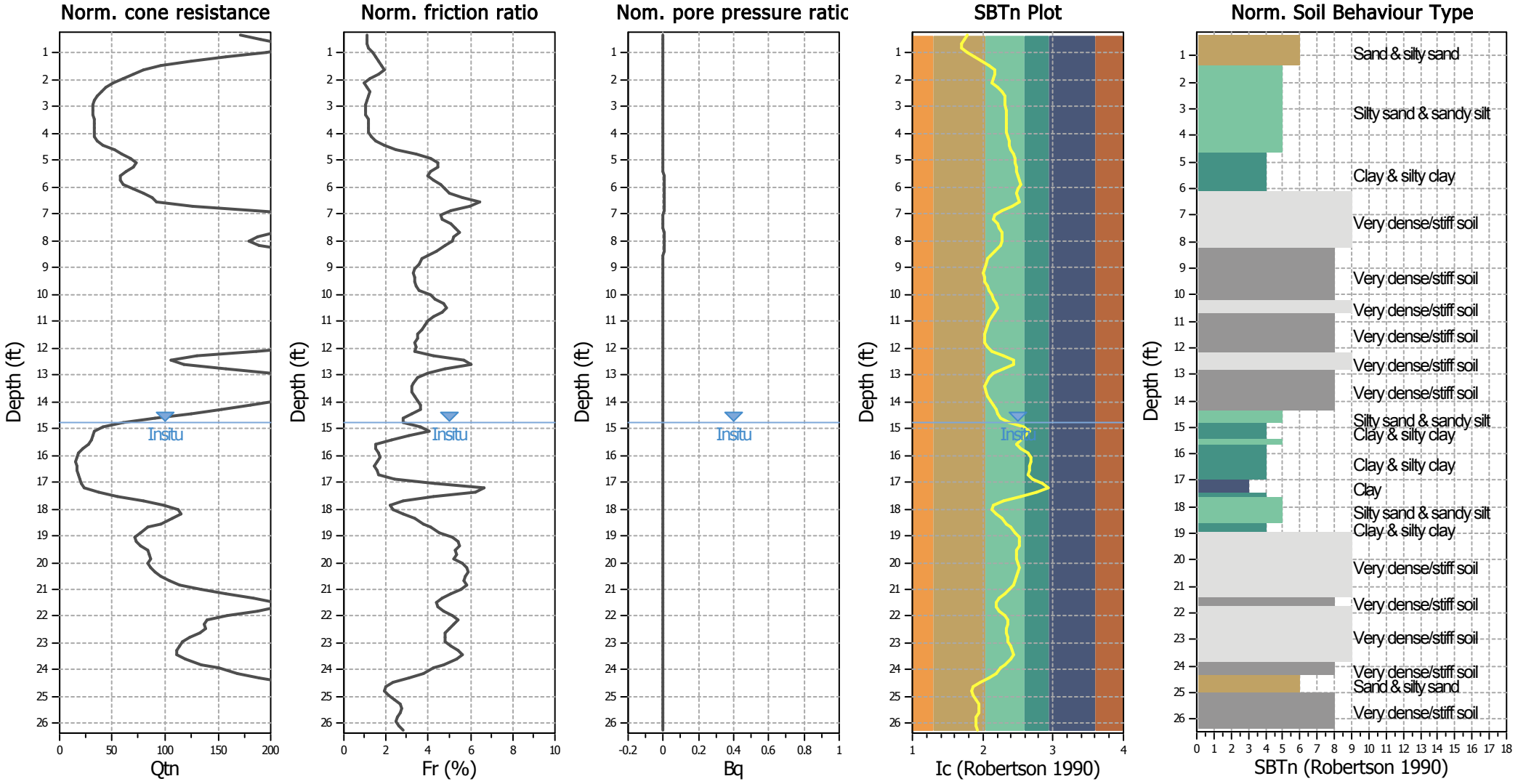
Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	14.80 ft	Fill height:	N/A	Limit depth:	N/A

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



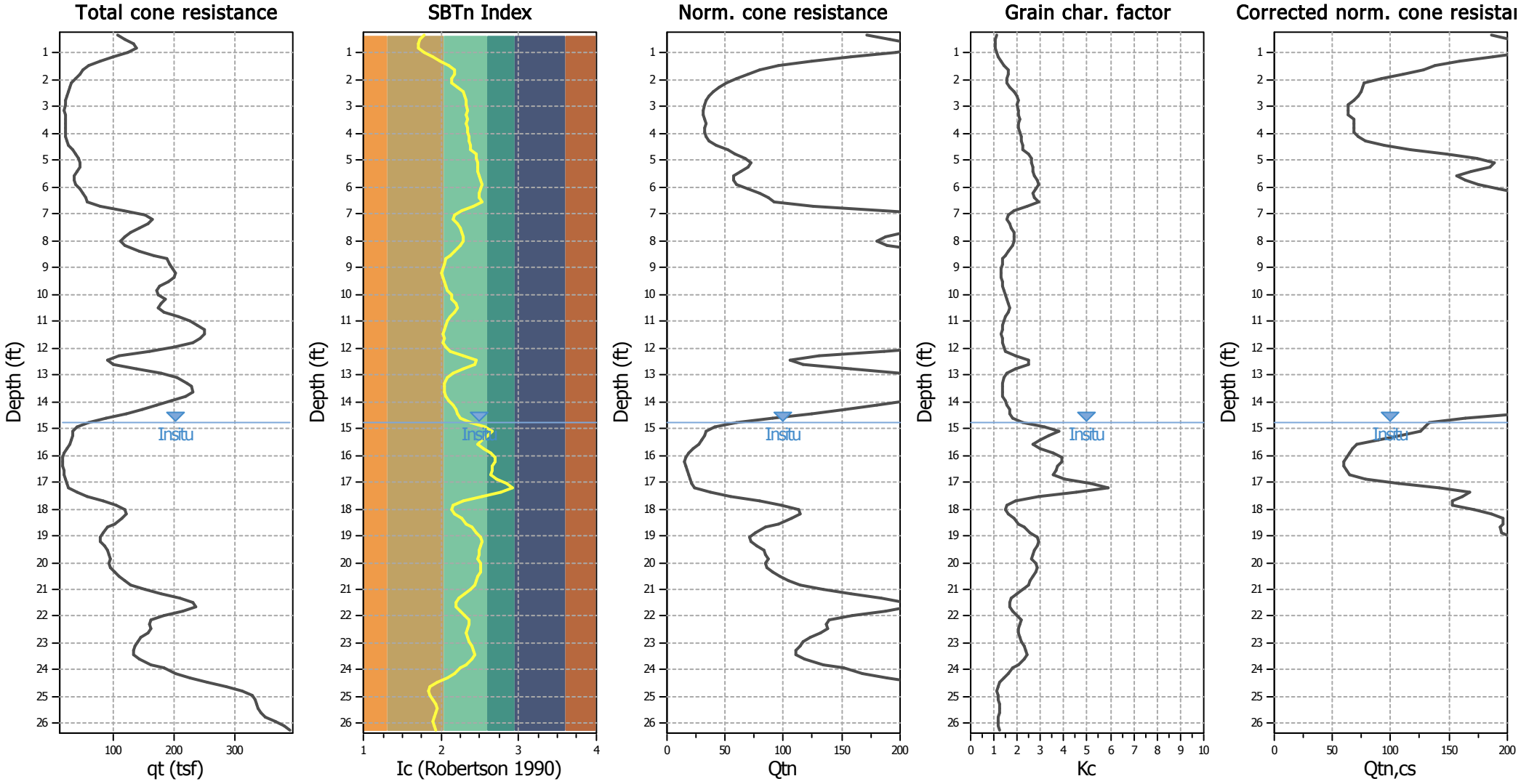
Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	14.80 ft	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

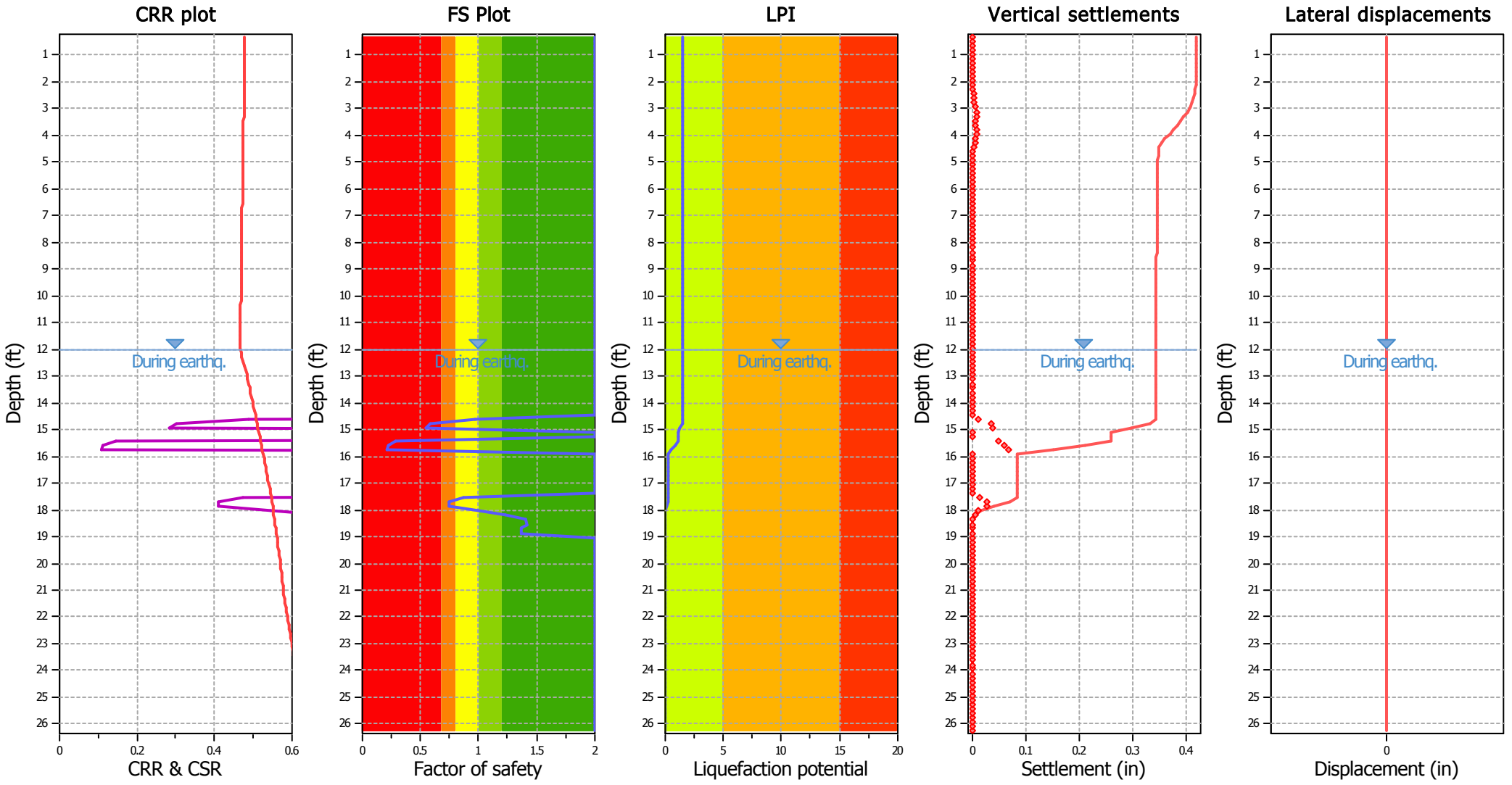
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_o applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	14.80 ft	Fill height:	N/A	Limit depth:	N/A

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	14.80 ft	Fill height:	N/A	Limit depth:	N/A

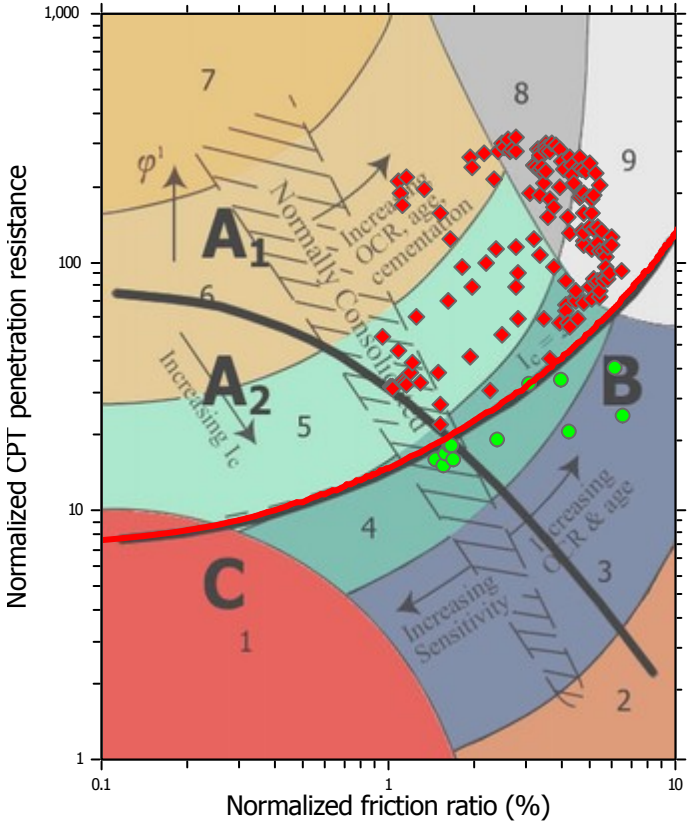
F.S. color scheme

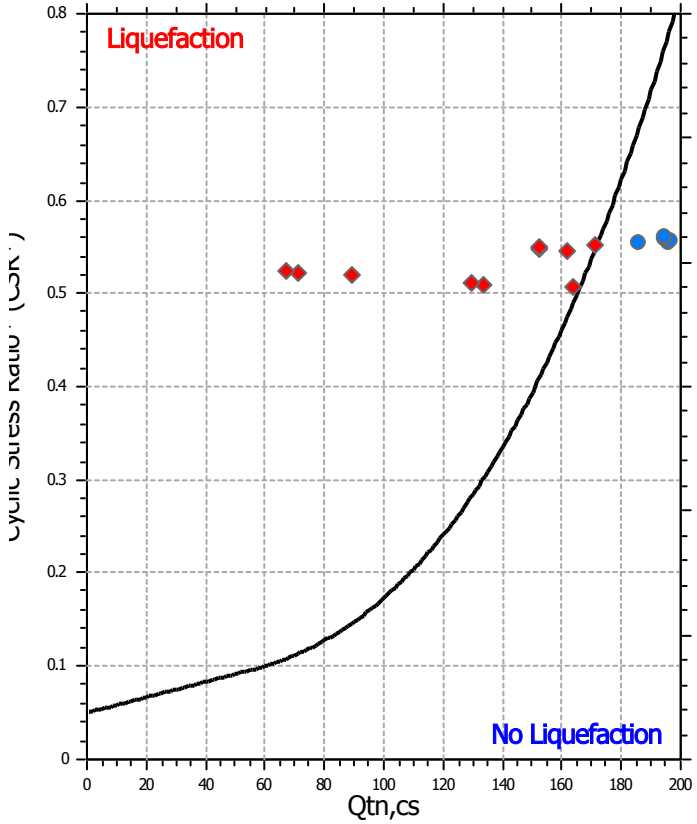
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

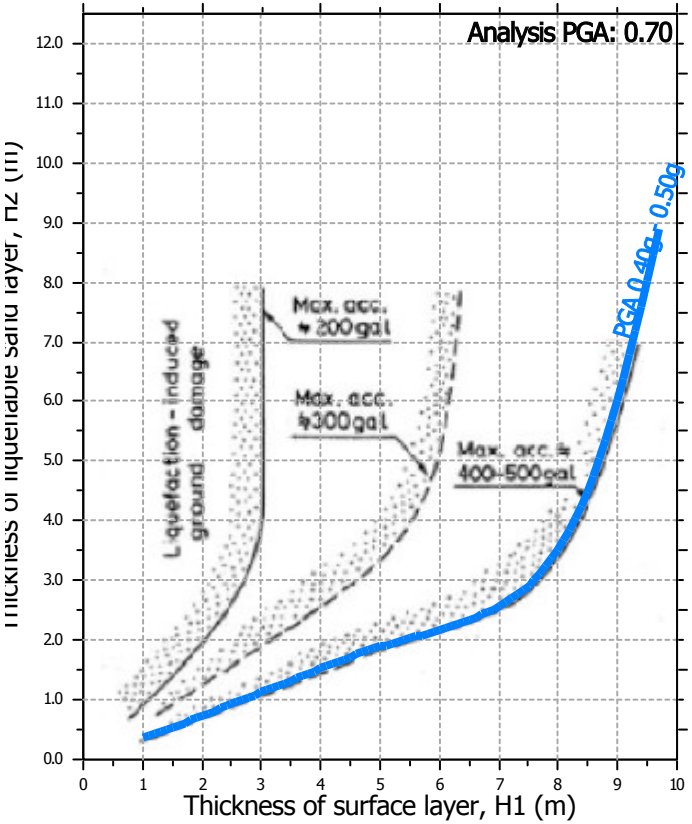
LPI color scheme

- Very high risk
- High risk
- Low risk

Liquefaction analysis summary plots



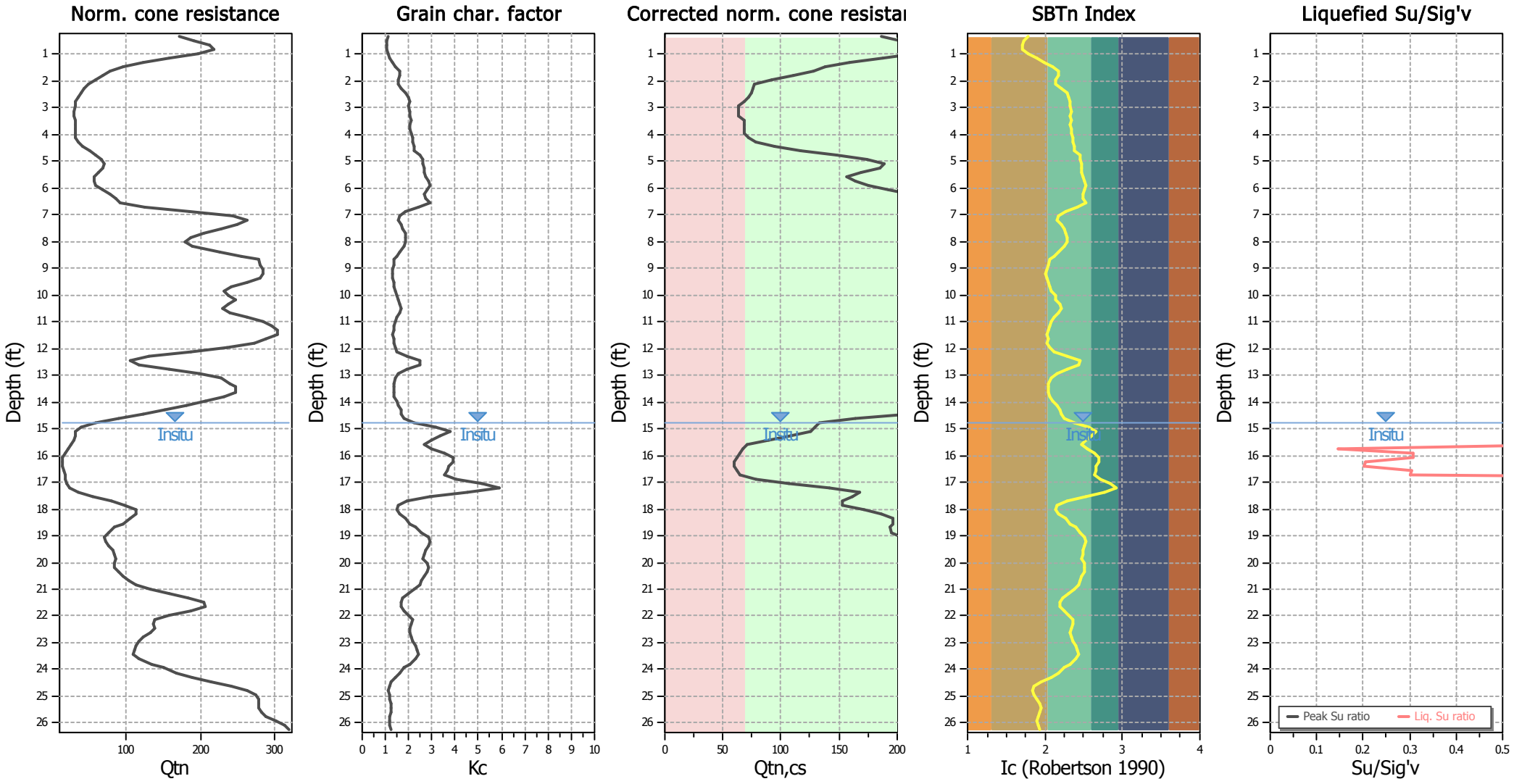




Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	14.80 ft	Fill height:	N/A	Limit depth:	N/A

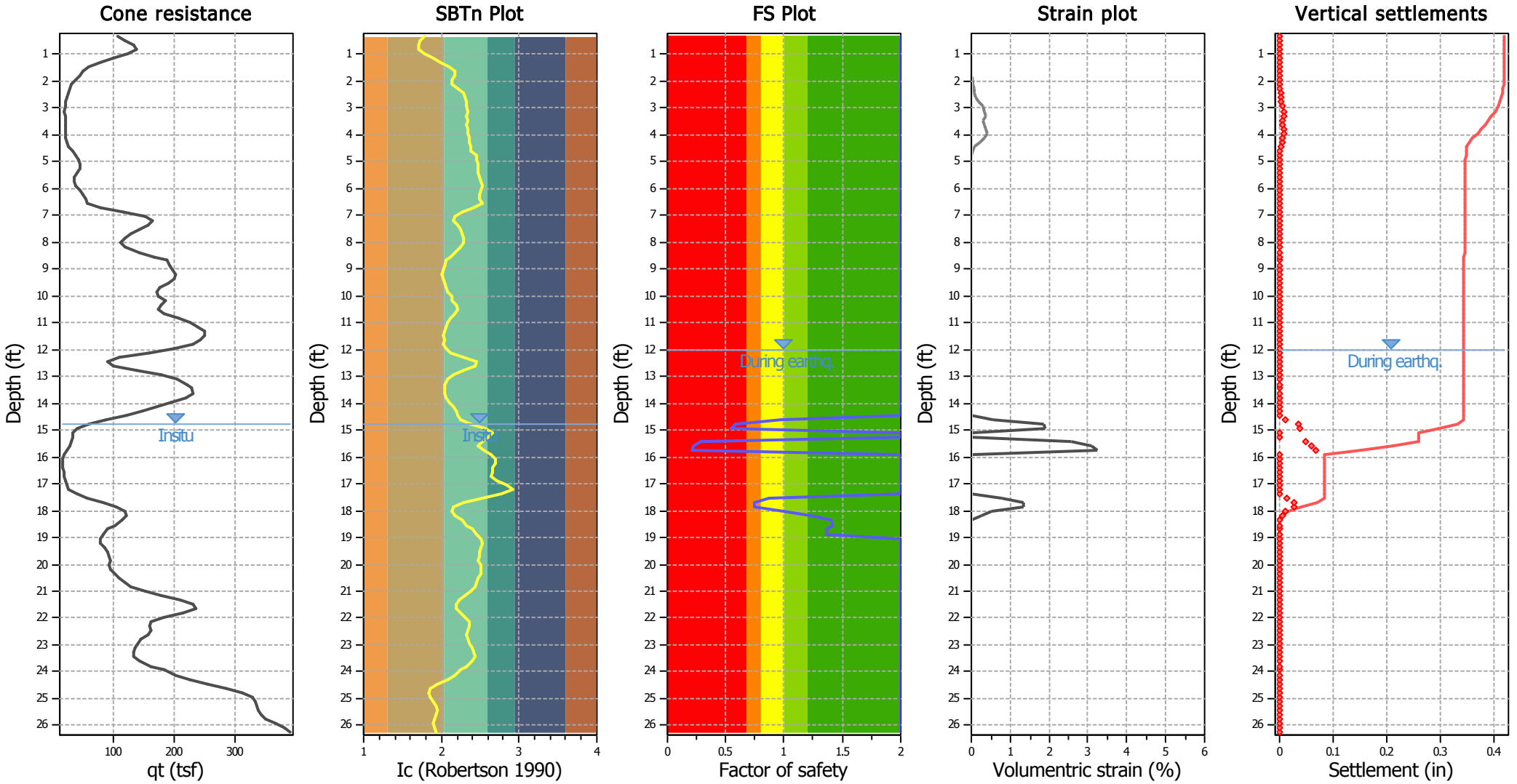
Check for strength loss plots (Robertson (2010))



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_o applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	14.80 ft	Fill height:	N/A	Limit depth:	N/A

Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

:: Post-earthquake settlement of dry sands ::

Depth (ft)	Ic	Q_{tn}	Kc	$Q_{tn,cs}$	$N_{1,60}$ (blows)	G_{max} (tsf)	CSR	Shear, γ (%)	$e_{vol(15)}$ (%)	N_c	e_v (%)	Settle. (in)
0.33	1.77	171.13	1.09	186.20	36	906	0.48	0.001	0.00	10.08	0.00	0.000
0.49	1.73	190.93	1.06	202.24	38	959	0.48	0.002	0.00	10.08	0.00	0.000
0.66	1.70	211.48	1.04	219.50	41	1020	0.48	0.002	0.00	10.08	0.00	0.000
0.82	1.71	218.96	1.04	228.37	43	1066	0.48	0.003	0.00	10.08	0.00	0.000
0.98	1.79	196.18	1.10	215.48	41	1058	0.48	0.003	0.00	10.08	0.00	0.000
1.15	1.89	158.14	1.18	186.98	37	974	0.48	0.004	0.00	10.08	0.00	0.000
1.31	1.99	124.22	1.28	159.51	33	862	0.48	0.006	0.00	10.08	0.00	0.000
1.48	2.10	95.45	1.45	138.20	30	760	0.48	0.008	0.00	10.08	0.00	0.000
1.64	2.18	79.74	1.61	128.52	29	703	0.48	0.010	0.01	10.08	0.01	0.000
1.80	2.17	69.61	1.59	110.39	25	605	0.48	0.015	0.01	10.08	0.01	0.000
1.97	2.14	60.11	1.54	92.43	20	508	0.48	0.025	0.02	10.08	0.02	0.000
2.13	2.14	50.35	1.53	76.86	17	422	0.48	0.048	0.06	10.08	0.05	0.001
2.30	2.22	44.18	1.71	75.44	17	410	0.48	0.062	0.07	10.08	0.06	0.001
2.46	2.28	39.61	1.89	74.99	18	399	0.48	0.077	0.09	10.08	0.08	0.001
2.62	2.31	35.90	1.99	71.45	17	376	0.48	0.112	0.14	10.08	0.11	0.002
2.79	2.32	33.48	2.02	67.74	16	355	0.48	0.165	0.21	10.08	0.18	0.004
2.95	2.32	31.75	2.01	63.80	15	335	0.48	0.249	0.35	10.08	0.29	0.006
3.12	2.33	30.99	2.06	63.81	15	333	0.48	0.293	0.41	10.08	0.34	0.007
3.28	2.33	31.35	2.04	63.80	15	334	0.48	0.327	0.45	10.08	0.38	0.007
3.45	2.35	32.25	2.10	67.79	16	352	0.48	0.282	0.36	10.08	0.30	0.006
3.61	2.33	32.98	2.05	67.76	16	354	0.47	0.306	0.40	10.08	0.33	0.006
3.77	2.33	32.86	2.06	67.76	16	354	0.47	0.343	0.44	10.08	0.37	0.007
3.94	2.34	32.47	2.09	67.78	16	353	0.47	0.389	0.50	10.08	0.42	0.009
4.10	2.36	33.10	2.16	71.58	17	369	0.47	0.339	0.40	10.08	0.34	0.006
4.27	2.37	35.92	2.19	78.54	19	404	0.47	0.240	0.25	10.08	0.21	0.004
4.43	2.38	41.69	2.25	93.85	23	479	0.47	0.124	0.11	10.08	0.09	0.002
4.59	2.39	51.58	2.26	116.76	29	594	0.47	0.062	0.04	10.08	0.03	0.001
4.76	2.45	58.85	2.51	147.80	37	730	0.47	0.037	0.02	10.08	0.01	0.000
4.92	2.46	67.57	2.58	174.34	44	854	0.47	0.028	0.01	10.08	0.01	0.000
5.09	2.47	71.99	2.62	188.41	48	919	0.47	0.025	0.01	10.08	0.01	0.000
5.25	2.48	69.57	2.66	185.35	47	900	0.47	0.027	0.01	10.08	0.01	0.000
5.41	2.48	63.57	2.67	169.54	43	823	0.47	0.035	0.01	10.08	0.01	0.000
5.58	2.50	56.88	2.76	157.08	40	754	0.47	0.045	0.02	10.08	0.02	0.000
5.74	2.52	57.15	2.86	163.39	42	776	0.47	0.044	0.02	10.08	0.02	0.000
5.91	2.53	59.66	2.93	174.92	46	824	0.47	0.040	0.01	10.08	0.01	0.000
6.07	2.50	69.29	2.79	193.00	50	924	0.47	0.032	0.01	10.08	0.01	0.000
6.23	2.48	79.08	2.68	211.62	54	1026	0.47	0.027	0.01	10.08	0.01	0.000
6.40	2.49	87.25	2.73	237.86	61	1147	0.47	0.023	0.01	10.08	0.01	0.000
6.56	2.53	91.84	2.92	268.16	70	1266	0.47	0.020	0.00	10.08	0.00	0.000
6.73	2.42	125.78	2.40	301.67	75	1511	0.47	0.016	0.00	10.08	0.00	0.000
6.89	2.27	184.51	1.85	341.97	79	1829	0.47	0.013	0.00	10.08	0.00	0.000
7.05	2.17	243.01	1.60	389.69	87	2134	0.47	0.011	0.00	10.08	0.00	0.000
7.22	2.16	263.11	1.58	414.61	92	2274	0.47	0.010	0.00	10.08	0.00	0.000
7.38	2.20	249.27	1.67	416.97	94	2271	0.47	0.010	0.00	10.08	0.00	0.000
7.55	2.24	227.19	1.77	401.74	92	2169	0.47	0.011	0.00	10.08	0.00	0.000
7.71	2.28	204.11	1.87	381.91	89	2039	0.47	0.013	0.00	10.08	0.00	0.000
7.87	2.28	187.56	1.88	352.56	82	1880	0.47	0.014	0.00	10.08	0.00	0.000
8.04	2.28	179.51	1.89	339.29	79	1807	0.47	0.016	0.00	10.08	0.00	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	Q_{tn}	Kc	$Q_{tn,cs}$	$N_{1,60}$ (blows)	G_{max} (tsf)	CSR	Shear, γ (%)	$e_{vol(15)}$ (%)	N_c	e_v (%)	Settle. (in)
8.20	2.25	188.40	1.79	336.61	77	1814	0.47	0.016	0.00	10.08	0.00	0.000
8.37	2.17	225.32	1.59	359.11	80	1997	0.47	0.014	0.00	10.08	0.00	0.000
8.53	2.11	254.34	1.47	374.94	82	2159	0.47	0.013	0.00	10.08	0.00	0.000
8.69	2.06	278.51	1.39	385.88	82	2278	0.47	0.013	0.00	10.08	0.00	0.000
8.86	2.05	279.95	1.36	382.04	81	2292	0.47	0.013	0.00	10.08	0.00	0.000
9.02	2.02	283.44	1.32	375.28	79	2285	0.47	0.013	0.00	10.08	0.00	0.000
9.19	2.02	283.08	1.32	373.72	78	2307	0.47	0.013	0.00	10.08	0.00	0.000
9.35	2.03	279.00	1.33	372.44	78	2327	0.47	0.013	0.00	10.08	0.00	0.000
9.51	2.04	262.80	1.35	354.99	75	2244	0.47	0.014	0.00	10.08	0.00	0.000
9.68	2.07	240.49	1.39	335.44	72	2143	0.47	0.016	0.00	10.08	0.00	0.000
9.84	2.09	232.40	1.43	332.68	72	2145	0.47	0.016	0.00	10.08	0.00	0.000
10.01	2.13	236.79	1.52	359.43	79	2325	0.47	0.015	0.00	10.08	0.00	0.000
10.17	2.15	247.88	1.54	382.59	84	2496	0.47	0.014	0.00	10.08	0.00	0.000
10.34	2.19	237.70	1.64	388.84	87	2535	0.47	0.014	0.00	10.08	0.00	0.000
10.50	2.20	230.50	1.68	386.18	87	2533	0.47	0.014	0.00	10.08	0.00	0.000
10.66	2.18	239.04	1.62	387.24	87	2592	0.47	0.014	0.00	10.08	0.00	0.000
10.83	2.13	262.92	1.50	395.41	86	2719	0.47	0.013	0.00	10.08	0.00	0.000
10.99	2.08	284.08	1.42	404.22	87	2830	0.47	0.013	0.00	10.08	0.00	0.000
11.16	2.06	295.27	1.39	409.73	87	2905	0.47	0.013	0.00	10.08	0.00	0.000
11.32	2.04	303.73	1.36	413.25	87	2961	0.47	0.013	0.00	10.08	0.00	0.000
11.48	2.02	302.09	1.33	402.82	85	2914	0.47	0.013	0.00	10.08	0.00	0.000
11.65	2.04	288.37	1.35	389.11	82	2845	0.47	0.014	0.00	10.08	0.00	0.000
11.81	2.03	271.70	1.35	365.65	77	2700	0.47	0.015	0.00	10.08	0.00	0.000
11.98	2.07	234.66	1.40	328.13	70	2448	0.47	0.017	0.00	10.08	0.00	0.000

Total estimated settlement: 0.08

Abbreviations

Q_{tn}: Equivalent clean sand normalized cone resistance
K_c: Fines correction factor
$Q_{tn,cs}$: Post-liquefaction volumentric strain
G_{max}: Small strain shear modulus
CSR: Soil cyclic stress ratio
γ: Cyclic shear strain
$e_{vol(15)}$: Volumetric strain after 15 cycles
N_c: Equivalent number of cycles
e_v: Volumetric strain
Settle.: Calculated settlement

:: Post-earthquake settlement due to soil liquefaction ::

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
12.14	278.09	2.00	0.00	1.00	0.00	12.30	251.21	2.00	0.00	1.00	0.00
12.47	265.73	2.00	0.00	1.00	0.00	12.63	291.30	2.00	0.00	1.00	0.00
12.80	302.27	2.00	0.00	1.00	0.00	12.96	314.01	2.00	0.00	1.00	0.00
13.12	322.81	2.00	0.00	1.00	0.00	13.29	327.95	2.00	0.00	1.00	0.00
13.45	333.59	2.00	0.00	1.00	0.00	13.62	333.59	2.00	0.00	1.00	0.00
13.78	323.92	2.00	0.00	1.00	0.00	13.94	303.97	2.00	0.00	1.00	0.00
14.11	282.10	2.00	0.00	1.00	0.00	14.27	252.13	2.00	0.00	1.00	0.00
14.44	209.71	2.00	0.00	1.00	0.00	14.60	163.96	0.97	0.56	1.00	0.01
14.76	133.35	0.59	1.85	1.00	0.04	14.93	129.65	0.55	1.89	1.00	0.04
15.09	126.07	2.00	0.00	1.00	0.00	15.26	107.83	2.00	0.00	1.00	0.00
15.42	89.53	0.28	2.56	1.00	0.05	15.58	71.11	0.22	3.09	1.00	0.06

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
15.75	66.84	0.21	3.25	1.00	0.07	15.91	65.16	2.00	0.00	1.00	0.00
16.08	62.72	2.00	0.00	1.00	0.00	16.24	59.47	2.00	0.00	1.00	0.00
16.40	59.09	2.00	0.00	1.00	0.00	16.57	62.08	2.00	0.00	1.00	0.00
16.73	64.70	2.00	0.00	1.00	0.00	16.90	78.44	2.00	0.00	1.00	0.00
17.06	106.97	2.00	0.00	1.00	0.00	17.23	141.85	2.00	0.00	1.00	0.00
17.39	167.72	2.00	0.00	1.00	0.00	17.55	161.67	0.87	0.77	1.00	0.01
17.72	152.57	0.75	1.35	1.00	0.03	17.88	152.62	0.75	1.35	1.00	0.03
18.05	171.02	0.99	0.54	1.00	0.01	18.21	186.23	1.23	0.26	1.00	0.01
18.37	195.78	1.40	0.00	1.00	0.00	18.54	196.42	1.41	0.00	1.00	0.00
18.70	194.40	1.37	0.00	1.00	0.00	18.87	194.66	1.37	0.00	1.00	0.00
19.03	203.20	2.00	0.00	1.00	0.00	19.19	212.61	2.00	0.00	1.00	0.00
19.36	220.63	2.00	0.00	1.00	0.00	19.52	224.17	2.00	0.00	1.00	0.00
19.69	227.86	2.00	0.00	1.00	0.00	19.85	226.78	2.00	0.00	1.00	0.00
20.01	234.34	2.00	0.00	1.00	0.00	20.18	242.52	2.00	0.00	1.00	0.00
20.34	250.39	2.00	0.00	1.00	0.00	20.51	255.04	2.00	0.00	1.00	0.00
20.67	264.43	2.00	0.00	1.00	0.00	20.83	282.09	2.00	0.00	1.00	0.00
21.00	299.23	2.00	0.00	1.00	0.00	21.16	312.57	2.00	0.00	1.00	0.00
21.33	325.28	2.00	0.00	1.00	0.00	21.49	338.15	2.00	0.00	1.00	0.00
21.65	342.31	2.00	0.00	1.00	0.00	21.82	331.73	2.00	0.00	1.00	0.00
21.98	313.60	2.00	0.00	1.00	0.00	22.15	299.97	2.00	0.00	1.00	0.00
22.31	291.58	2.00	0.00	1.00	0.00	22.47	285.91	2.00	0.00	1.00	0.00
22.64	270.33	2.00	0.00	1.00	0.00	22.80	258.97	2.00	0.00	1.00	0.00
22.97	251.91	2.00	0.00	1.00	0.00	23.13	259.16	2.00	0.00	1.00	0.00
23.30	264.99	2.00	0.00	1.00	0.00	23.46	269.70	2.00	0.00	1.00	0.00
23.62	271.72	2.00	0.00	1.00	0.00	23.79	271.76	2.00	0.00	1.00	0.00
23.95	273.04	2.00	0.00	1.00	0.00	24.12	273.23	2.00	0.00	1.00	0.00
24.28	269.66	2.00	0.00	1.00	0.00	24.44	266.95	2.00	0.00	1.00	0.00
24.61	278.12	2.00	0.00	1.00	0.00	24.77	297.88	2.00	0.00	1.00	0.00
24.94	317.69	2.00	0.00	1.00	0.00	25.10	330.33	2.00	0.00	1.00	0.00
25.26	339.86	2.00	0.00	1.00	0.00	25.43	345.38	2.00	0.00	1.00	0.00
25.59	346.18	2.00	0.00	1.00	0.00	25.76	346.54	2.00	0.00	1.00	0.00
25.92	355.92	2.00	0.00	1.00	0.00	26.08	373.10	2.00	0.00	1.00	0.00
26.25	386.53	2.00	0.00	1.00	0.00						

Total estimated settlement: 0.34

Abbreviations

$Q_{tn,cs}$:	Equivalent clean sand normalized cone resistance
FS:	Factor of safety against liquefaction
e_v (%):	Post-liquefaction volumentric strain
DF:	e_v depth weighting factor
Settlement:	Calculated settlement

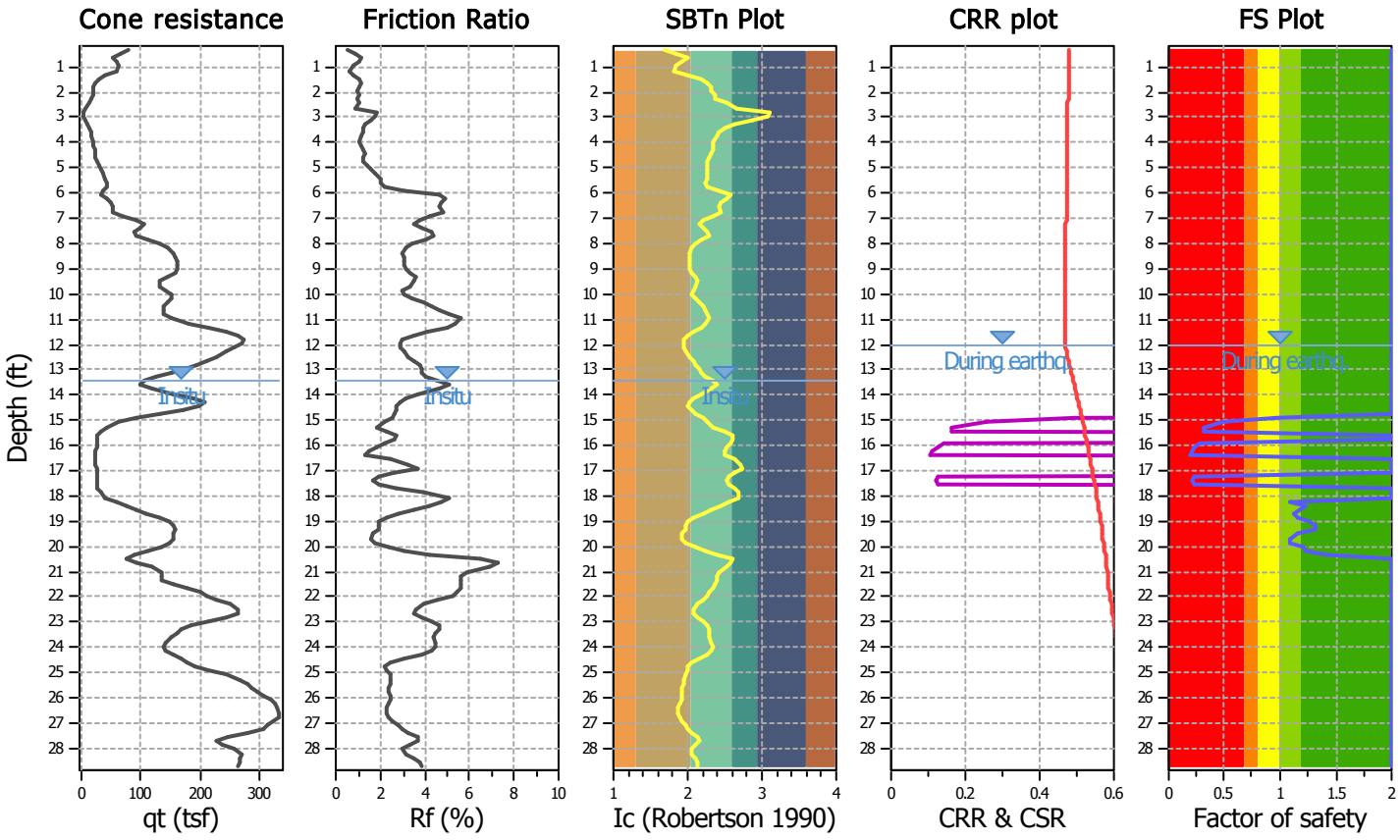
GEOLOGISMIKI Geotechnical Software

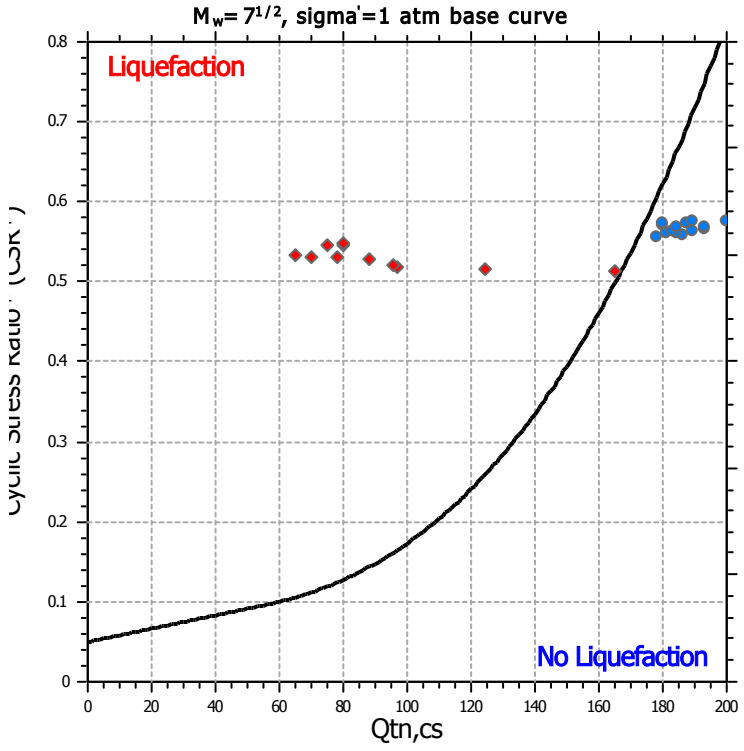
LIQUEFACTION ANALYSIS REPORT

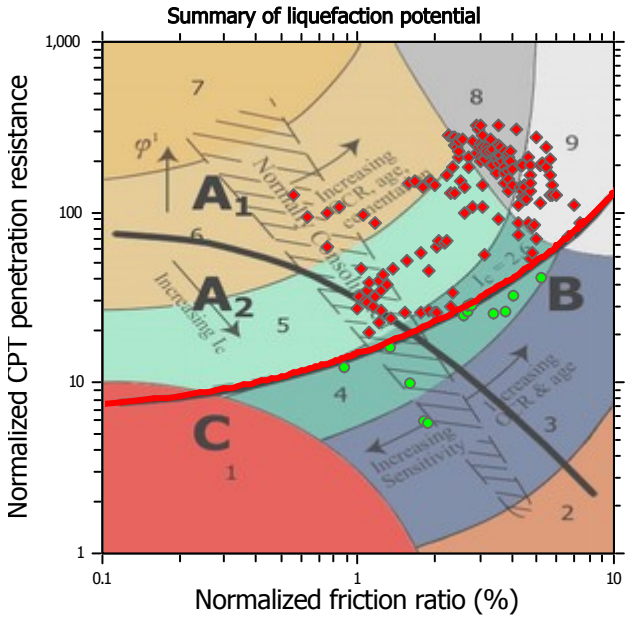
Project title : Cole CampusCole Campus – Central **Location : Oakland**
CPT file : CPT-02

Input parameters and analysis data

Analysis method:	**NCEER (1998)**	**G.W.T. (in-situ):**	**13.40 ft**	**Use fill:**	**No**	**Clay like behavior applied:**	**Sands only**
Fines correction method:	**NCEER (1998)**	**G.W.T. (earthq.):**	**12.00 ft**	**Fill height:**	**N/A**	**Limit depth applie**	**No**
Points to test:	**Based on Ic value**	**Average results interva**	**3**	**Fill weight:**	**N/A**	**Limit depth:**	**N/A**
Earthquake magnitude M_w:	**6.90**	**Ic cut-off value:**	**2.60**	**Trans. detect. applied:**	**No**	**MSF method:**	**Method based**
Peak ground acceleration:	**0.70**	**Unit weight calculatior**	**Based on SBT**	**K_o applied:**	**Yes**		

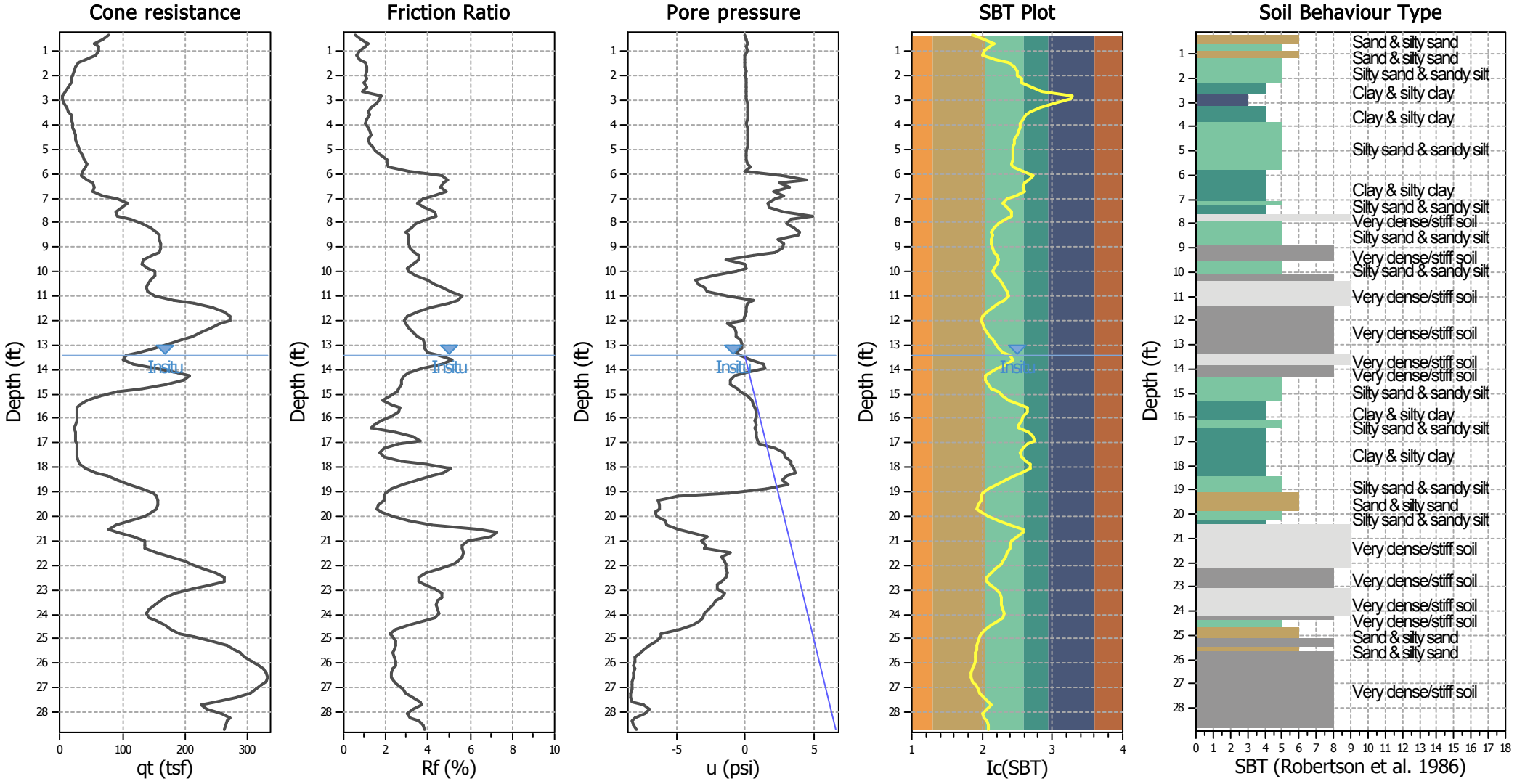






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



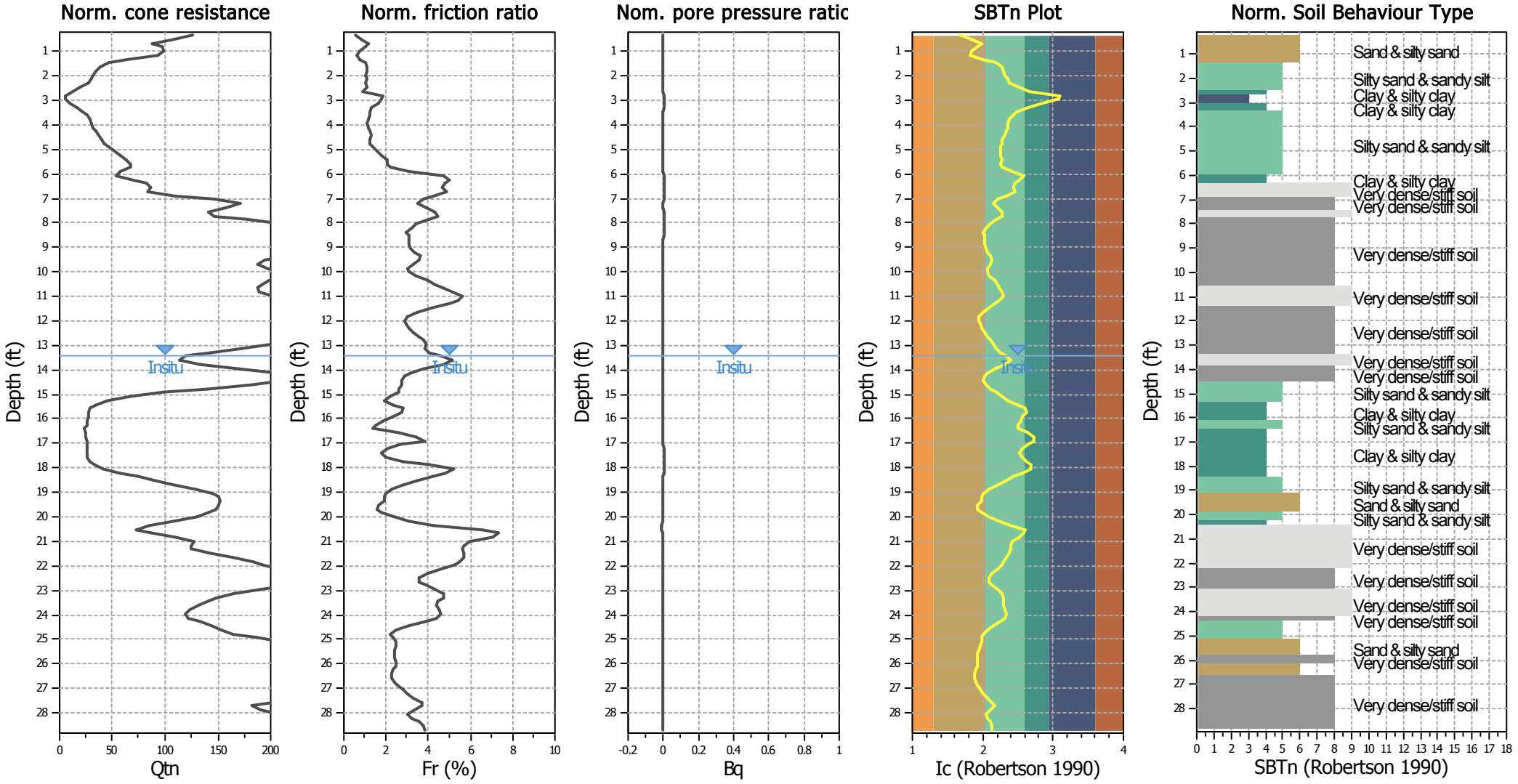
Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	13.40 ft	Fill height:	N/A	Limit depth:	N/A

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



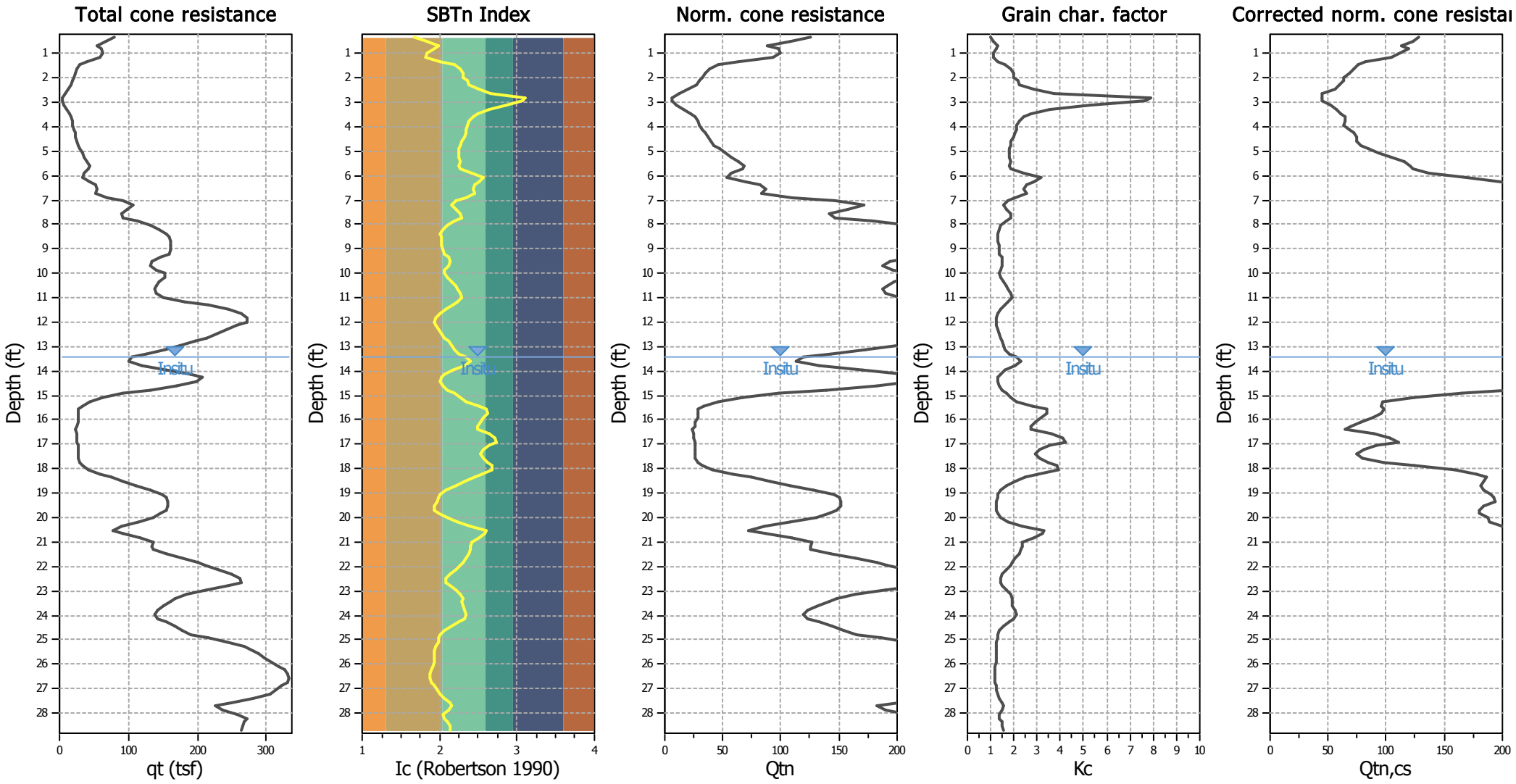
Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	13.40 ft	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

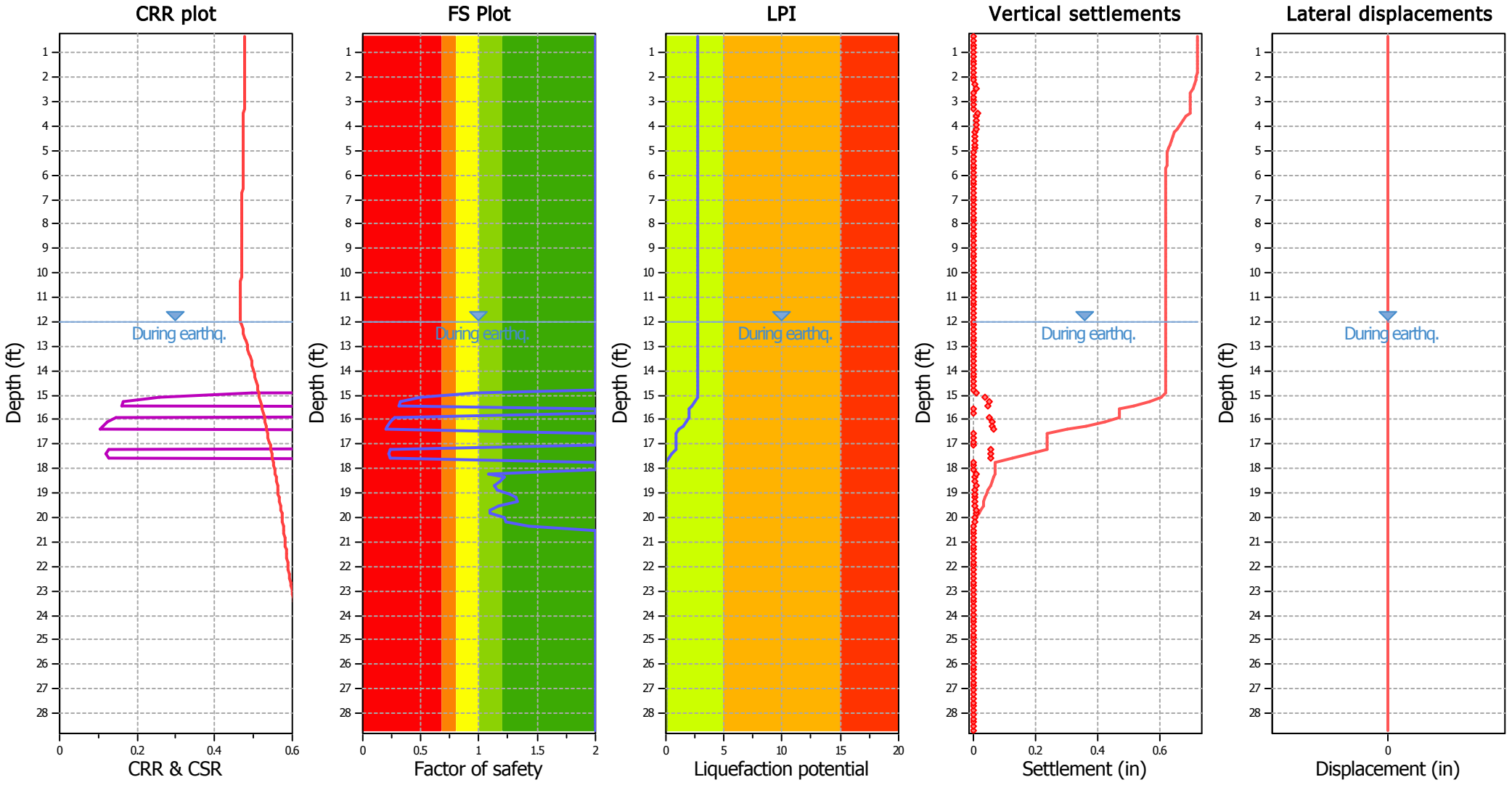
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_o applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	13.40 ft	Fill height:	N/A	Limit depth:	N/A

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	13.40 ft	Fill height:	N/A	Limit depth:	N/A

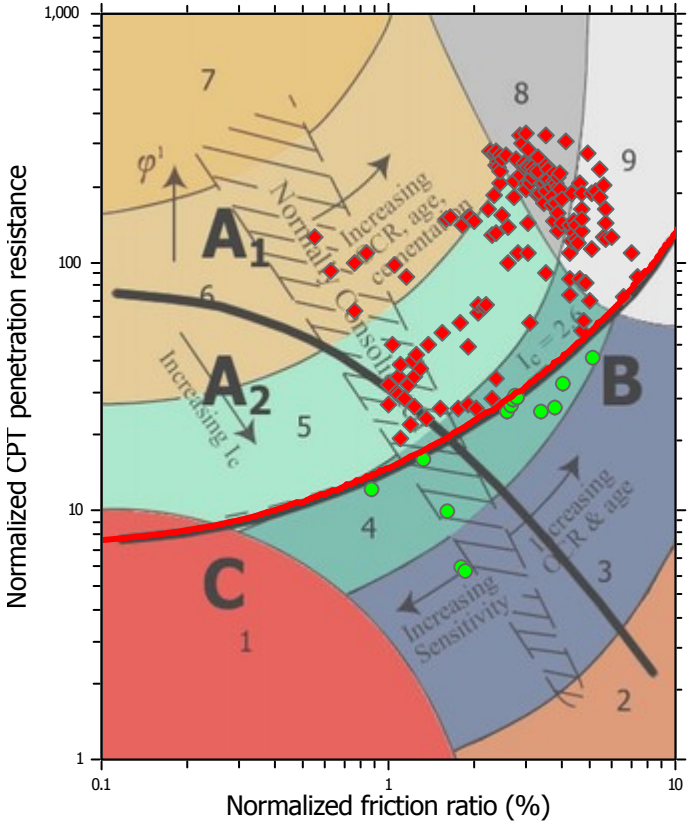
F.S. color scheme

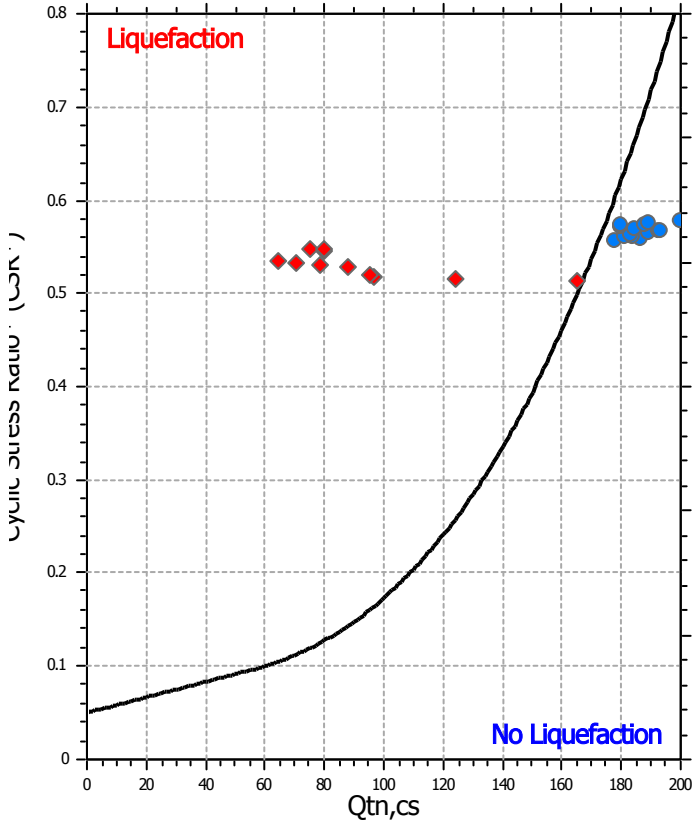
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

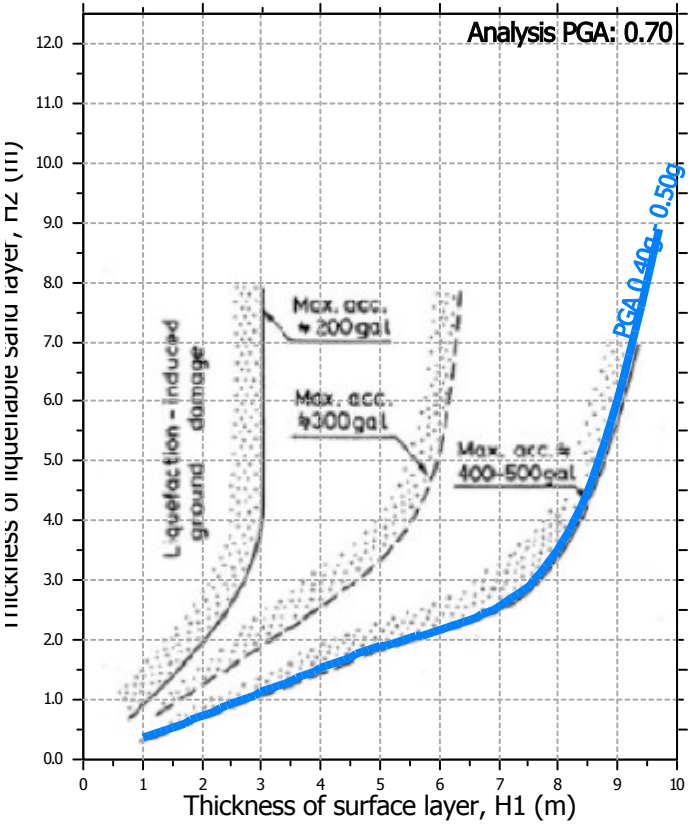
LPI color scheme

- Very high risk
- High risk
- Low risk

Liquefaction analysis summary plots



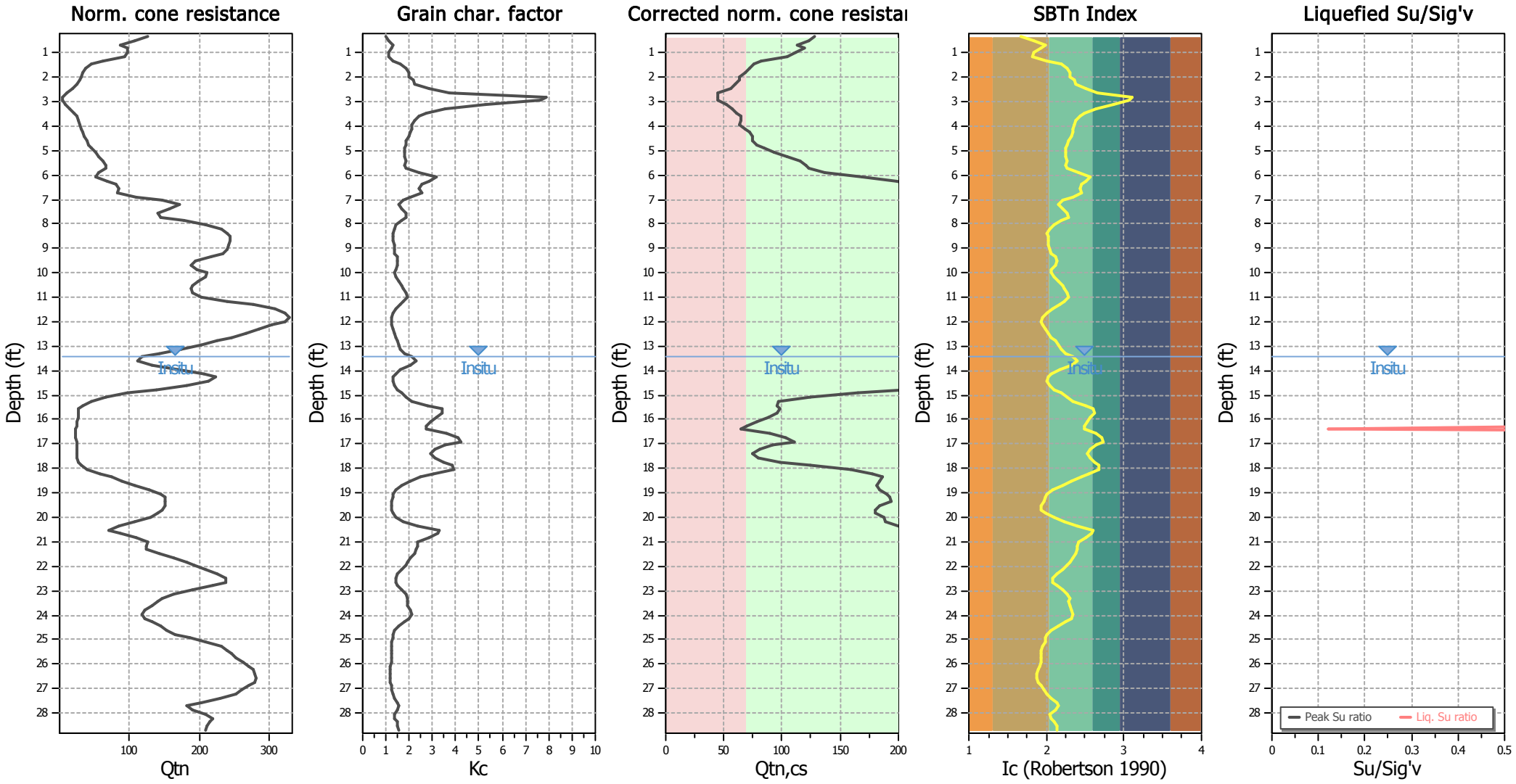




Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	13.40 ft	Fill height:	N/A	Limit depth:	N/A

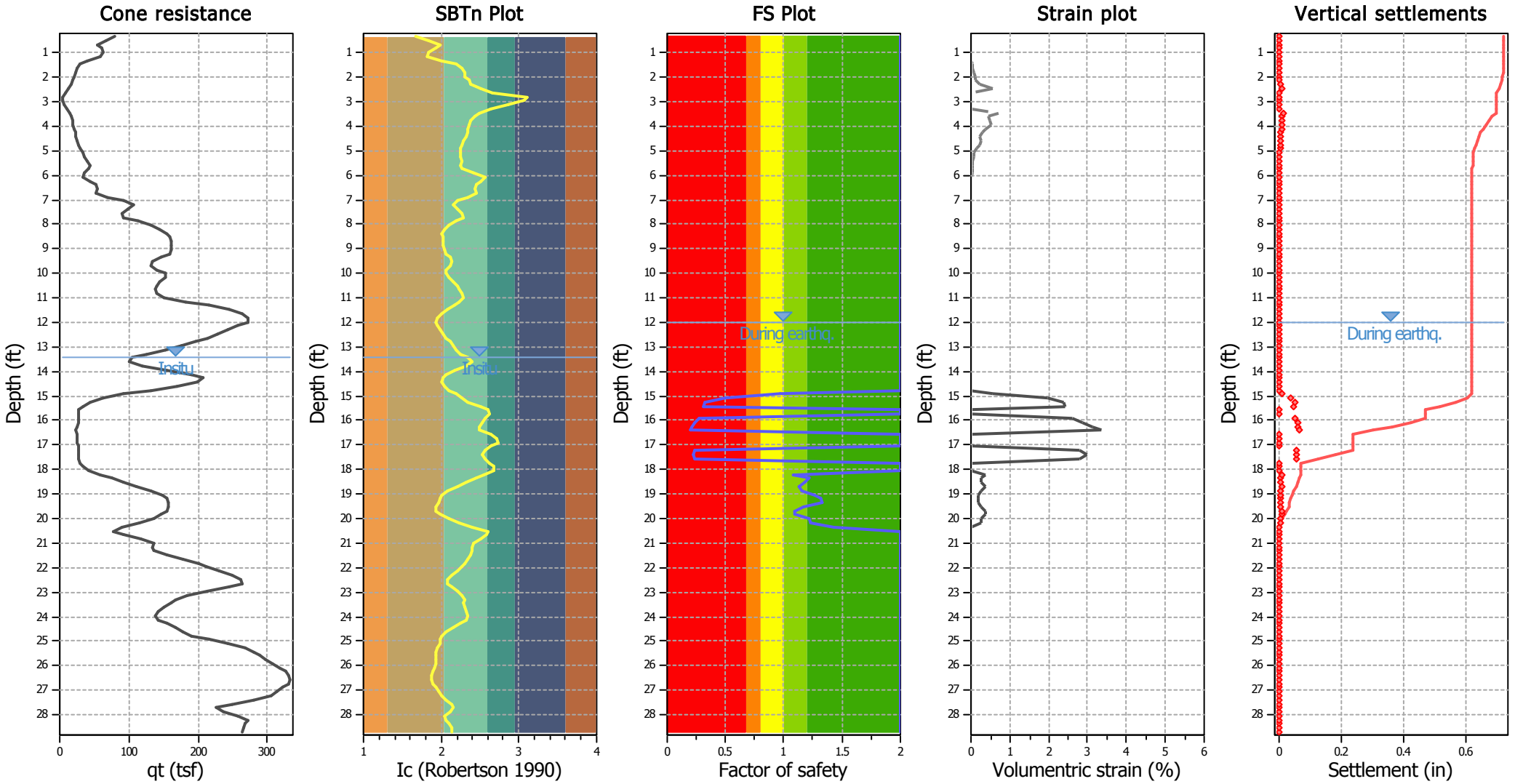
Check for strength loss plots (Robertson (2010))



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_o applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	13.40 ft	Fill height:	N/A	Limit depth:	N/A

Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

:: Post-earthquake settlement of dry sands ::

Depth (ft)	Ic	Q_{tn}	Kc	$Q_{tn,cs}$	$N_{1,60}$ (blows)	G_{max} (tsf)	CSR	Shear, γ (%)	$e_{vol(15)}$ (%)	N_c	e_v (%)	Settle. (in)
0.33	1.68	125.72	1.02	128.36	24	588	0.48	0.002	0.00	10.08	0.00	0.000
0.49	1.84	108.24	1.13	122.75	24	620	0.48	0.003	0.00	10.08	0.00	0.000
0.66	2.00	87.72	1.29	113.50	24	615	0.48	0.004	0.00	10.08	0.00	0.000
0.82	1.93	97.72	1.22	118.99	24	630	0.48	0.005	0.00	10.08	0.00	0.000
0.98	1.84	98.88	1.14	112.42	22	569	0.48	0.007	0.01	10.08	0.01	0.000
1.15	1.82	93.13	1.12	104.12	20	520	0.48	0.010	0.01	10.08	0.01	0.000
1.31	2.00	63.50	1.30	82.35	17	446	0.48	0.016	0.02	10.08	0.02	0.000
1.48	2.18	46.56	1.63	75.89	17	415	0.48	0.024	0.03	10.08	0.02	0.000
1.64	2.27	38.62	1.85	71.53	17	383	0.48	0.036	0.04	10.08	0.04	0.001
1.80	2.30	34.54	1.96	67.74	16	358	0.48	0.054	0.07	10.08	0.06	0.001
1.97	2.31	32.06	1.99	63.80	15	336	0.48	0.083	0.12	10.08	0.10	0.002
2.13	2.36	29.64	2.15	63.87	15	330	0.48	0.106	0.14	10.08	0.12	0.002
2.30	2.38	26.95	2.21	59.65	15	306	0.48	0.179	0.26	10.08	0.22	0.004
2.46	2.52	19.55	2.86	55.81	15	265	0.48	0.455	0.67	10.08	0.56	0.011
2.62	2.66	12.09	3.70	44.72	0	0	0.48	0.000	0.00	0.00	0.00	0.000
2.79	3.10	5.70	7.90	45.05	0	0	0.48	0.000	0.00	0.00	0.00	0.000
2.95	3.08	5.91	7.64	45.15	0	0	0.48	0.000	0.00	0.00	0.00	0.000
3.12	2.86	9.91	5.29	52.46	0	0	0.48	0.000	0.00	0.00	0.00	0.000
3.28	2.63	16.06	3.54	56.84	0	0	0.48	0.000	0.00	0.00	0.00	0.000
3.45	2.49	22.31	2.71	60.40	15	292	0.48	0.636	0.87	10.08	0.72	0.015
3.61	2.43	26.26	2.45	64.30	16	320	0.47	0.424	0.55	10.08	0.46	0.009
3.77	2.39	28.33	2.26	63.99	16	326	0.47	0.432	0.58	10.08	0.49	0.009
3.94	2.35	30.03	2.13	63.85	15	331	0.47	0.452	0.62	10.08	0.52	0.011
4.10	2.35	32.11	2.11	67.80	16	352	0.47	0.361	0.46	10.08	0.39	0.007
4.27	2.33	34.72	2.06	71.48	17	373	0.47	0.296	0.36	10.08	0.30	0.006
4.43	2.32	37.33	2.01	74.97	18	394	0.47	0.250	0.29	10.08	0.24	0.005
4.59	2.28	39.88	1.88	75.00	17	400	0.47	0.254	0.30	10.08	0.25	0.005
4.76	2.26	42.60	1.84	78.40	18	420	0.47	0.221	0.25	10.08	0.21	0.004
4.92	2.26	46.71	1.81	84.74	20	455	0.47	0.167	0.17	10.08	0.14	0.003
5.09	2.25	51.89	1.80	93.47	22	503	0.47	0.121	0.11	10.08	0.09	0.002
5.25	2.25	57.49	1.81	104.03	24	559	0.47	0.087	0.07	10.08	0.06	0.001
5.41	2.27	62.94	1.84	116.03	27	621	0.47	0.066	0.05	10.08	0.04	0.001
5.58	2.24	67.75	1.78	120.73	28	651	0.47	0.061	0.04	10.08	0.03	0.001
5.74	2.27	66.61	1.84	122.81	28	658	0.47	0.062	0.04	10.08	0.03	0.001
5.91	2.42	57.02	2.40	137.10	34	686	0.47	0.058	0.03	10.08	0.03	0.001
6.07	2.57	53.45	3.16	169.05	45	778	0.47	0.044	0.02	10.08	0.01	0.000
6.23	2.51	69.79	2.84	198.42	51	944	0.47	0.029	0.01	10.08	0.01	0.000
6.40	2.46	81.88	2.55	209.09	53	1028	0.47	0.026	0.01	10.08	0.01	0.000
6.56	2.43	86.34	2.45	211.42	53	1052	0.47	0.026	0.01	10.08	0.01	0.000
6.73	2.46	83.22	2.57	213.91	54	1050	0.47	0.027	0.01	10.08	0.01	0.000
6.89	2.34	109.44	2.08	227.30	54	1184	0.47	0.023	0.01	10.08	0.01	0.000
7.05	2.22	147.12	1.71	251.43	57	1365	0.47	0.018	0.01	10.08	0.00	0.000
7.22	2.15	171.52	1.56	267.61	59	1469	0.47	0.017	0.00	10.08	0.00	0.000
7.38	2.21	157.69	1.69	267.01	60	1452	0.47	0.018	0.00	10.08	0.00	0.000
7.55	2.28	141.68	1.87	265.28	62	1416	0.47	0.019	0.00	10.08	0.00	0.000
7.71	2.28	146.02	1.88	274.69	64	1465	0.47	0.019	0.00	10.08	0.00	0.000
7.87	2.19	178.72	1.65	294.84	66	1609	0.47	0.017	0.00	10.08	0.00	0.000
8.04	2.10	209.33	1.46	304.72	66	1676	0.47	0.016	0.00	10.08	0.00	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	Q_{tn}	Kc	$Q_{tn,cs}$	$N_{1,60}$ (blows)	G_{max} (tsf)	CSR	Shear, γ (%)	$e_{vol(15)}$ (%)	N_c	e_v (%)	Settle. (in)
8.20	2.05	230.84	1.37	316.42	67	1734	0.47	0.016	0.00	10.08	0.00	0.000
8.37	2.01	240.55	1.32	317.03	66	1768	0.47	0.016	0.00	10.08	0.00	0.000
8.53	2.02	244.39	1.33	324.40	68	1834	0.47	0.016	0.00	10.08	0.00	0.000
8.69	2.02	243.63	1.33	324.08	68	1857	0.47	0.016	0.00	10.08	0.00	0.000
8.86	2.03	241.15	1.34	322.05	68	1872	0.47	0.016	0.00	10.08	0.00	0.000
9.02	2.04	239.61	1.35	324.28	69	1909	0.47	0.016	0.00	10.08	0.00	0.000
9.19	2.06	233.40	1.39	324.80	69	1933	0.47	0.016	0.00	10.08	0.00	0.000
9.35	2.11	215.98	1.47	317.74	69	1899	0.47	0.017	0.00	10.08	0.00	0.000
9.51	2.13	194.16	1.51	292.96	64	1765	0.47	0.019	0.00	10.08	0.00	0.000
9.68	2.11	187.26	1.48	276.54	60	1697	0.47	0.021	0.01	10.08	0.00	0.000
9.84	2.07	196.74	1.40	275.50	59	1726	0.47	0.021	0.01	10.08	0.00	0.000
10.01	2.06	211.44	1.39	293.12	62	1862	0.47	0.019	0.00	10.08	0.00	0.000
10.17	2.10	209.15	1.45	303.92	66	1942	0.47	0.018	0.00	10.08	0.00	0.000
10.34	2.16	198.11	1.58	313.26	70	1994	0.47	0.018	0.00	10.08	0.00	0.000
10.50	2.20	191.14	1.68	320.51	72	2034	0.47	0.018	0.00	10.08	0.00	0.000
10.66	2.24	188.13	1.76	331.53	76	2100	0.47	0.017	0.00	10.08	0.00	0.000
10.83	2.27	189.55	1.85	350.58	81	2216	0.47	0.016	0.00	10.08	0.00	0.000
10.99	2.29	202.89	1.91	387.46	91	2455	0.47	0.015	0.00	10.08	0.00	0.000
11.16	2.24	238.71	1.77	421.40	97	2772	0.47	0.013	0.00	10.08	0.00	0.000
11.32	2.18	276.74	1.61	445.50	99	3037	0.47	0.012	0.00	10.08	0.00	0.000
11.48	2.09	306.48	1.43	437.80	94	3077	0.47	0.012	0.00	10.08	0.00	0.000
11.65	2.01	321.82	1.32	423.62	89	3014	0.47	0.012	0.00	10.08	0.00	0.000
11.81	1.95	327.75	1.24	405.40	83	2883	0.47	0.013	0.00	10.08	0.00	0.000
11.98	1.94	322.14	1.22	394.47	80	2825	0.47	0.014	0.00	10.08	0.00	0.000

Total estimated settlement: 0.10

Abbreviations

Q_{tn}: Equivalent clean sand normalized cone resistance
K_c: Fines correction factor
$Q_{tn,cs}$: Post-liquefaction volumentric strain
G_{max}: Small strain shear modulus
CSR: Soil cyclic stress ratio
γ: Cyclic shear strain
$e_{vol(15)}$: Volumetric strain after 15 cycles
N_c: Equivalent number of cycles
e_v: Volumetric strain
Settle.: Calculated settlement

:: Post-earthquake settlement due to soil liquefaction ::

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
12.14	377.94	2.00	0.00	1.00	0.00	12.30	364.46	2.00	0.00	1.00	0.00
12.47	355.37	2.00	0.00	1.00	0.00	12.63	346.34	2.00	0.00	1.00	0.00
12.80	334.90	2.00	0.00	1.00	0.00	12.96	313.68	2.00	0.00	1.00	0.00
13.12	282.42	2.00	0.00	1.00	0.00	13.29	256.82	2.00	0.00	1.00	0.00
13.45	248.74	2.00	0.00	1.00	0.00	13.62	259.70	2.00	0.00	1.00	0.00
13.78	268.05	2.00	0.00	1.00	0.00	13.94	275.39	2.00	0.00	1.00	0.00
14.11	288.92	2.00	0.00	1.00	0.00	14.27	296.25	2.00	0.00	1.00	0.00
14.44	279.77	2.00	0.00	1.00	0.00	14.60	249.68	2.00	0.00	1.00	0.00
14.76	205.12	2.00	0.00	1.00	0.00	14.93	164.84	0.97	0.56	1.00	0.01
15.09	124.12	0.50	1.96	1.00	0.04	15.26	96.77	0.32	2.40	1.00	0.05
15.42	95.56	0.31	2.43	1.00	0.05	15.58	97.65	2.00	0.00	1.00	0.00

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
15.75	95.49	2.00	0.00	1.00	0.00	15.91	88.08	0.27	2.59	1.00	0.05
16.08	78.29	0.24	2.86	1.00	0.06	16.24	70.18	0.21	3.12	1.00	0.06
16.40	64.72	0.20	3.34	1.00	0.06	16.57	88.97	2.00	0.00	1.00	0.00
16.73	102.66	2.00	0.00	1.00	0.00	16.90	110.37	2.00	0.00	1.00	0.00
17.06	92.54	2.00	0.00	1.00	0.00	17.23	80.18	0.23	2.80	1.00	0.06
17.39	74.84	0.22	2.96	1.00	0.06	17.55	79.90	0.23	2.81	1.00	0.05
17.72	97.53	2.00	0.00	1.00	0.00	17.88	124.71	2.00	0.00	1.00	0.00
18.05	158.81	2.00	0.00	1.00	0.00	18.21	177.82	1.08	0.38	1.00	0.01
18.37	186.38	1.22	0.26	1.00	0.01	18.54	184.07	1.18	0.27	1.00	0.01
18.70	181.20	1.13	0.37	1.00	0.01	18.87	183.34	1.16	0.27	1.00	0.01
19.03	189.57	1.26	0.18	1.00	0.00	19.19	192.90	1.32	0.18	1.00	0.00
19.36	193.32	1.32	0.18	1.00	0.00	19.52	184.44	1.17	0.27	1.00	0.01
19.69	179.92	1.09	0.38	1.00	0.01	19.85	179.96	1.09	0.38	1.00	0.01
20.01	187.70	1.21	0.26	1.00	0.01	20.18	189.24	1.23	0.26	1.00	0.01
20.34	199.76	1.42	0.00	1.00	0.00	20.51	239.43	2.00	0.00	1.00	0.00
20.67	282.40	2.00	0.00	1.00	0.00	20.83	311.73	2.00	0.00	1.00	0.00
21.00	303.35	2.00	0.00	1.00	0.00	21.16	292.37	2.00	0.00	1.00	0.00
21.33	290.66	2.00	0.00	1.00	0.00	21.49	315.62	2.00	0.00	1.00	0.00
21.65	341.02	2.00	0.00	1.00	0.00	21.82	356.56	2.00	0.00	1.00	0.00
21.98	358.85	2.00	0.00	1.00	0.00	22.15	351.57	2.00	0.00	1.00	0.00
22.31	342.59	2.00	0.00	1.00	0.00	22.47	339.65	2.00	0.00	1.00	0.00
22.64	338.38	2.00	0.00	1.00	0.00	22.80	332.88	2.00	0.00	1.00	0.00
22.97	320.26	2.00	0.00	1.00	0.00	23.13	304.11	2.00	0.00	1.00	0.00
23.30	287.21	2.00	0.00	1.00	0.00	23.46	270.57	2.00	0.00	1.00	0.00
23.62	257.91	2.00	0.00	1.00	0.00	23.79	250.47	2.00	0.00	1.00	0.00
23.95	247.72	2.00	0.00	1.00	0.00	24.12	246.28	2.00	0.00	1.00	0.00
24.28	241.01	2.00	0.00	1.00	0.00	24.44	225.05	2.00	0.00	1.00	0.00
24.61	214.18	2.00	0.00	1.00	0.00	24.77	215.48	2.00	0.00	1.00	0.00
24.94	239.01	2.00	0.00	1.00	0.00	25.10	266.43	2.00	0.00	1.00	0.00
25.26	287.16	2.00	0.00	1.00	0.00	25.43	295.57	2.00	0.00	1.00	0.00
25.59	299.46	2.00	0.00	1.00	0.00	25.76	306.79	2.00	0.00	1.00	0.00
25.92	317.69	2.00	0.00	1.00	0.00	26.08	325.45	2.00	0.00	1.00	0.00
26.25	326.71	2.00	0.00	1.00	0.00	26.41	326.28	2.00	0.00	1.00	0.00
26.58	328.16	2.00	0.00	1.00	0.00	26.74	330.30	2.00	0.00	1.00	0.00
26.90	329.50	2.00	0.00	1.00	0.00	27.07	329.40	2.00	0.00	1.00	0.00
27.23	329.24	2.00	0.00	1.00	0.00	27.40	319.68	2.00	0.00	1.00	0.00
27.56	306.27	2.00	0.00	1.00	0.00	27.72	287.78	2.00	0.00	1.00	0.00
27.89	281.36	2.00	0.00	1.00	0.00	28.05	287.13	2.00	0.00	1.00	0.00
28.22	304.12	2.00	0.00	1.00	0.00	28.38	314.56	2.00	0.00	1.00	0.00
28.54	319.80	2.00	0.00	1.00	0.00	28.71	320.45	2.00	0.00	1.00	0.00

Total estimated settlement: 0.62

Abbreviations

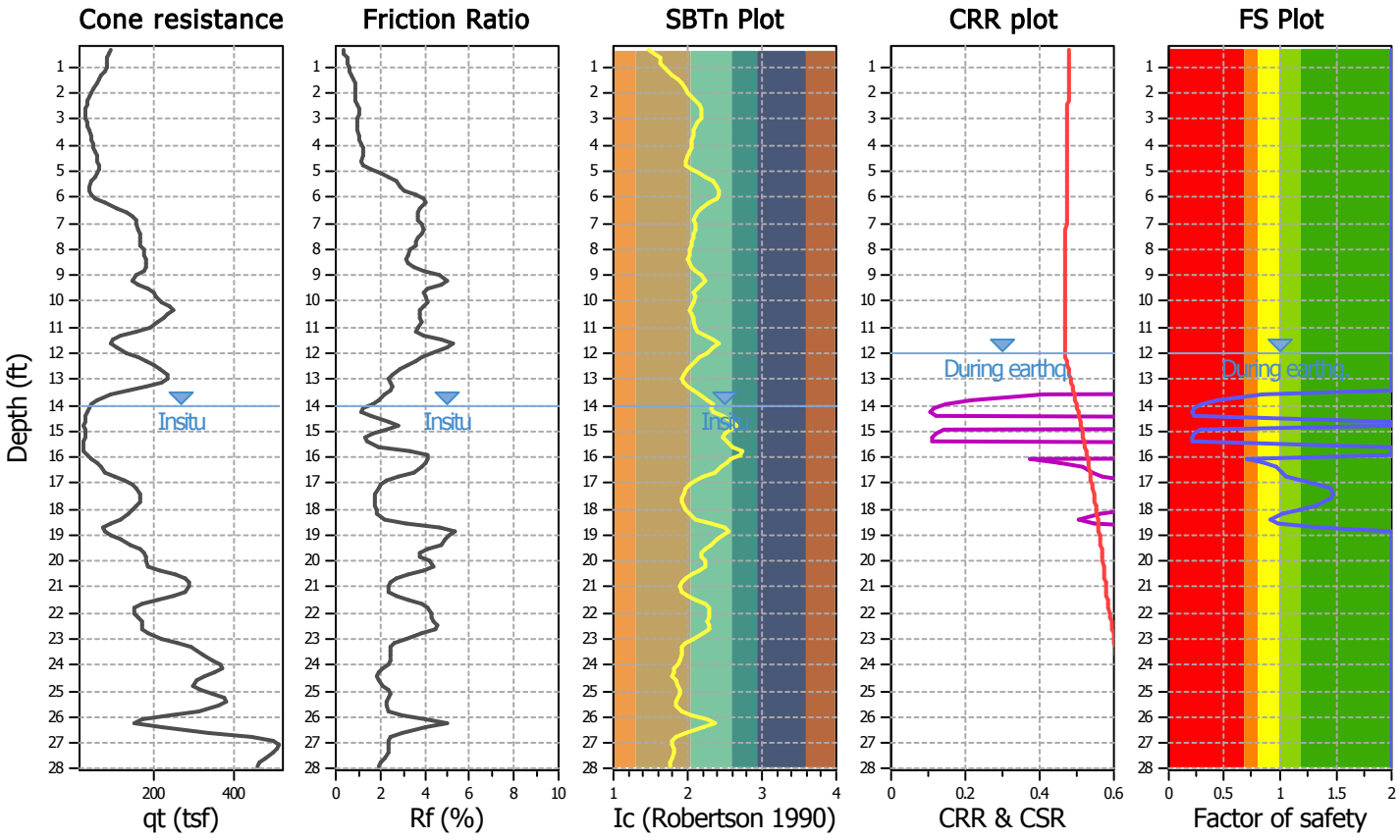
$Q_{tn,cs}$:	Equivalent clean sand normalized cone resistance
FS:	Factor of safety against liquefaction
e_v (%):	Post-liquefaction volumentric strain
DF:	e_v depth weighting factor
Settlement:	Calculated settlement

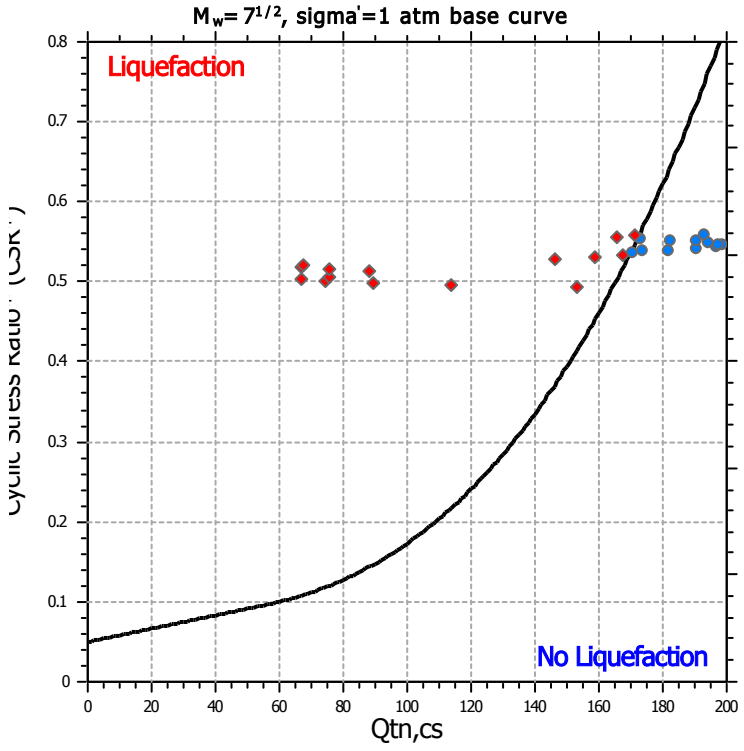
LIQUEFACTION ANALYSIS REPORT

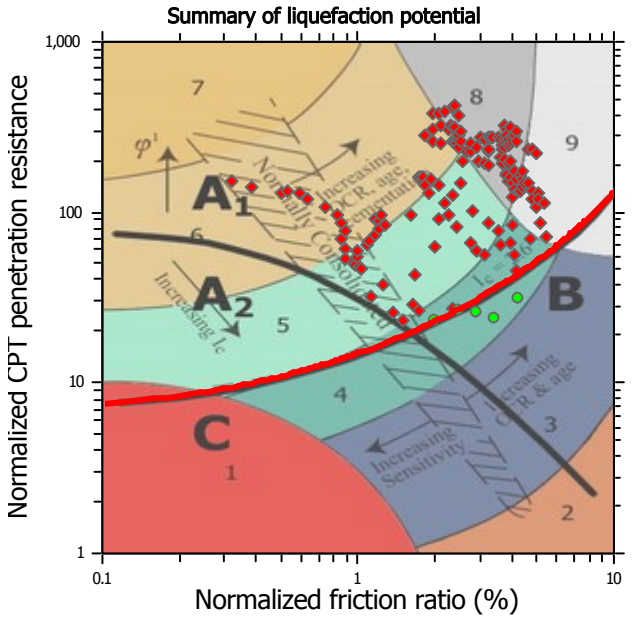
Project title : Cole CampusCole Campus – Central **Location : Oakland**
CPT file : CPT-03

Input parameters and analysis data

Analysis method:	**NCEER (1998)**	**G.W.T. (in-situ):**	**14.00 ft**	**Use fill:**	**No**	**Clay like behavior applied:**	**Sands only**
Fines correction method:	**NCEER (1998)**	**G.W.T. (earthq.):**	**12.00 ft**	**Fill height:**	**N/A**	**Limit depth applie**	**No**
Points to test:	**Based on Ic value**	**Average results interva**	**3**	**Fill weight:**	**N/A**	**Limit depth:**	**N/A**
Earthquake magnitude M_w:	**6.90**	**Ic cut-off value:**	**2.60**	**Trans. detect. applied:**	**No**	**MSF method:**	**Method based**
Peak ground acceleration:	**0.70**	**Unit weight calculatior**	**Based on SBT**	**K_o applied:**	**Yes**		

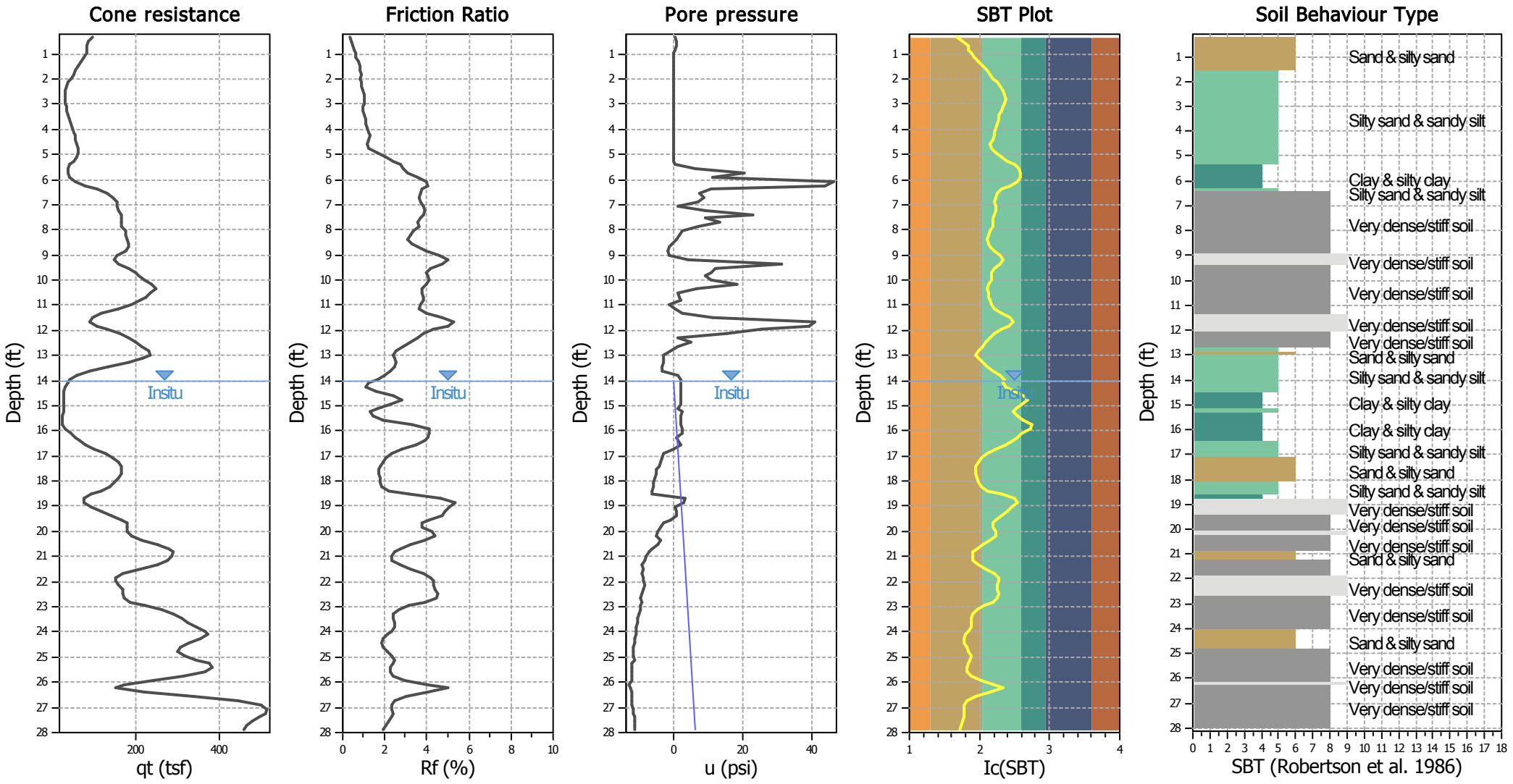






Zone A_1 : Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



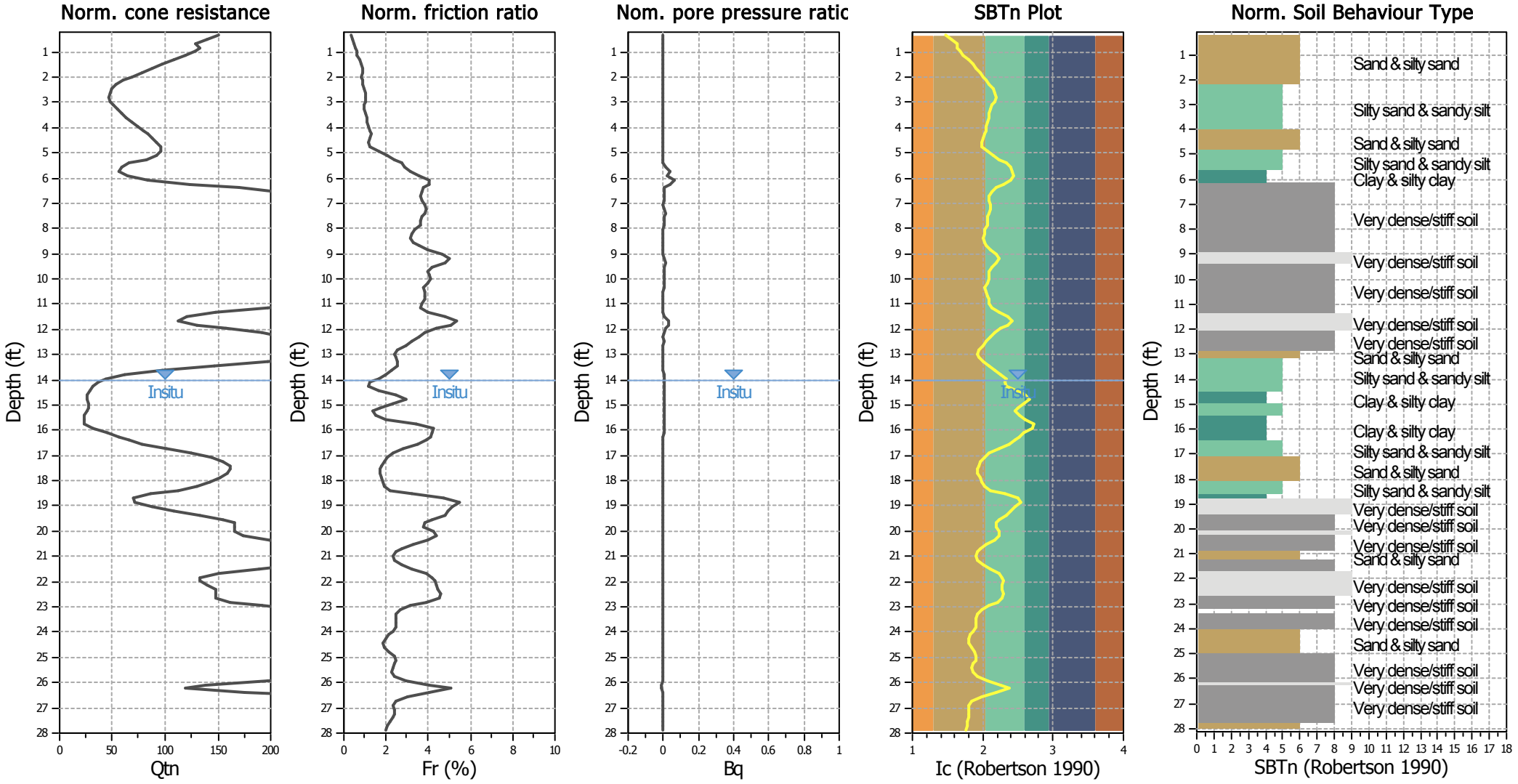
Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	N/A	Limit depth:	N/A

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



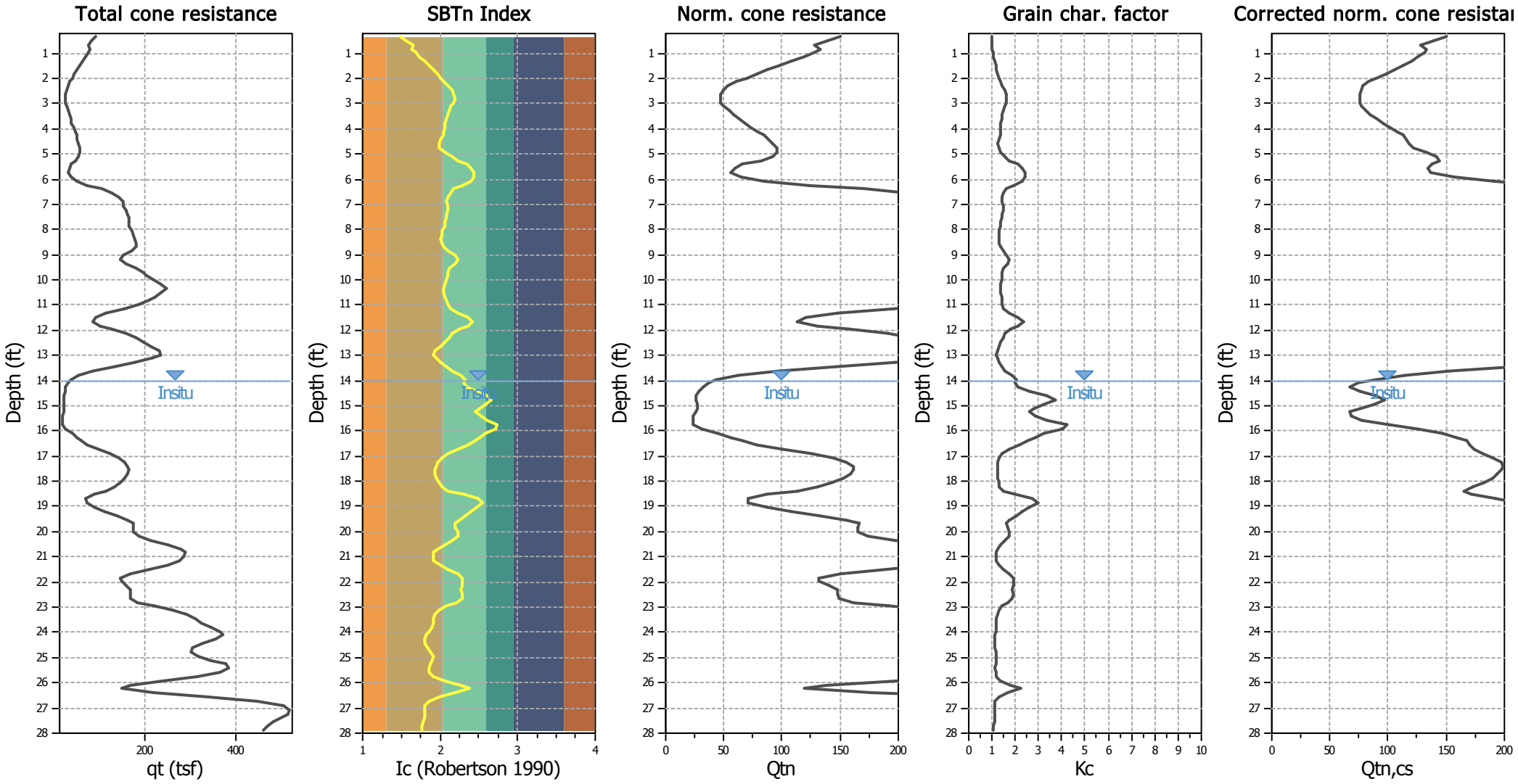
Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

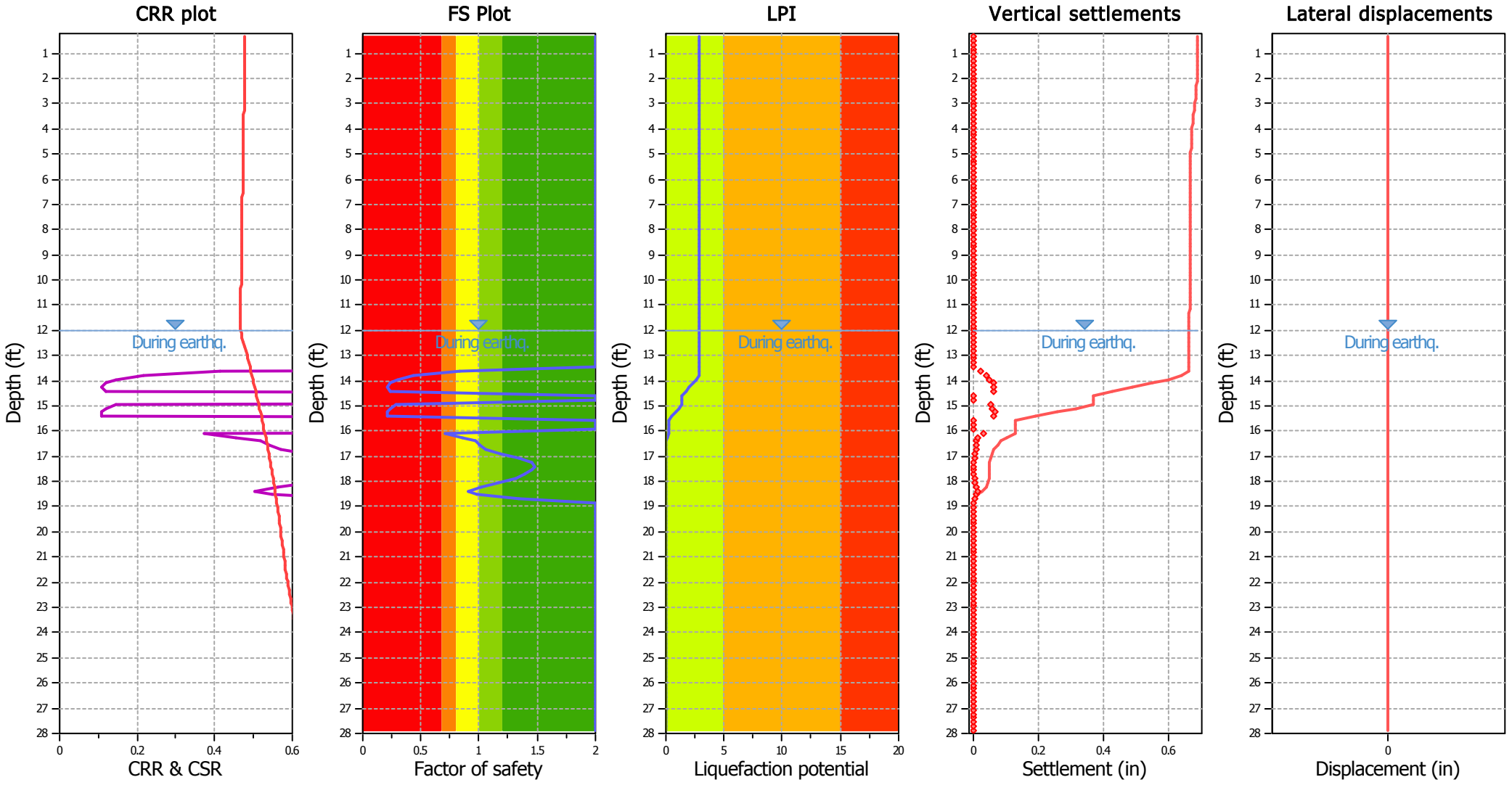
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_o applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	N/A	Limit depth:	N/A

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	N/A	Limit depth:	N/A

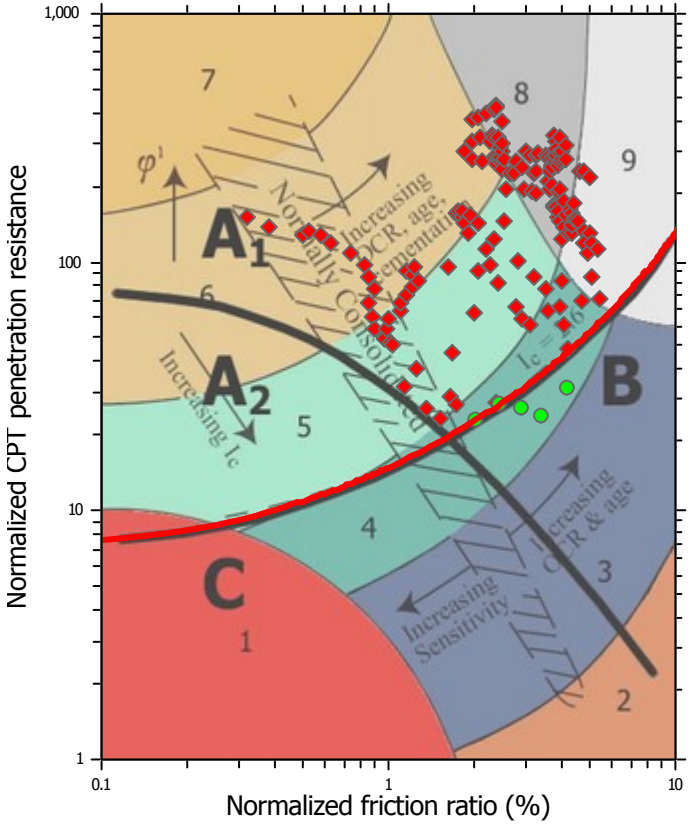
F.S. color scheme

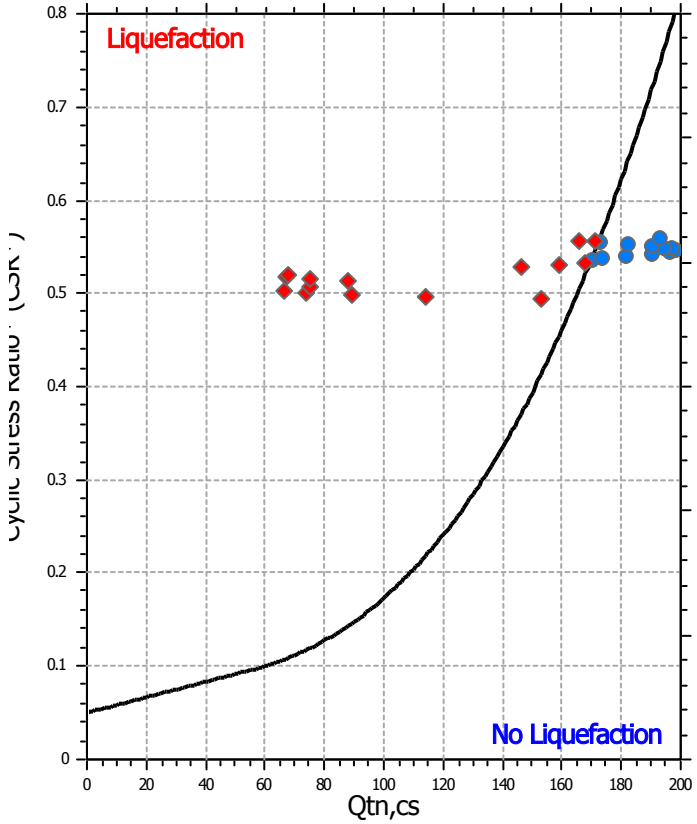
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

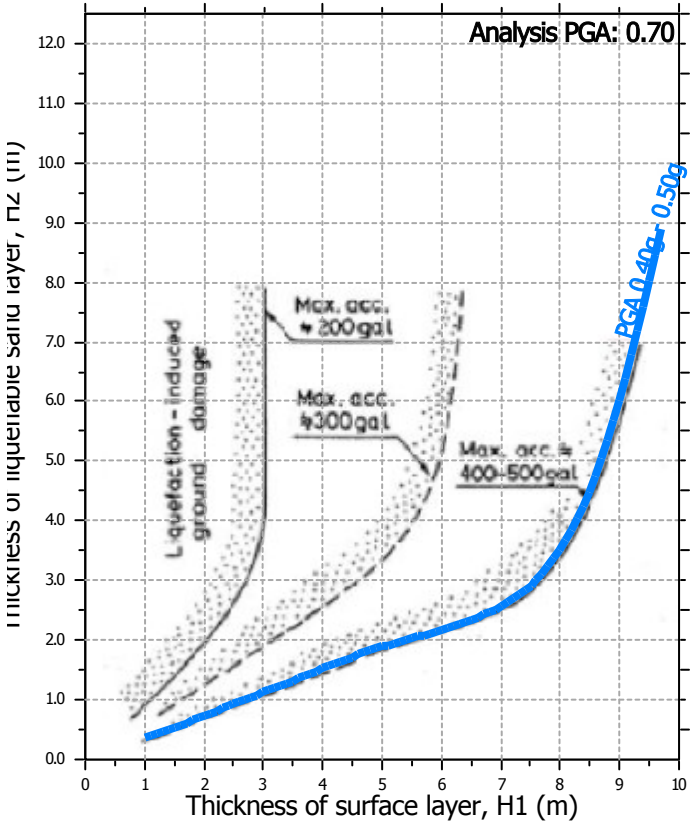
LPI color scheme

- Very high risk
- High risk
- Low risk

Liquefaction analysis summary plots



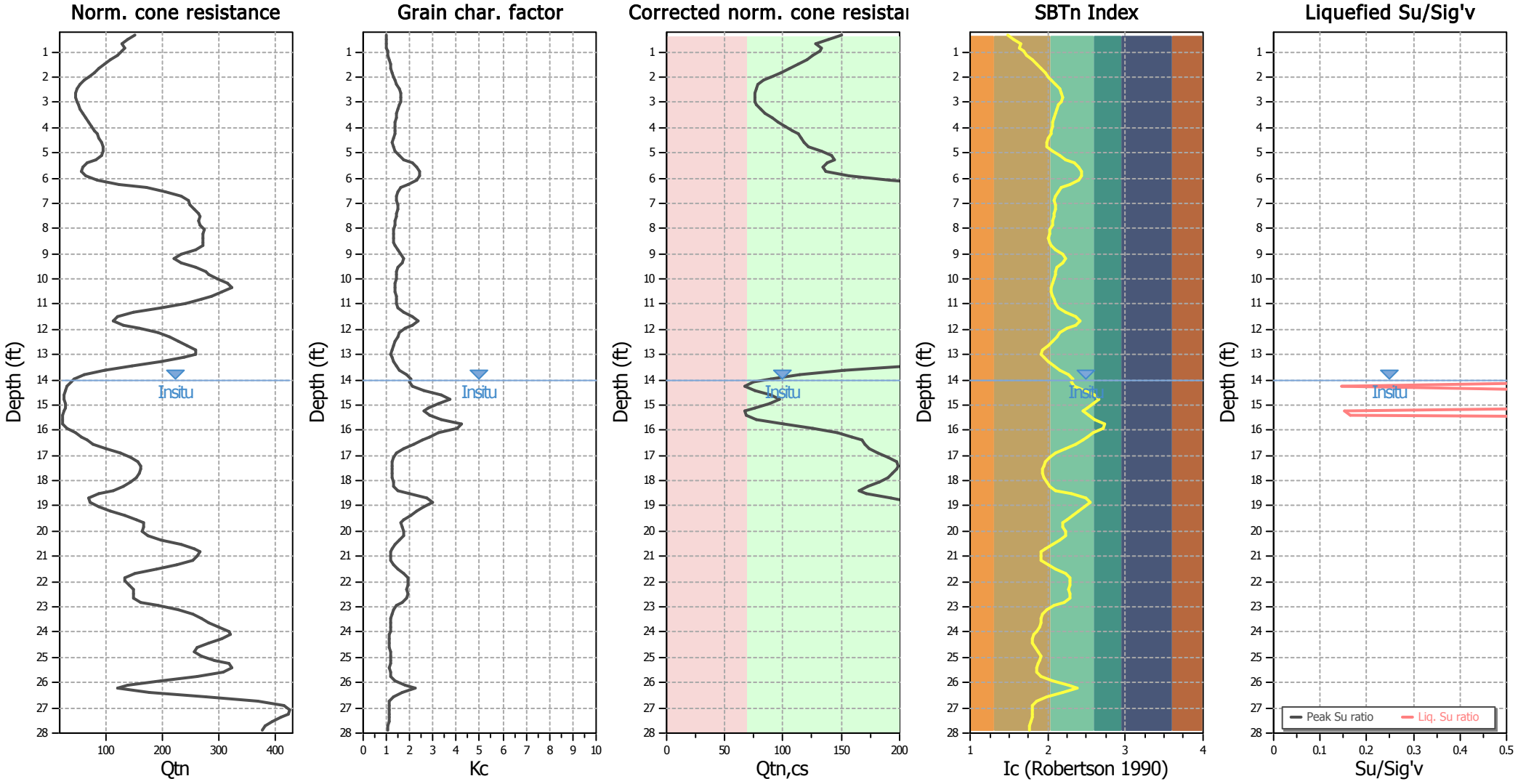




Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	N/A	Limit depth:	N/A

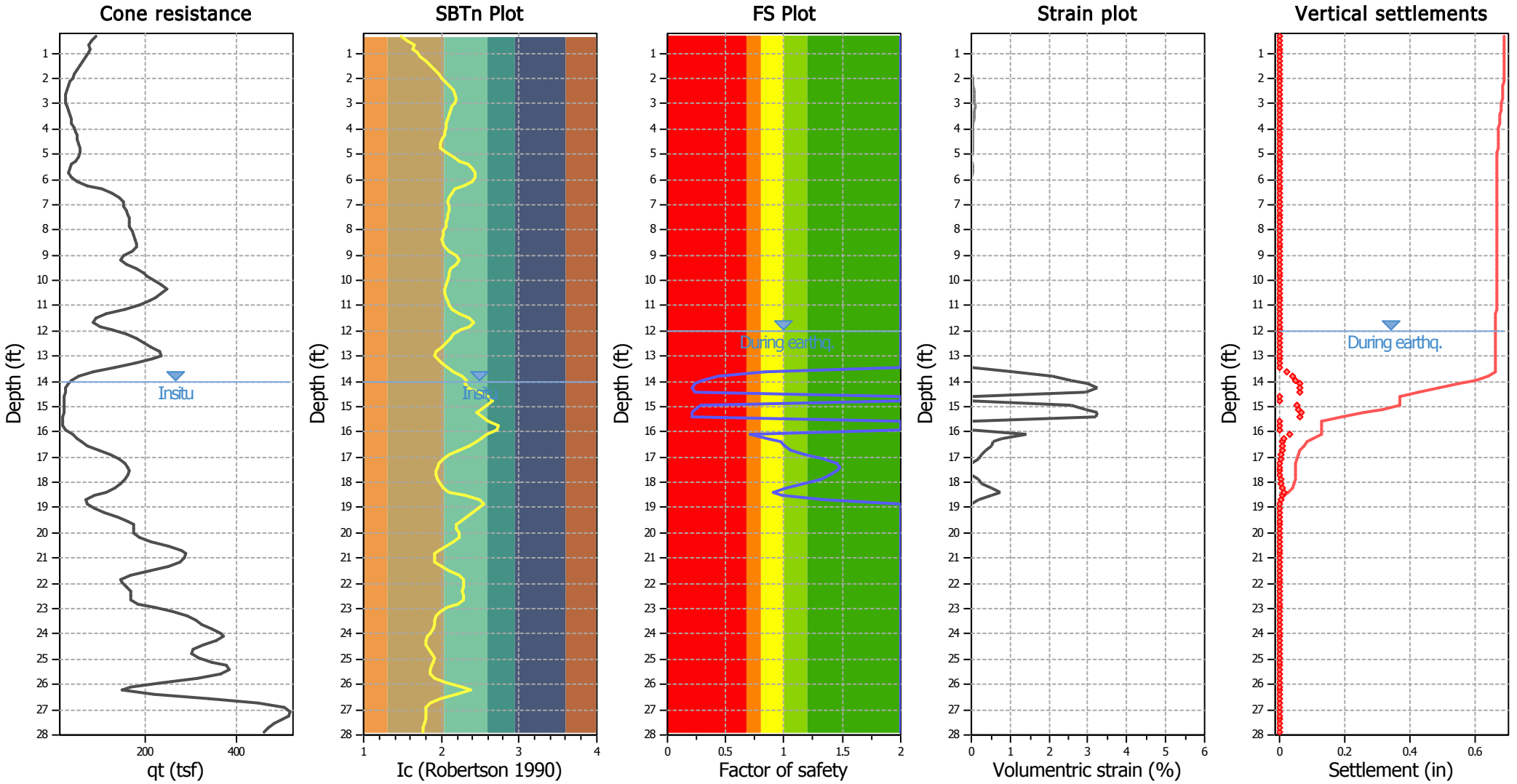
Check for strength loss plots (Robertson (2010))



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	N/A	Limit depth:	N/A

Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

:: Post-earthquake settlement of dry sands ::

Depth (ft)	Ic	Q_{tn}	Kc	$Q_{tn,cs}$	$N_{1,60}$ (blows)	G_{max} (tsf)	CSR	Shear, γ (%)	$e_{vol(15)}$ (%)	N_c	e_v (%)	Settle. (in)
0.33	1.48	150.84	1.00	150.84	26	551	0.48	0.002	0.00	10.08	0.00	0.000
0.49	1.55	139.16	1.00	139.16	25	556	0.48	0.003	0.00	10.08	0.00	0.000
0.66	1.64	128.11	1.00	128.00	23	576	0.48	0.004	0.00	10.08	0.00	0.000
0.82	1.64	132.69	1.00	132.43	24	595	0.48	0.005	0.00	10.08	0.00	0.000
0.98	1.68	128.17	1.03	131.48	24	604	0.48	0.006	0.00	10.08	0.00	0.000
1.15	1.73	119.16	1.06	125.80	24	594	0.48	0.008	0.01	10.08	0.01	0.000
1.31	1.80	108.32	1.11	120.06	23	595	0.48	0.009	0.01	10.08	0.01	0.000
1.48	1.87	97.54	1.16	113.01	22	581	0.48	0.011	0.01	10.08	0.01	0.000
1.64	1.91	87.57	1.20	105.26	21	553	0.48	0.014	0.01	10.08	0.01	0.000
1.80	1.96	78.29	1.25	98.17	20	526	0.48	0.018	0.02	10.08	0.01	0.000
1.97	2.00	68.95	1.30	89.37	19	484	0.48	0.025	0.03	10.08	0.02	0.000
2.13	2.05	60.48	1.38	83.16	18	456	0.48	0.034	0.04	10.08	0.03	0.001
2.30	2.10	53.82	1.45	78.02	17	429	0.48	0.047	0.06	10.08	0.05	0.001
2.46	2.15	49.52	1.55	76.62	17	421	0.48	0.057	0.07	10.08	0.06	0.001
2.62	2.18	47.26	1.61	76.04	17	416	0.48	0.067	0.08	10.08	0.07	0.001
2.79	2.18	46.60	1.63	75.90	17	415	0.48	0.078	0.09	10.08	0.08	0.002
2.95	2.17	47.55	1.60	76.11	17	417	0.48	0.085	0.10	10.08	0.09	0.002
3.12	2.14	50.16	1.53	76.81	17	422	0.48	0.092	0.11	10.08	0.09	0.002
3.28	2.12	54.27	1.49	80.78	18	444	0.48	0.084	0.10	10.08	0.08	0.002
3.45	2.09	58.97	1.44	84.91	18	467	0.48	0.077	0.09	10.08	0.07	0.001
3.61	2.09	63.67	1.43	91.28	20	502	0.47	0.066	0.07	10.08	0.06	0.001
3.77	2.06	68.53	1.39	95.35	20	523	0.47	0.062	0.06	10.08	0.05	0.001
3.94	2.05	73.82	1.38	101.60	22	557	0.47	0.056	0.05	10.08	0.04	0.001
4.10	2.04	79.21	1.36	107.72	23	590	0.47	0.050	0.04	10.08	0.04	0.001
4.27	2.04	83.96	1.35	113.41	24	620	0.47	0.047	0.04	10.08	0.03	0.001
4.43	2.01	88.28	1.31	115.44	24	627	0.47	0.049	0.04	10.08	0.03	0.001
4.59	1.98	92.28	1.27	117.49	24	633	0.47	0.050	0.04	10.08	0.03	0.001
4.76	1.99	95.32	1.28	122.21	25	660	0.47	0.048	0.04	10.08	0.03	0.001
4.92	2.06	95.84	1.39	133.49	28	733	0.47	0.039	0.03	10.08	0.02	0.000
5.09	2.15	91.48	1.55	142.01	31	780	0.47	0.035	0.02	10.08	0.02	0.000
5.25	2.24	81.88	1.76	143.89	33	778	0.47	0.037	0.02	10.08	0.02	0.000
5.41	2.34	65.85	2.09	137.87	33	717	0.47	0.048	0.03	10.08	0.02	0.000
5.58	2.39	59.14	2.27	134.41	33	683	0.47	0.058	0.03	10.08	0.03	0.001
5.74	2.43	56.47	2.43	137.23	34	685	0.47	0.061	0.03	10.08	0.03	0.001
5.91	2.43	64.16	2.45	157.09	39	782	0.47	0.045	0.02	10.08	0.02	0.000
6.07	2.39	84.08	2.27	191.09	47	972	0.47	0.029	0.01	10.08	0.01	0.000
6.23	2.29	123.69	1.91	235.80	55	1254	0.47	0.019	0.01	10.08	0.00	0.000
6.40	2.18	170.50	1.62	276.74	62	1513	0.47	0.015	0.00	10.08	0.00	0.000
6.56	2.13	206.10	1.51	311.91	68	1715	0.47	0.013	0.00	10.08	0.00	0.000
6.73	2.10	233.10	1.45	337.43	73	1856	0.47	0.012	0.00	10.08	0.00	0.000
6.89	2.09	246.96	1.43	353.28	76	1942	0.47	0.011	0.00	10.08	0.00	0.000
7.05	2.10	247.85	1.46	362.10	78	1992	0.47	0.011	0.00	10.08	0.00	0.000
7.22	2.10	255.03	1.46	372.29	81	2048	0.47	0.011	0.00	10.08	0.00	0.000
7.38	2.09	264.23	1.43	377.70	81	2077	0.47	0.012	0.00	10.08	0.00	0.000
7.55	2.07	266.12	1.41	374.86	80	2059	0.47	0.012	0.00	10.08	0.00	0.000
7.71	2.06	264.69	1.39	367.98	78	2019	0.47	0.013	0.00	10.08	0.00	0.000
7.87	2.06	265.80	1.39	369.36	79	2027	0.47	0.013	0.00	10.08	0.00	0.000
8.04	2.03	273.68	1.34	365.38	77	2037	0.47	0.013	0.00	10.08	0.00	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	Q_{tn}	Kc	$Q_{tn,cs}$	$N_{1,60}$ (blows)	G_{max} (tsf)	CSR	Shear, γ (%)	$e_{vol(15)}$ (%)	N_c	e_v (%)	Settle. (in)
8.20	2.02	271.56	1.32	359.47	75	2035	0.47	0.014	0.00	10.08	0.00	0.000
8.37	2.00	270.51	1.31	353.17	74	2030	0.47	0.014	0.00	10.08	0.00	0.000
8.53	2.02	272.47	1.33	362.55	76	2111	0.47	0.014	0.00	10.08	0.00	0.000
8.69	2.05	271.86	1.37	372.60	79	2193	0.47	0.013	0.00	10.08	0.00	0.000
8.86	2.11	259.35	1.47	380.03	82	2246	0.47	0.013	0.00	10.08	0.00	0.000
9.02	2.18	232.81	1.63	379.43	85	2215	0.47	0.014	0.00	10.08	0.00	0.000
9.19	2.23	220.58	1.73	381.69	87	2220	0.47	0.014	0.00	10.08	0.00	0.000
9.35	2.20	232.44	1.66	385.27	87	2303	0.47	0.014	0.00	10.08	0.00	0.000
9.51	2.12	259.13	1.50	387.56	85	2409	0.47	0.013	0.00	10.08	0.00	0.000
9.68	2.09	275.63	1.44	396.32	85	2514	0.47	0.013	0.00	10.08	0.00	0.000
9.84	2.09	280.99	1.44	405.49	88	2603	0.47	0.012	0.00	10.08	0.00	0.000
10.01	2.09	297.58	1.43	426.60	92	2776	0.47	0.012	0.00	10.08	0.00	0.000
10.17	2.06	315.35	1.39	437.93	93	2893	0.47	0.011	0.00	10.08	0.00	0.000
10.34	2.03	323.24	1.35	435.70	92	2917	0.47	0.011	0.00	10.08	0.00	0.000
10.50	2.05	304.50	1.38	418.80	89	2834	0.47	0.012	0.00	10.08	0.00	0.000
10.66	2.07	285.90	1.40	400.11	86	2734	0.47	0.013	0.00	10.08	0.00	0.000
10.83	2.08	267.91	1.43	382.57	82	2641	0.47	0.014	0.00	10.08	0.00	0.000
10.99	2.10	240.11	1.45	347.34	75	2421	0.47	0.016	0.00	10.08	0.00	0.000
11.16	2.13	196.62	1.52	298.87	66	2092	0.47	0.019	0.00	10.08	0.00	0.000
11.32	2.24	147.69	1.76	260.21	60	1780	0.47	0.025	0.01	10.08	0.01	0.000
11.48	2.35	120.29	2.13	256.43	62	1669	0.47	0.028	0.01	10.08	0.01	0.000
11.65	2.41	112.84	2.35	264.83	65	1686	0.47	0.028	0.01	10.08	0.01	0.000
11.81	2.35	130.44	2.12	277.15	67	1849	0.47	0.025	0.01	10.08	0.00	0.000
11.98	2.25	158.06	1.81	285.38	66	2027	0.47	0.022	0.01	10.08	0.00	0.000

Total estimated settlement: 0.02

Abbreviations

Q_{tn}: Equivalent clean sand normalized cone resistance
K_c: Fines correction factor
$Q_{tn,cs}$: Post-liquefaction volumentric strain
G_{max}: Small strain shear modulus
CSR: Soil cyclic stress ratio
γ: Cyclic shear strain
$e_{vol(15)}$: Volumetric strain after 15 cycles
N_c: Equivalent number of cycles
e_v: Volumetric strain
Settle.: Calculated settlement

:: Post-earthquake settlement due to soil liquefaction ::

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
12.14	302.96	2.00	0.00	1.00	0.00	12.30	312.04	2.00	0.00	1.00	0.00
12.47	315.20	2.00	0.00	1.00	0.00	12.63	316.56	2.00	0.00	1.00	0.00
12.80	317.00	2.00	0.00	1.00	0.00	12.96	312.82	2.00	0.00	1.00	0.00
13.12	294.91	2.00	0.00	1.00	0.00	13.29	258.22	2.00	0.00	1.00	0.00
13.45	208.09	2.00	0.00	1.00	0.00	13.62	153.01	0.84	1.09	1.00	0.02
13.78	113.96	0.44	2.10	1.00	0.04	13.94	89.30	0.29	2.56	1.00	0.05
14.11	74.09	0.24	2.99	1.00	0.06	14.27	66.71	0.21	3.26	1.00	0.06
14.44	75.36	0.24	2.95	1.00	0.06	14.60	89.01	2.00	0.00	1.00	0.00
14.76	96.36	2.00	0.00	1.00	0.00	14.93	88.22	0.28	2.59	1.00	0.05
15.09	75.42	0.23	2.94	1.00	0.06	15.26	67.11	0.21	3.24	1.00	0.07
15.42	67.76	0.21	3.22	1.00	0.06	15.58	76.58	2.00	0.00	1.00	0.00

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
15.75	100.90	2.00	0.00	1.00	0.00	15.91	125.23	2.00	0.00	1.00	0.00
16.08	146.38	0.70	1.43	1.00	0.03	16.24	159.05	0.86	0.79	1.00	0.02
16.40	167.45	0.97	0.55	1.00	0.01	16.57	170.39	1.01	0.54	1.00	0.01
16.73	173.83	1.06	0.38	1.00	0.01	16.90	181.80	1.18	0.27	1.00	0.01
17.06	190.62	1.34	0.18	1.00	0.00	17.23	196.92	1.46	0.00	1.00	0.00
17.39	198.45	1.48	0.00	1.00	0.00	17.55	197.48	1.46	0.00	1.00	0.00
17.72	194.33	1.39	0.00	1.00	0.00	17.88	190.49	1.31	0.18	1.00	0.00
18.05	182.37	1.17	0.27	1.00	0.01	18.21	173.11	1.02	0.53	1.00	0.01
18.37	165.72	0.91	0.74	1.00	0.01	18.54	171.41	0.98	0.54	1.00	0.01
18.70	193.13	1.34	0.18	1.00	0.00	18.87	211.15	2.00	0.00	1.00	0.00
19.03	226.02	2.00	0.00	1.00	0.00	19.19	247.21	2.00	0.00	1.00	0.00
19.36	270.57	2.00	0.00	1.00	0.00	19.52	273.82	2.00	0.00	1.00	0.00
19.69	273.57	2.00	0.00	1.00	0.00	19.85	272.91	2.00	0.00	1.00	0.00
20.01	289.83	2.00	0.00	1.00	0.00	20.18	304.18	2.00	0.00	1.00	0.00
20.34	312.48	2.00	0.00	1.00	0.00	20.51	319.96	2.00	0.00	1.00	0.00
20.67	325.13	2.00	0.00	1.00	0.00	20.83	321.64	2.00	0.00	1.00	0.00
21.00	313.40	2.00	0.00	1.00	0.00	21.16	304.75	2.00	0.00	1.00	0.00
21.33	294.05	2.00	0.00	1.00	0.00	21.49	275.56	2.00	0.00	1.00	0.00
21.65	260.59	2.00	0.00	1.00	0.00	21.82	250.78	2.00	0.00	1.00	0.00
21.98	255.52	2.00	0.00	1.00	0.00	22.15	265.63	2.00	0.00	1.00	0.00
22.31	276.99	2.00	0.00	1.00	0.00	22.47	281.98	2.00	0.00	1.00	0.00
22.64	279.29	2.00	0.00	1.00	0.00	22.80	272.34	2.00	0.00	1.00	0.00
22.97	274.79	2.00	0.00	1.00	0.00	23.13	291.21	2.00	0.00	1.00	0.00
23.30	309.14	2.00	0.00	1.00	0.00	23.46	324.00	2.00	0.00	1.00	0.00
23.62	337.92	2.00	0.00	1.00	0.00	23.79	355.03	2.00	0.00	1.00	0.00
23.95	365.80	2.00	0.00	1.00	0.00	24.12	359.87	2.00	0.00	1.00	0.00
24.28	339.18	2.00	0.00	1.00	0.00	24.44	311.30	2.00	0.00	1.00	0.00
24.61	297.96	2.00	0.00	1.00	0.00	24.77	298.03	2.00	0.00	1.00	0.00
24.94	320.33	2.00	0.00	1.00	0.00	25.10	347.25	2.00	0.00	1.00	0.00
25.26	369.28	2.00	0.00	1.00	0.00	25.43	370.47	2.00	0.00	1.00	0.00
25.59	352.25	2.00	0.00	1.00	0.00	25.76	316.45	2.00	0.00	1.00	0.00
25.92	273.53	2.00	0.00	1.00	0.00	26.08	252.64	2.00	0.00	1.00	0.00
26.25	265.21	2.00	0.00	1.00	0.00	26.41	293.99	2.00	0.00	1.00	0.00
26.58	354.99	2.00	0.00	1.00	0.00	26.74	422.64	2.00	0.00	1.00	0.00
26.90	461.15	2.00	0.00	1.00	0.00	27.07	471.27	2.00	0.00	1.00	0.00
27.23	468.20	2.00	0.00	1.00	0.00	27.40	455.45	2.00	0.00	1.00	0.00
27.56	433.18	2.00	0.00	1.00	0.00	27.72	415.51	2.00	0.00	1.00	0.00
27.89	404.02	2.00	0.00	1.00	0.00						

Total estimated settlement: 0.66

Abbreviations

$Q_{tn,cs}$:	Equivalent clean sand normalized cone resistance
FS:	Factor of safety against liquefaction
e_v (%):	Post-liquefaction volumentric strain
DF:	e_v depth weighting factor
Settlement:	Calculated settlement

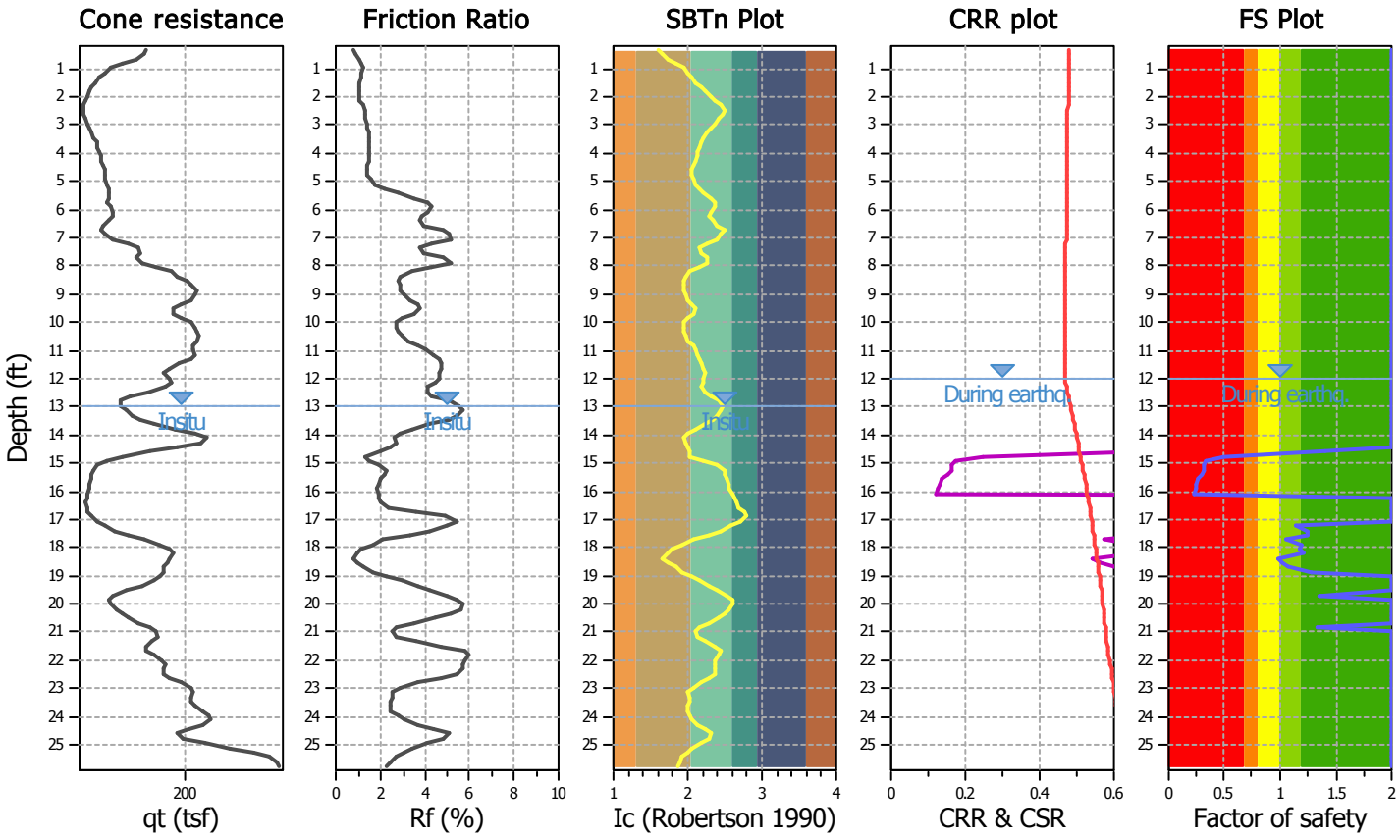
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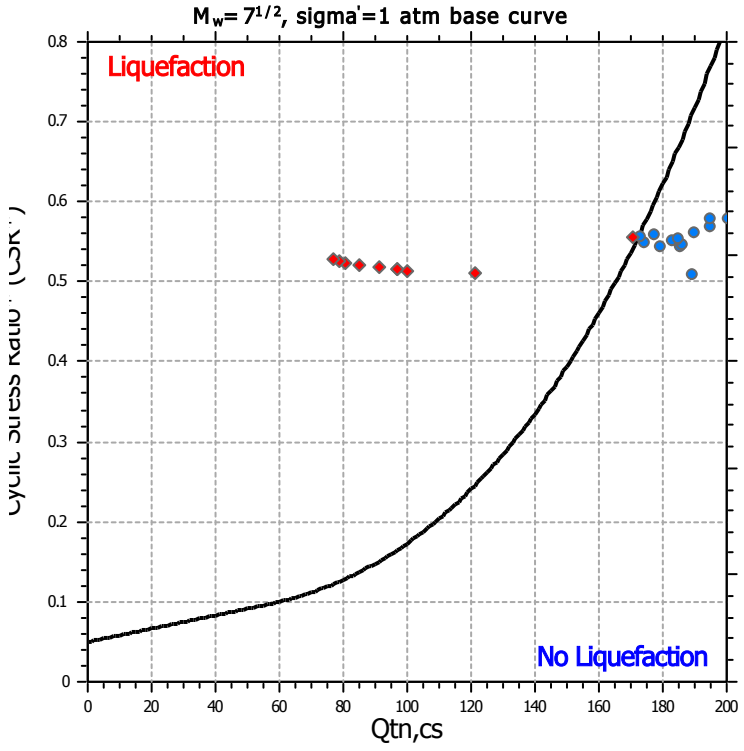
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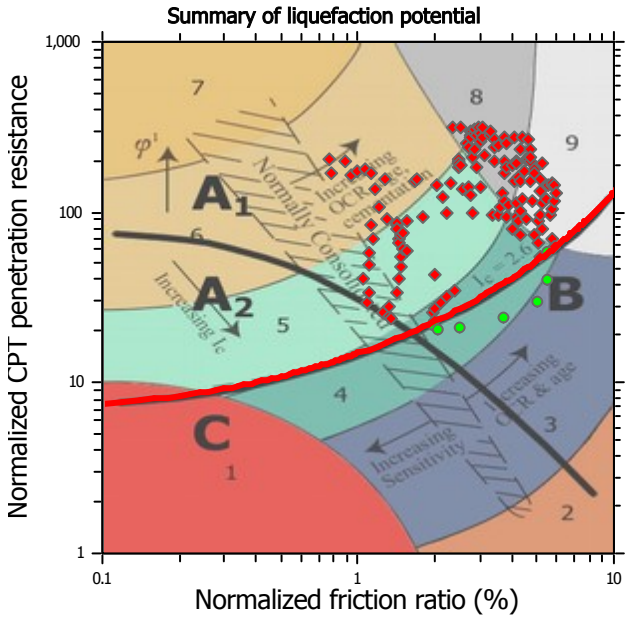
Project title : Cole CampusCole Campus – Central **Location : Oakland**
CPT file : CPT-04

Input parameters and analysis data

Analysis method:	NCEER (1998)	**G.W.T. (in-situ):**	13.00 ft	**Use fill:**	No	**Clay like behavior**	
Fines correction method:	NCEER (1998)	**G.W.T. (earthq.):**	12.00 ft	**Fill height:**	N/A	**applied:**	Sands only
Points to test:	Based on Ic value	**Average results interva**	3	**Fill weight:**	N/A	**Limit depth applie**	No
Earthquake magnitude M_w:	6.90	**Ic cut-off value:**	2.60	**Trans. detect. applied:**	No	**Limit depth:**	N/A
Peak ground acceleration:	0.70	**Unit weight calculatior**	Based on SBT	**K_o applied:**	Yes	**MSF method:**	Method based

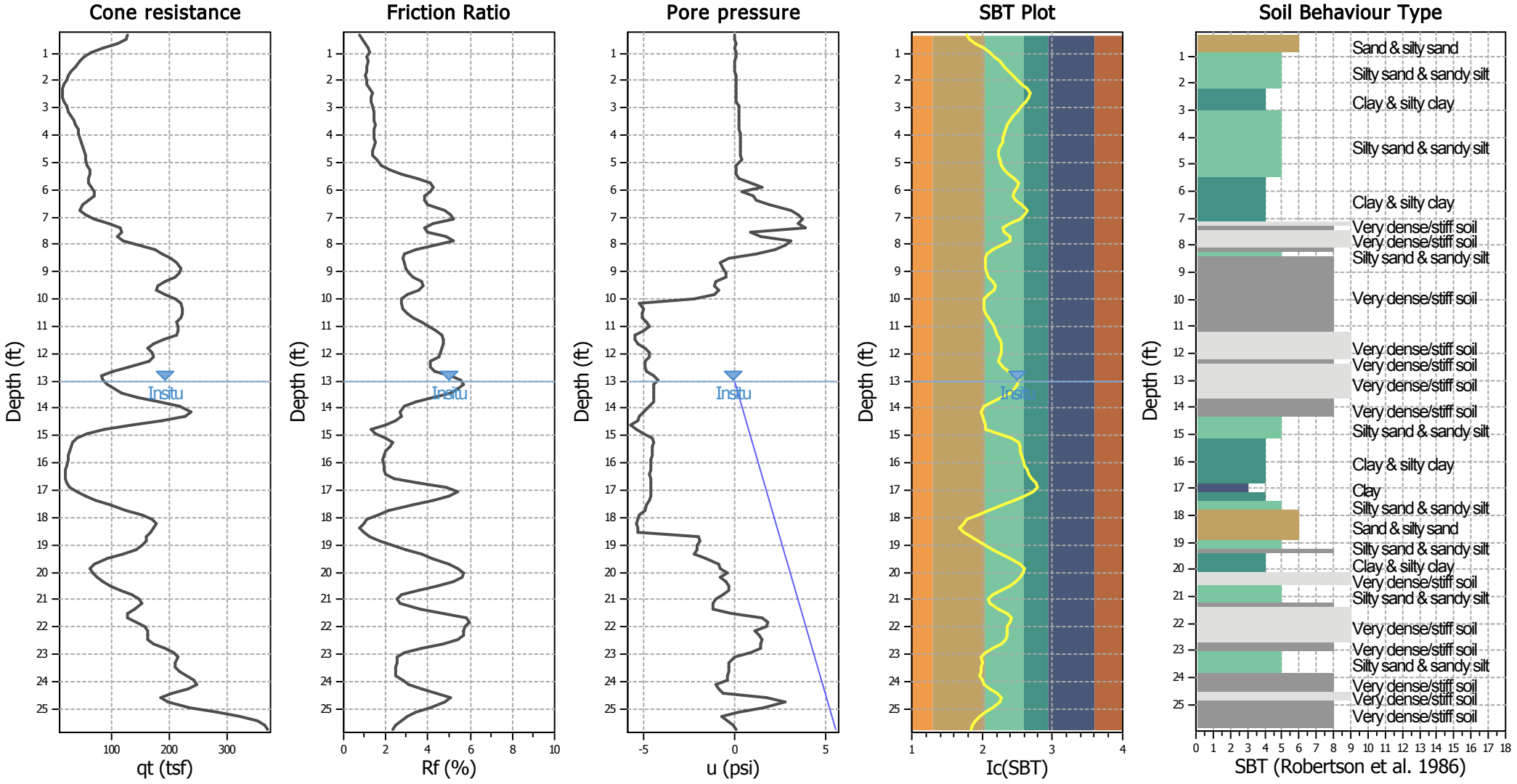






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



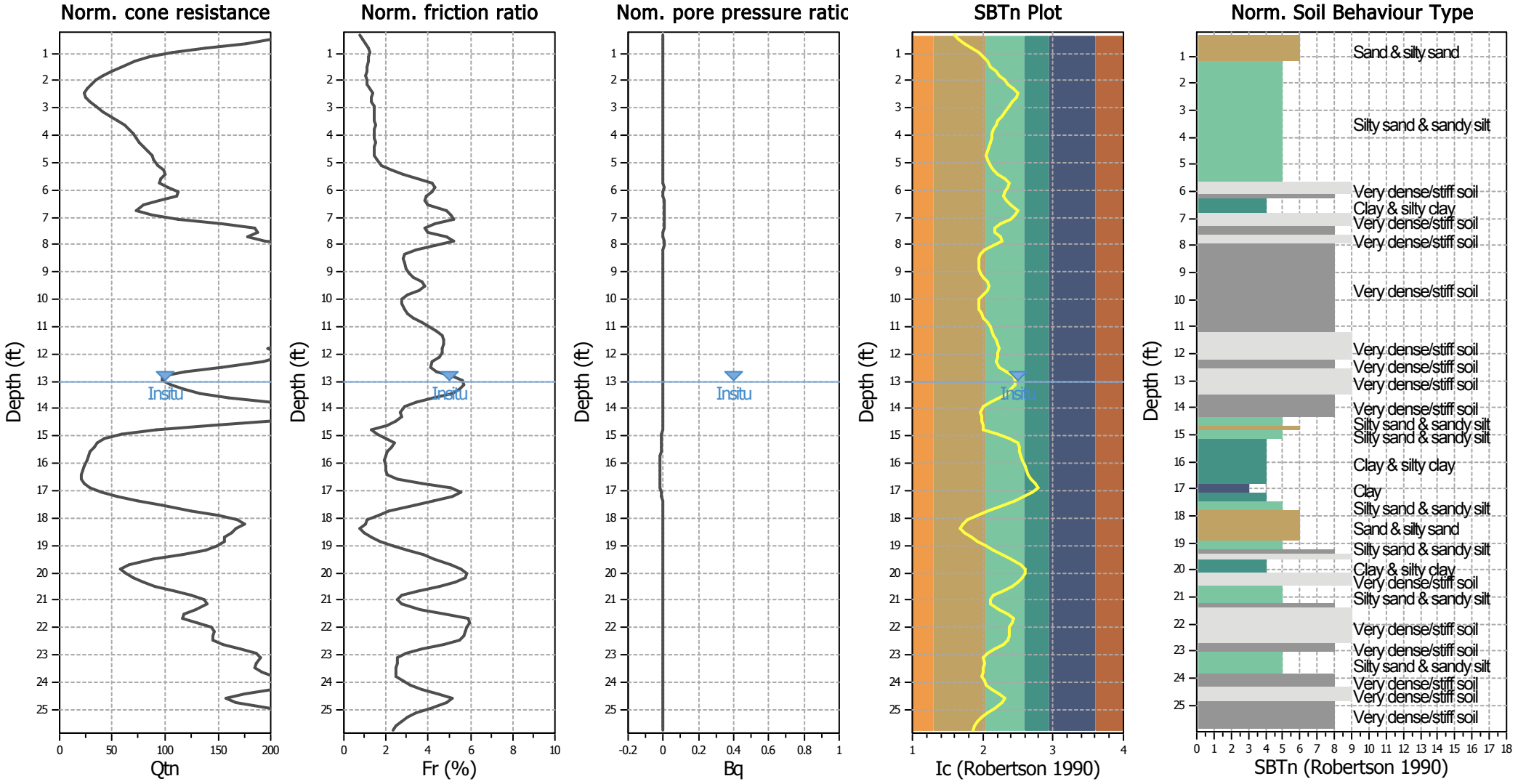
Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_o applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	13.00 ft	Fill height:	N/A	Limit depth:	N/A

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



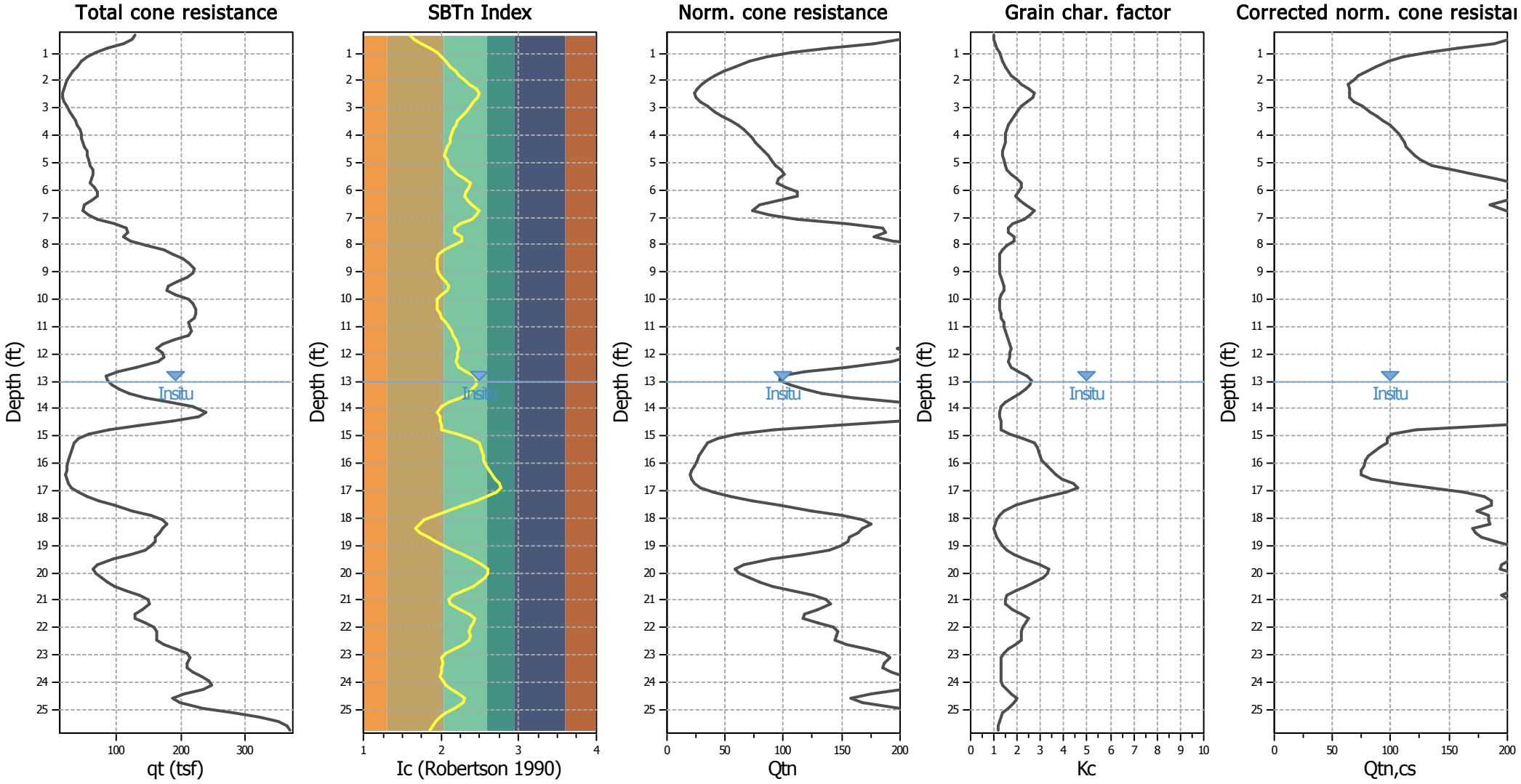
Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	13.00 ft	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

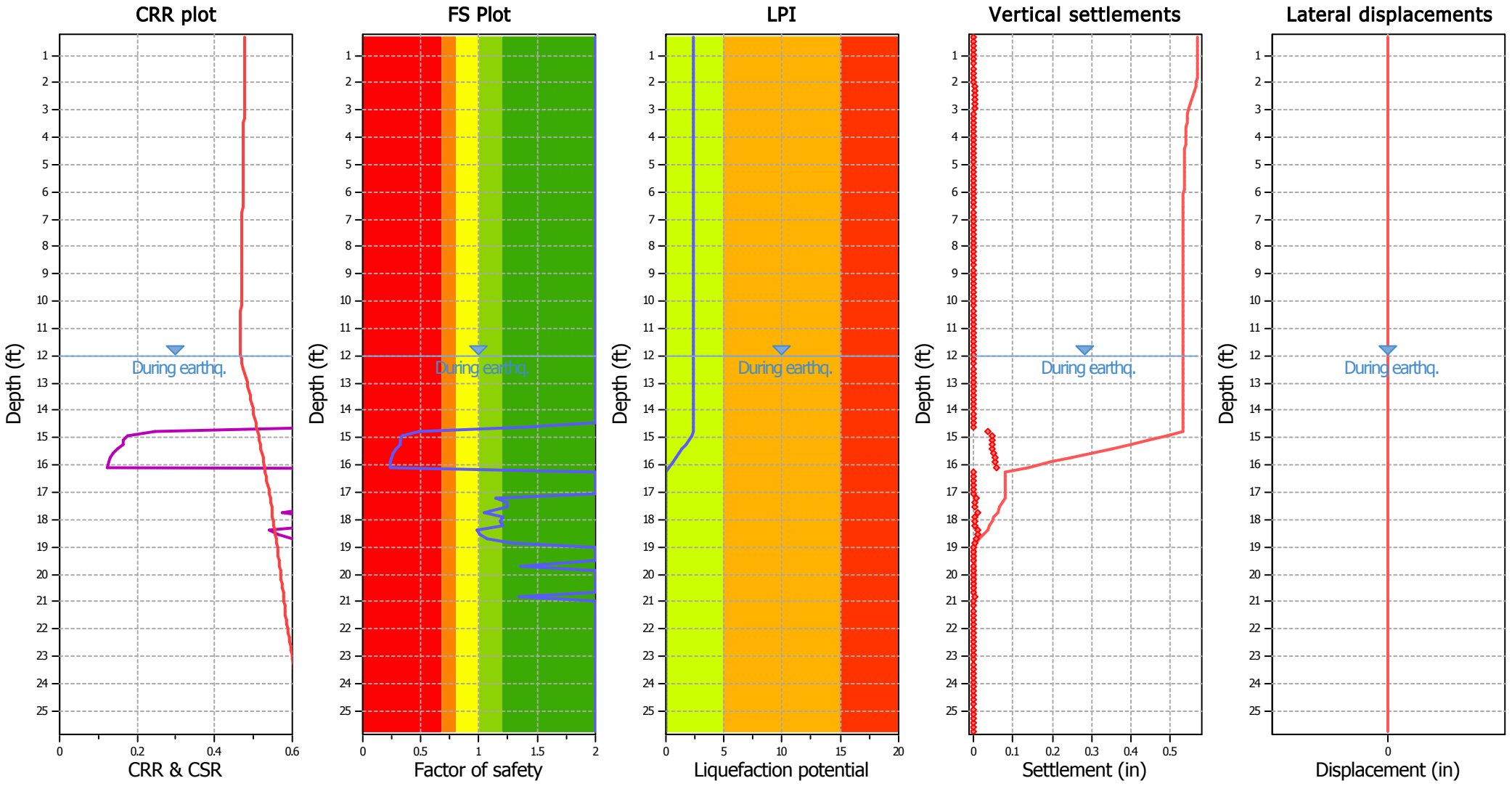
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	13.00 ft	Fill height:	N/A	Limit depth:	N/A

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	13.00 ft	Fill height:	N/A	Limit depth:	N/A

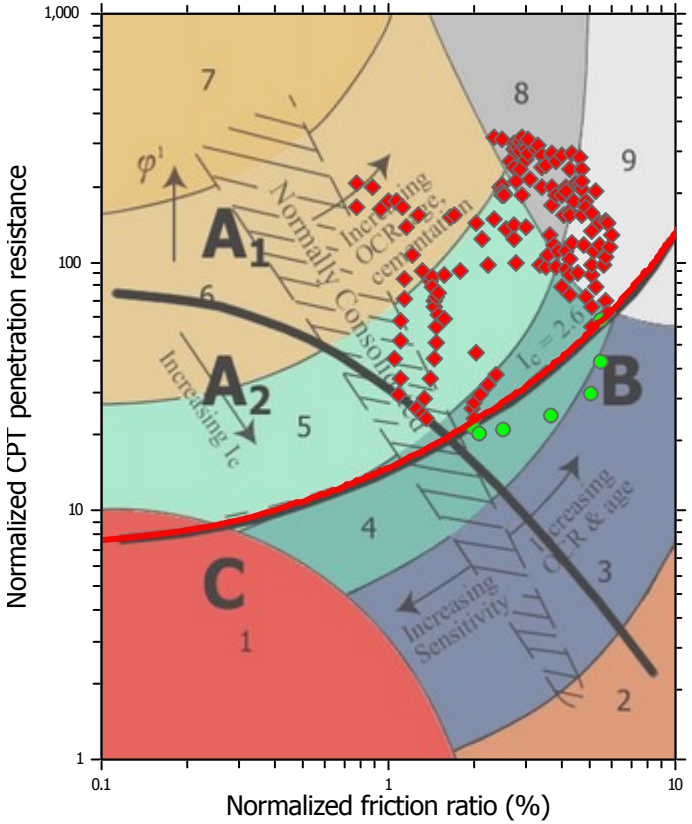
F.S. color scheme

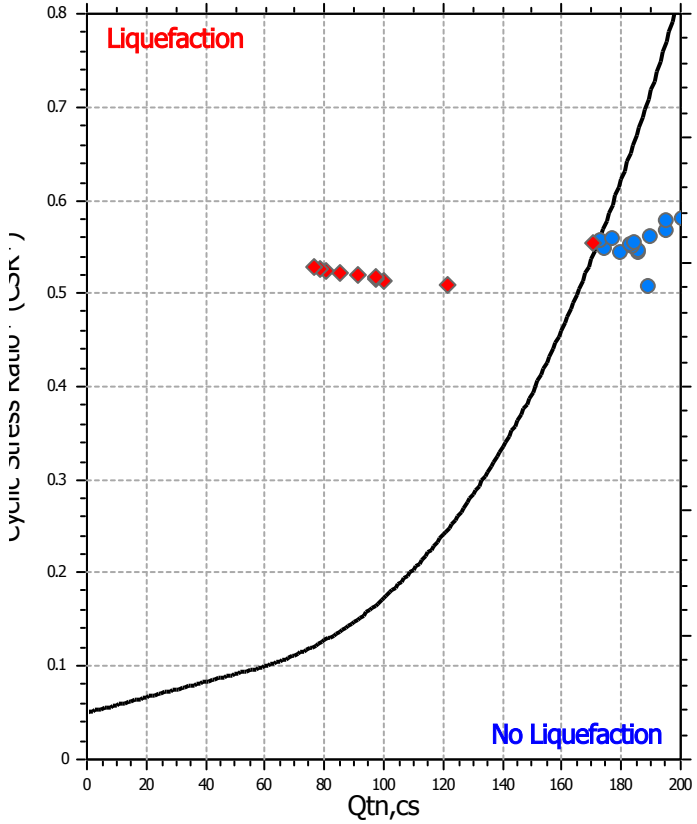
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

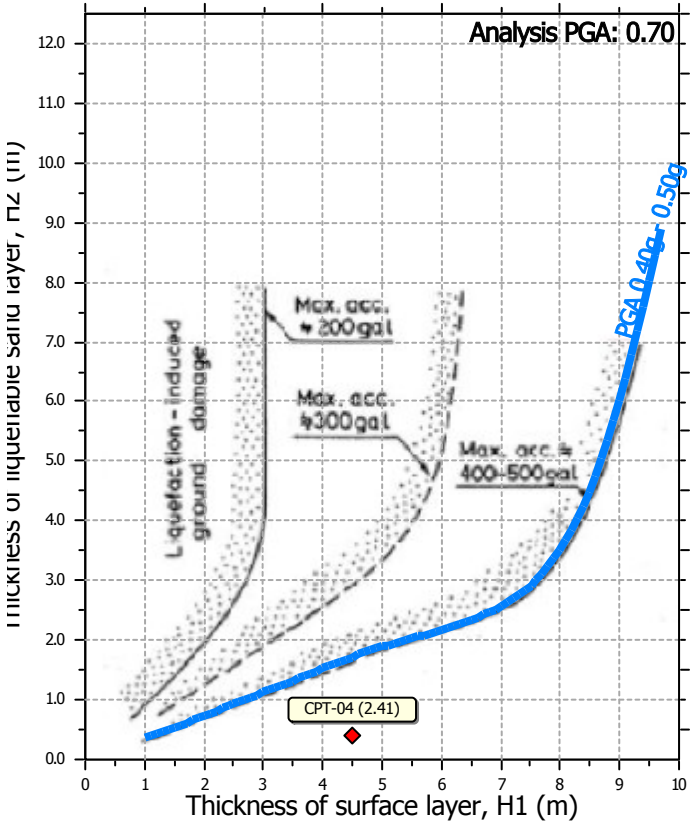
LPI color scheme

- Very high risk
- High risk
- Low risk

Liquefaction analysis summary plots



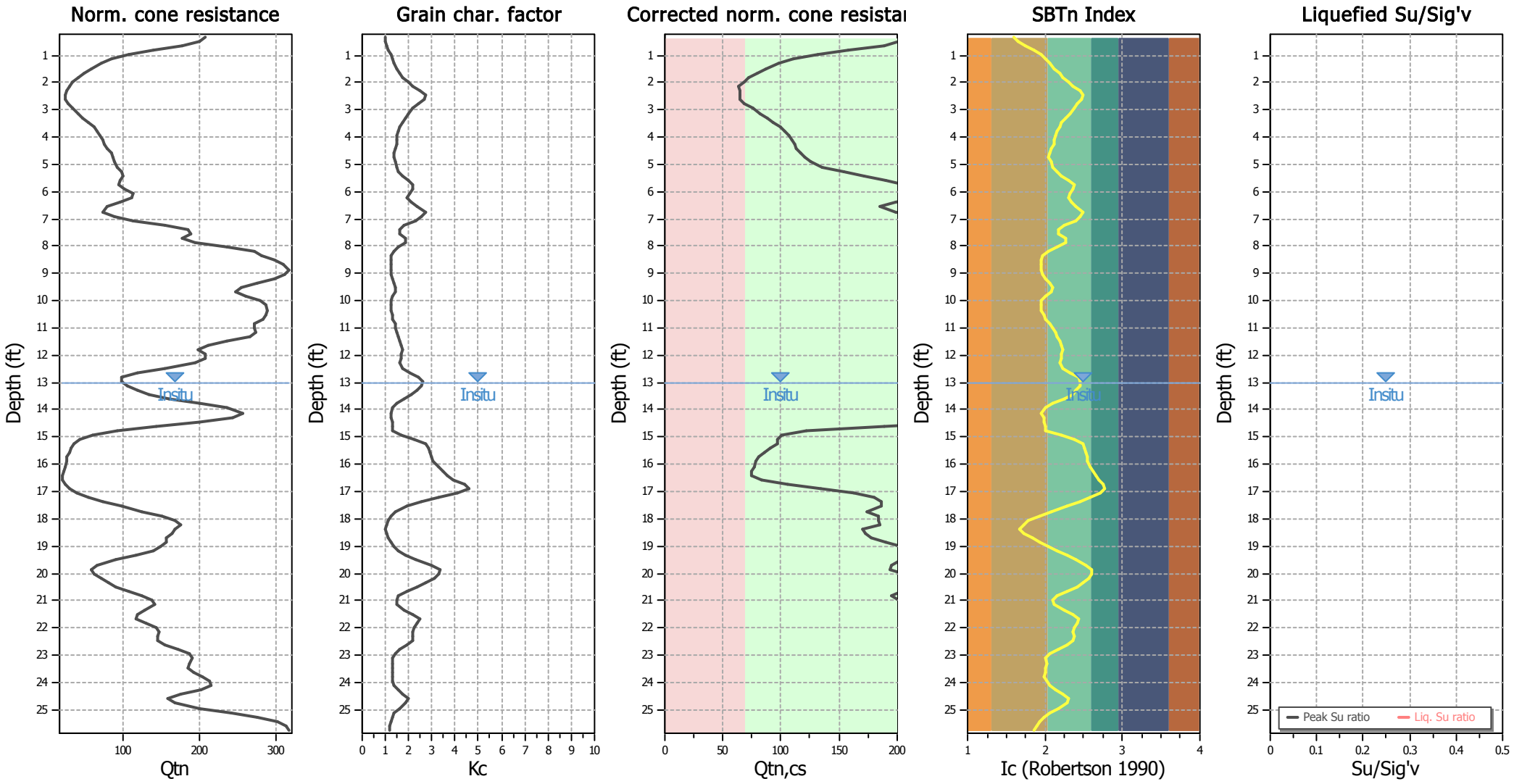




Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	13.00 ft	Fill height:	N/A	Limit depth:	N/A

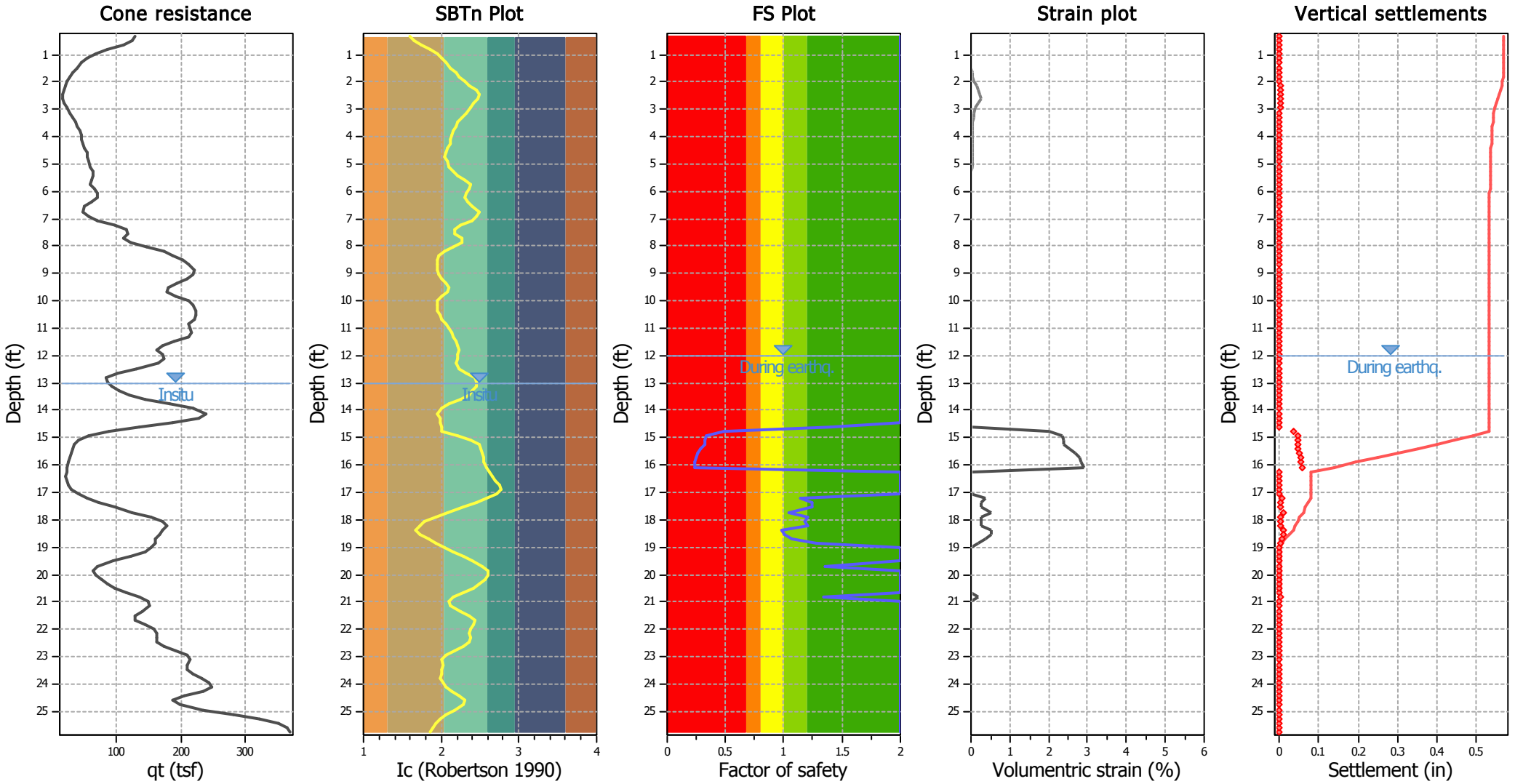
Check for strength loss plots (Robertson (2010))



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_o applied:	Yes
Earthquake magnitude M_w:	6.90	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.70	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	13.00 ft	Fill height:	N/A	Limit depth:	N/A

Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

:: Post-earthquake settlement of dry sands ::

Depth (ft)	Ic	Q_{tn}	Kc	$Q_{tn,cs}$	$N_{1,60}$ (blows)	G_{max} (tsf)	CSR	Shear, γ (%)	$e_{vol(15)}$ (%)	N_c	e_v (%)	Settle. (in)
0.33	1.60	206.74	1.00	206.74	37	881	0.48	0.001	0.00	10.08	0.00	0.000
0.49	1.65	199.60	1.01	200.62	37	906	0.48	0.002	0.00	10.08	0.00	0.000
0.66	1.74	177.09	1.07	189.07	36	903	0.48	0.002	0.00	10.08	0.00	0.000
0.82	1.85	138.52	1.14	158.38	31	806	0.48	0.003	0.00	10.08	0.00	0.000
0.98	1.94	106.53	1.23	131.26	27	699	0.48	0.005	0.00	10.08	0.00	0.000
1.15	2.00	85.20	1.30	110.55	23	599	0.48	0.008	0.01	10.08	0.01	0.000
1.31	2.06	70.67	1.39	98.29	21	539	0.48	0.011	0.01	10.08	0.01	0.000
1.48	2.12	58.66	1.49	87.21	19	480	0.48	0.018	0.02	10.08	0.02	0.000
1.64	2.18	48.69	1.63	79.26	18	433	0.48	0.027	0.03	10.08	0.03	0.000
1.80	2.24	40.75	1.76	71.74	16	388	0.48	0.044	0.06	10.08	0.05	0.001
1.97	2.31	34.25	1.98	67.74	16	357	0.48	0.070	0.09	10.08	0.08	0.002
2.13	2.36	29.47	2.17	63.88	15	329	0.48	0.116	0.16	10.08	0.13	0.003
2.30	2.45	25.66	2.51	64.41	16	318	0.48	0.160	0.21	10.08	0.17	0.004
2.46	2.49	23.72	2.73	64.86	17	312	0.48	0.205	0.26	10.08	0.21	0.004
2.62	2.48	24.40	2.65	64.69	16	314	0.48	0.231	0.29	10.08	0.24	0.005
2.79	2.42	28.24	2.42	68.27	17	341	0.48	0.180	0.22	10.08	0.18	0.004
2.95	2.37	34.23	2.20	75.18	18	386	0.48	0.118	0.13	10.08	0.11	0.002
3.12	2.32	40.80	2.00	81.54	19	429	0.48	0.087	0.09	10.08	0.08	0.002
3.28	2.26	47.69	1.84	87.69	20	470	0.48	0.069	0.07	10.08	0.06	0.001
3.45	2.22	54.75	1.71	93.78	21	509	0.48	0.058	0.05	10.08	0.05	0.001
3.61	2.19	61.10	1.63	99.73	22	545	0.47	0.051	0.04	10.08	0.04	0.001
3.77	2.15	66.23	1.56	103.14	23	566	0.47	0.049	0.04	10.08	0.04	0.001
3.94	2.13	69.91	1.52	106.28	23	584	0.47	0.049	0.04	10.08	0.03	0.001
4.10	2.12	72.79	1.50	109.18	24	600	0.47	0.048	0.04	10.08	0.03	0.001
4.27	2.11	75.67	1.48	112.06	24	616	0.47	0.048	0.04	10.08	0.03	0.001
4.43	2.08	79.51	1.43	113.39	24	623	0.47	0.050	0.04	10.08	0.03	0.001
4.59	2.07	83.72	1.40	116.84	25	641	0.47	0.049	0.04	10.08	0.03	0.001
4.76	2.05	87.29	1.38	120.05	26	658	0.47	0.049	0.04	10.08	0.03	0.001
4.92	2.07	89.26	1.41	125.95	27	692	0.47	0.045	0.03	10.08	0.03	0.001
5.09	2.10	92.88	1.46	135.67	29	746	0.47	0.039	0.02	10.08	0.02	0.000
5.25	2.15	98.33	1.56	153.73	34	844	0.47	0.031	0.02	10.08	0.01	0.000
5.41	2.22	100.13	1.72	171.97	39	933	0.47	0.026	0.01	10.08	0.01	0.000
5.58	2.31	95.68	1.98	189.90	45	1000	0.47	0.024	0.01	10.08	0.01	0.000
5.74	2.37	94.17	2.19	206.64	50	1061	0.47	0.023	0.01	10.08	0.01	0.000
5.91	2.36	102.24	2.15	220.20	53	1136	0.47	0.021	0.01	10.08	0.01	0.000
6.07	2.32	111.97	2.03	227.15	54	1190	0.47	0.020	0.01	10.08	0.01	0.000
6.23	2.30	111.53	1.96	218.08	51	1153	0.47	0.022	0.01	10.08	0.01	0.000
6.40	2.34	95.13	2.08	198.25	47	1032	0.47	0.028	0.01	10.08	0.01	0.000
6.56	2.40	79.23	2.33	184.80	46	933	0.47	0.036	0.01	10.08	0.01	0.000
6.73	2.49	72.86	2.73	199.25	51	959	0.47	0.035	0.01	10.08	0.01	0.000
6.89	2.46	88.22	2.56	226.07	57	1110	0.47	0.027	0.01	10.08	0.01	0.000
7.05	2.40	111.99	2.32	260.00	64	1314	0.47	0.021	0.01	10.08	0.00	0.000
7.22	2.25	153.75	1.81	277.79	64	1494	0.47	0.018	0.00	10.08	0.00	0.000
7.38	2.17	184.82	1.59	293.93	65	1611	0.47	0.016	0.00	10.08	0.00	0.000
7.55	2.18	187.68	1.62	303.62	68	1661	0.47	0.016	0.00	10.08	0.00	0.000
7.71	2.26	177.75	1.84	326.24	76	1749	0.47	0.015	0.00	10.08	0.00	0.000
7.87	2.27	194.29	1.86	361.04	84	1930	0.47	0.014	0.00	10.08	0.00	0.000
8.04	2.15	236.05	1.56	368.90	82	2025	0.47	0.013	0.00	10.08	0.00	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	Q_{tn}	Kc	$Q_{tn,cs}$	$N_{1,60}$ (blows)	G_{max} (tsf)	CSR	Shear, γ (%)	$e_{vol(15)}$ (%)	N_c	e_v (%)	Settle. (in)
8.20	2.04	271.34	1.35	366.95	78	2071	0.47	0.013	0.00	10.08	0.00	0.000
8.37	1.97	280.45	1.26	353.43	73	2029	0.47	0.014	0.00	10.08	0.00	0.000
8.53	1.94	298.23	1.23	367.01	75	2130	0.47	0.013	0.00	10.08	0.00	0.000
8.69	1.94	308.64	1.23	380.68	78	2239	0.47	0.013	0.00	10.08	0.00	0.000
8.86	1.95	316.60	1.24	391.17	80	2332	0.47	0.012	0.00	10.08	0.00	0.000
9.02	1.97	311.44	1.26	392.63	81	2377	0.47	0.012	0.00	10.08	0.00	0.000
9.19	2.01	297.09	1.31	388.46	81	2387	0.47	0.013	0.00	10.08	0.00	0.000
9.35	2.06	275.14	1.39	383.40	82	2378	0.47	0.013	0.00	10.08	0.00	0.000
9.51	2.09	253.53	1.44	365.48	79	2285	0.47	0.014	0.00	10.08	0.00	0.000
9.68	2.07	247.10	1.41	347.93	75	2211	0.47	0.015	0.00	10.08	0.00	0.000
9.84	2.00	259.87	1.30	338.69	71	2185	0.47	0.015	0.00	10.08	0.00	0.000
10.01	1.95	278.91	1.24	346.41	71	2250	0.47	0.015	0.00	10.08	0.00	0.000
10.17	1.94	286.00	1.23	352.98	72	2315	0.47	0.015	0.00	10.08	0.00	0.000
10.34	1.96	288.04	1.25	358.79	73	2384	0.47	0.015	0.00	10.08	0.00	0.000
10.50	1.98	287.11	1.27	365.80	76	2466	0.47	0.014	0.00	10.08	0.00	0.000
10.66	2.01	282.48	1.32	371.87	78	2541	0.47	0.014	0.00	10.08	0.00	0.000
10.83	2.07	271.44	1.40	379.40	81	2621	0.47	0.014	0.00	10.08	0.00	0.000
10.99	2.10	271.78	1.46	395.70	86	2753	0.47	0.013	0.00	10.08	0.00	0.000
11.16	2.13	272.73	1.51	412.00	90	2885	0.47	0.013	0.00	10.08	0.00	0.000
11.32	2.16	265.10	1.57	416.35	92	2927	0.47	0.013	0.00	10.08	0.00	0.000
11.48	2.19	236.29	1.64	388.51	87	2734	0.47	0.014	0.00	10.08	0.00	0.000
11.65	2.22	211.69	1.70	360.90	82	2547	0.47	0.016	0.00	10.08	0.00	0.000
11.81	2.23	197.86	1.73	342.51	78	2434	0.47	0.017	0.00	10.08	0.00	0.000
11.98	2.21	206.57	1.70	350.61	79	2532	0.47	0.016	0.00	10.08	0.00	0.000

Total estimated settlement: 0.04

Abbreviations

Q_{tn}: Equivalent clean sand normalized cone resistance
K_c: Fines correction factor
$Q_{tn,cs}$: Post-liquefaction volumentric strain
G_{max}: Small strain shear modulus
CSR: Soil cyclic stress ratio
γ: Cyclic shear strain
$e_{vol(15)}$: Volumetric strain after 15 cycles
N_c: Equivalent number of cycles
e_v: Volumetric strain
Settle.: Calculated settlement

:: Post-earthquake settlement due to soil liquefaction ::

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
12.14	345.98	2.00	0.00	1.00	0.00	12.30	315.92	2.00	0.00	1.00	0.00
12.47	271.17	2.00	0.00	1.00	0.00	12.63	240.99	2.00	0.00	1.00	0.00
12.80	238.31	2.00	0.00	1.00	0.00	12.96	252.01	2.00	0.00	1.00	0.00
13.12	266.40	2.00	0.00	1.00	0.00	13.29	276.70	2.00	0.00	1.00	0.00
13.45	282.96	2.00	0.00	1.00	0.00	13.62	284.60	2.00	0.00	1.00	0.00
13.78	294.02	2.00	0.00	1.00	0.00	13.94	308.69	2.00	0.00	1.00	0.00
14.11	320.50	2.00	0.00	1.00	0.00	14.27	309.19	2.00	0.00	1.00	0.00
14.44	257.15	2.00	0.00	1.00	0.00	14.60	189.38	1.40	0.00	1.00	0.00
14.76	121.35	0.48	1.99	1.00	0.04	14.93	100.29	0.34	2.33	1.00	0.05
15.09	97.04	0.32	2.39	1.00	0.05	15.26	97.05	0.32	2.39	1.00	0.05
15.42	91.27	0.29	2.52	1.00	0.05	15.58	85.10	0.26	2.67	1.00	0.05

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
15.75	80.74	0.25	2.78	1.00	0.06	15.91	78.51	0.24	2.85	1.00	0.05
16.08	76.61	0.23	2.91	1.00	0.06	16.24	74.45	2.00	0.00	1.00	0.00
16.40	74.78	2.00	0.00	1.00	0.00	16.57	82.71	2.00	0.00	1.00	0.00
16.73	104.98	2.00	0.00	1.00	0.00	16.90	134.62	2.00	0.00	1.00	0.00
17.06	162.48	2.00	0.00	1.00	0.00	17.23	179.60	1.14	0.38	1.00	0.01
17.39	185.78	1.24	0.26	1.00	0.01	17.55	186.16	1.25	0.26	1.00	0.01
17.72	174.49	1.05	0.53	1.00	0.01	17.88	184.09	1.20	0.27	1.00	0.01
18.05	183.28	1.18	0.27	1.00	0.01	18.21	184.88	1.21	0.26	1.00	0.01
18.37	170.55	0.98	0.54	1.00	0.01	18.54	173.13	1.01	0.53	1.00	0.01
18.70	177.43	1.07	0.38	1.00	0.01	18.87	189.95	1.28	0.18	1.00	0.00
19.03	203.59	2.00	0.00	1.00	0.00	19.19	216.70	2.00	0.00	1.00	0.00
19.36	219.06	2.00	0.00	1.00	0.00	19.52	204.26	2.00	0.00	1.00	0.00
19.69	195.16	1.36	0.00	1.00	0.00	19.85	193.27	2.00	0.00	1.00	0.00
20.01	206.72	2.00	0.00	1.00	0.00	20.18	216.94	2.00	0.00	1.00	0.00
20.34	220.18	2.00	0.00	1.00	0.00	20.51	213.82	2.00	0.00	1.00	0.00
20.67	204.29	2.00	0.00	1.00	0.00	20.83	195.13	1.34	0.18	1.00	0.00
21.00	200.76	2.00	0.00	1.00	0.00	21.16	208.94	2.00	0.00	1.00	0.00
21.33	228.51	2.00	0.00	1.00	0.00	21.49	254.09	2.00	0.00	1.00	0.00
21.65	286.37	2.00	0.00	1.00	0.00	21.82	307.54	2.00	0.00	1.00	0.00
21.98	319.20	2.00	0.00	1.00	0.00	22.15	320.92	2.00	0.00	1.00	0.00
22.31	318.75	2.00	0.00	1.00	0.00	22.47	310.07	2.00	0.00	1.00	0.00
22.64	295.03	2.00	0.00	1.00	0.00	22.80	275.31	2.00	0.00	1.00	0.00
22.97	260.62	2.00	0.00	1.00	0.00	23.13	251.25	2.00	0.00	1.00	0.00
23.30	247.07	2.00	0.00	1.00	0.00	23.46	244.40	2.00	0.00	1.00	0.00
23.62	250.83	2.00	0.00	1.00	0.00	23.79	261.18	2.00	0.00	1.00	0.00
23.95	282.33	2.00	0.00	1.00	0.00	24.12	297.88	2.00	0.00	1.00	0.00
24.28	307.86	2.00	0.00	1.00	0.00	24.44	307.38	2.00	0.00	1.00	0.00
24.61	313.85	2.00	0.00	1.00	0.00	24.77	315.07	2.00	0.00	1.00	0.00
24.94	322.17	2.00	0.00	1.00	0.00	25.10	336.50	2.00	0.00	1.00	0.00
25.26	355.19	2.00	0.00	1.00	0.00	25.43	367.51	2.00	0.00	1.00	0.00
25.59	368.19	2.00	0.00	1.00	0.00	25.76	364.99	2.00	0.00	1.00	0.00

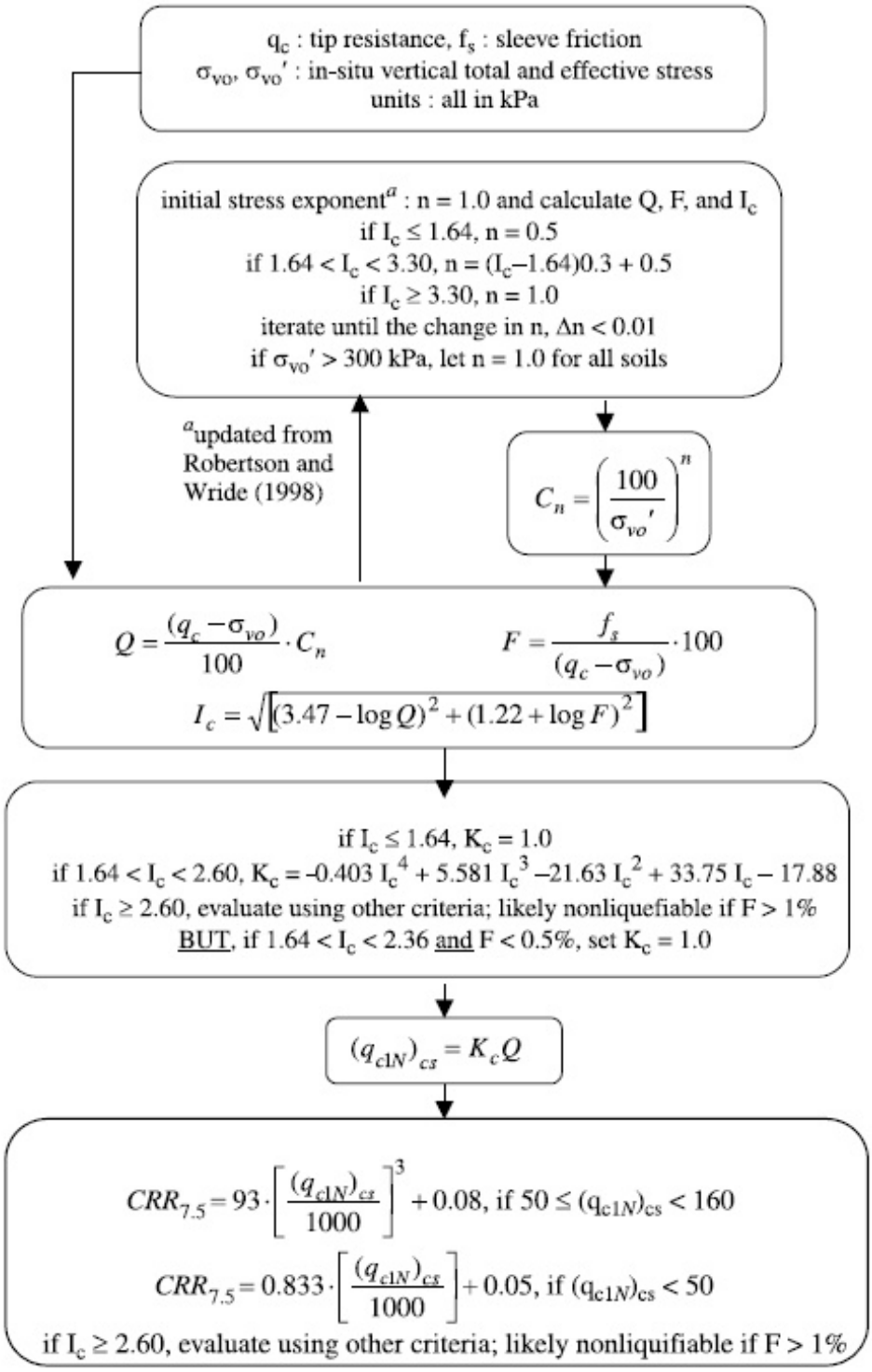
Total estimated settlement: 0.53

Abbreviations

$Q_{tn,cs}$:	Equivalent clean sand normalized cone resistance
FS:	Factor of safety against liquefaction
e_v (%):	Post-liquefaction volumentric strain
DF:	e_v depth weighting factor
Settlement:	Calculated settlement

Procedure for the evaluation of soil liquefaction resistance, NCEER (1998)

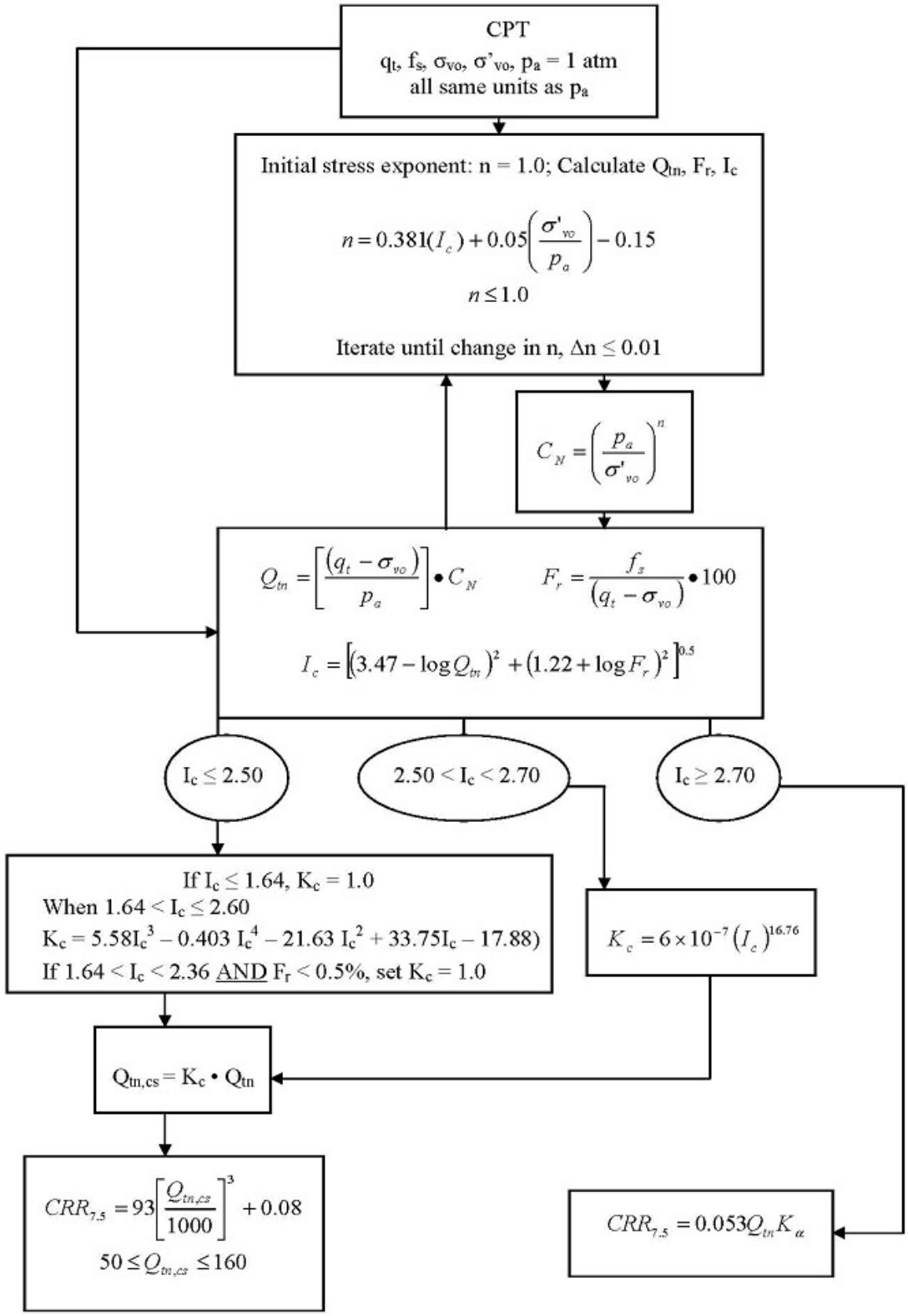
Calculation of soil resistance against liquefaction is performed according to the Robertson & Wride (1998) procedure. The procedure used in the software, slightly differs from the one originally published in NCEER-97-0022 (Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils). The revised procedure is presented below in the form of a flowchart[1]:



[1] "Estimating liquefaction-induced ground settlements from CPT for level ground", G. Zhang, P.K. Robertson, and R.W.I. Brachman

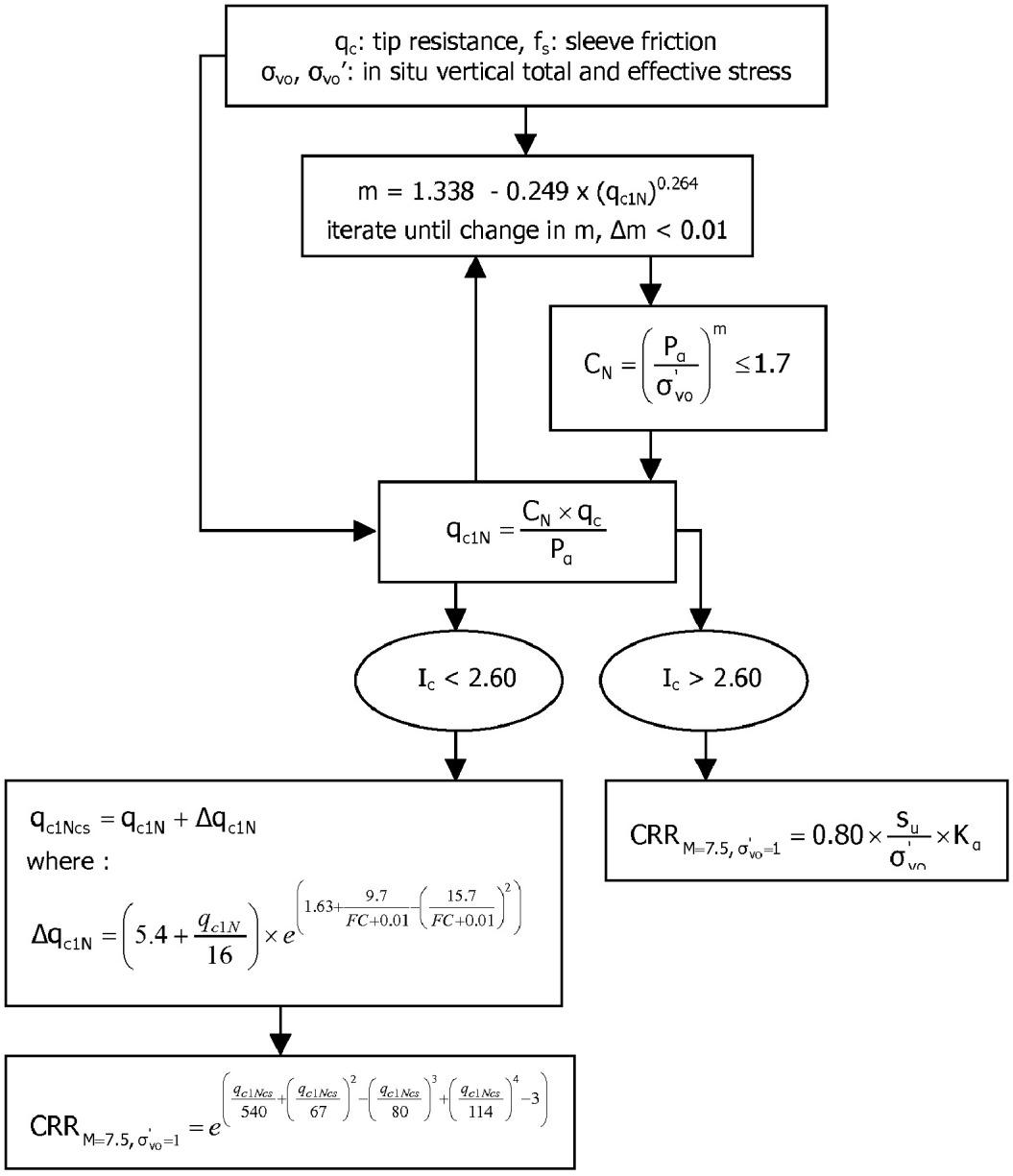
Procedure for the evaluation of soil liquefaction resistance (all soils), Robertson (2010)

Calculation of soil resistance against liquefaction is performed according to the Robertson & Wride (1998) procedure. This procedure used in the software, slightly differs from the one originally published in NCEER-97-0022 (Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils). The revised procedure is presented below in the form of a flowchart[1]:

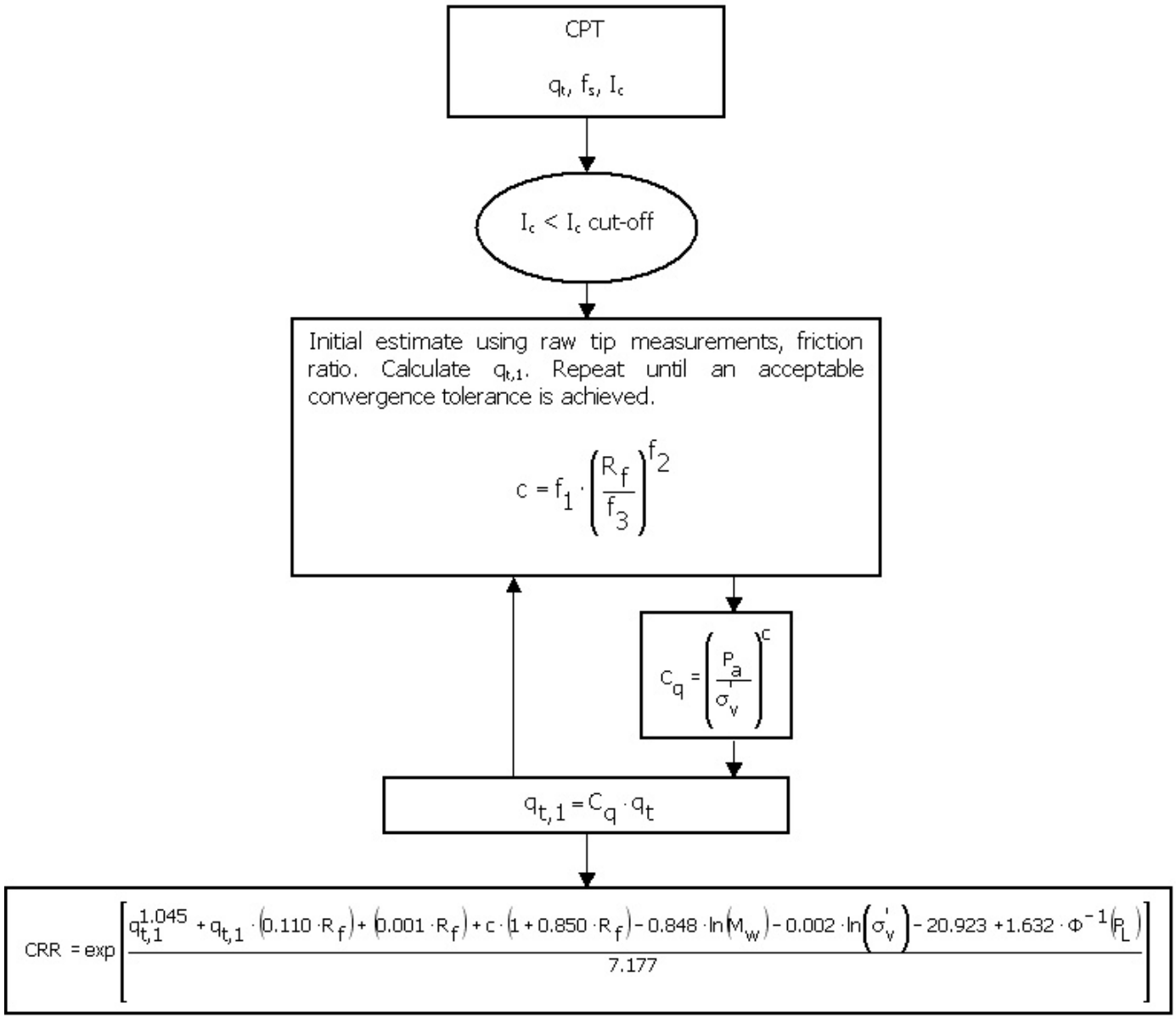


[1] P.K. Robertson, 2009. "Performance based earthquake design using the CPT", Keynote Lecture, International Conference on Performance-based Design in Earthquake Geotechnical Engineering – from case history to practice, IS-Tokyo, June 2009

Procedure for the evaluation of soil liquefaction resistance, Idriss & Boulanger (2008)



Procedure for the evaluation of soil liquefaction resistance (sandy soils), Moss et al. (2006)



Procedure for the evaluation of soil liquefaction resistance, Boulanger & Idriss(2014)

$$FS_{liq} = \frac{CRR_{M=7.5,\sigma'_v=1atm}}{CSR_{M=7.5,\sigma'_v=1atm}}$$

$$CSR_{M=7.5,\sigma'_v=1atm} = 0.65 \frac{\sigma_v}{\sigma'_v} \frac{a_{max}}{g} r_d \frac{1}{MSF} \frac{1}{K_\sigma}$$

$$r_d = \exp\left[\alpha(z) + \beta(z) \cdot M\right]$$

$$\alpha(z) = -1.012 - 1.126 \sin\left(\frac{z}{11.73} + 5.133\right)$$

$$\beta(z) = 0.106 + 0.118 \sin\left(\frac{z}{11.28} + 5.142\right)$$

$$K_\sigma = 1 - C_\sigma \ln\left(\frac{\sigma'_v}{P_a}\right) \le 1.1$$

$$C_\sigma = \frac{1}{37.3 - 8.27\left(q_{c1Ncs}\right)^{0.264}} \le 0.3$$

$$MSF = 1 + \left(MSF_{max} - 1\right)\left(8.64 \exp\left(\frac{-M}{4}\right) - 1.325\right)$$

$$MSF_{max} = 1.09 + \left(\frac{q_{c1Ncs}}{180}\right)^3 \le 2.2$$

σ'_v *and* σ_v *at start of earthquake shaking*

$$CRR_{M=7.5,\sigma'_v=1atm} = \exp\left(\frac{q_{c1Ncs}}{113} + \left(\frac{q_{c1Ncs}}{1000}\right)^2 - \left(\frac{q_{c1Ncs}}{140}\right)^3 + \left(\frac{q_{c1Ncs}}{137}\right)^4 - 2.80\right)$$

$$q_{c1Ncs} = q_{c1N} + \Delta q_{c1N}$$

$$\Delta q_{c1N} = \left(11.9 + \frac{q_{c1N}}{14.6}\right) \exp\left(1.63 - \frac{9.7}{FC+2} - \left(\frac{15.7}{FC+2}\right)^2\right)$$

$$q_{c1N} = C_{Ne} \frac{q_c}{P_a}$$

$$C_{Ne} = \left(\frac{P_a}{\sigma'_v}\right)^m \le 1.7$$

$$m = 1.338 - 0.249\left(q_{c1Ncs}\right)^{0.264} \quad with \quad 0.264 \le m \le 0.782$$

$$FC = 80\left(I_C + C_{FC}\right) - 137 \quad with \quad 0\% \le FC \le 100\%$$

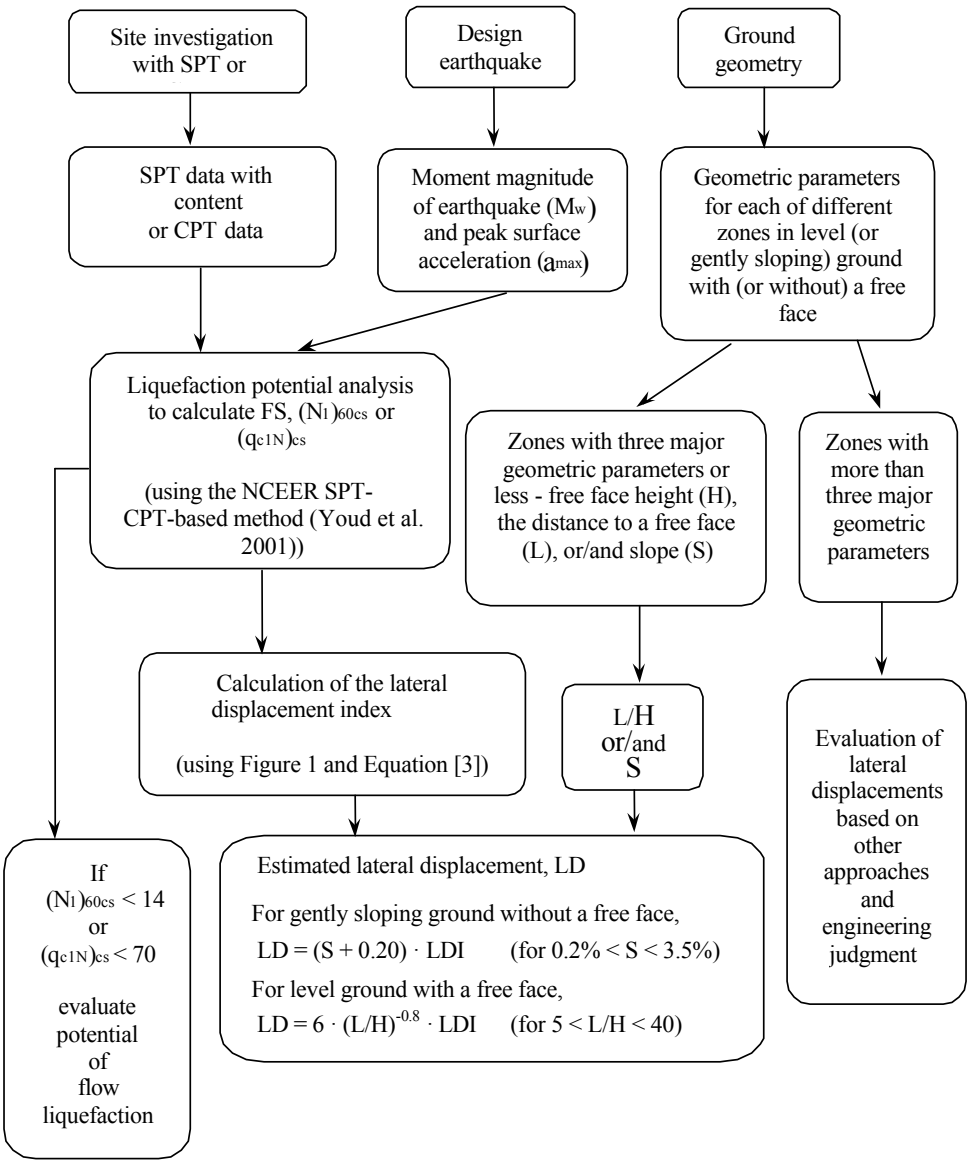
$$I_c = \left[\left(3.47 - \log\left(Q\right)\right)^2 + \left(1.22 + \log\left(F\right)\right)^2\right]^{0.5}$$

$$Q = \left(\frac{q_c - \sigma_{vc}}{P_a}\right)\left(\frac{P_a}{\sigma'_{vc}}\right)^n \; with \; 0.5 \le n \le 1.0 \; per \; Robertson \; \& \; Wride \; (1998)$$

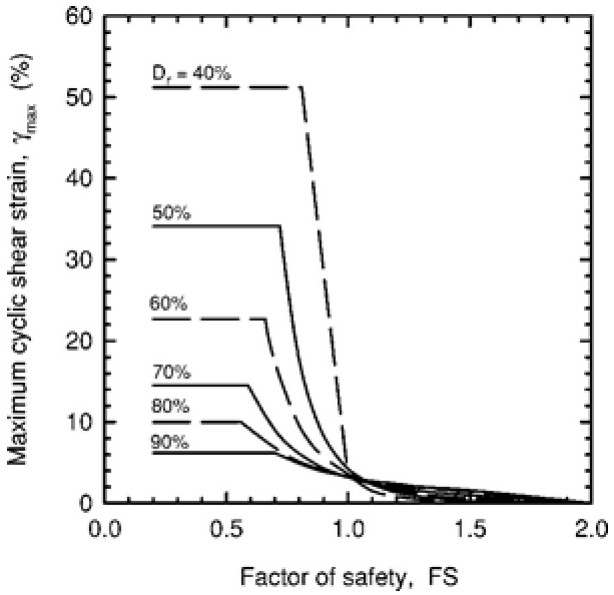
$$F = \left(\frac{f_s}{q_c - \sigma_{vc}}\right) \cdot 100\%$$

σ'_v *at time of CPT sounding*

Procedure for the evaluation of liquefaction-induced lateral spreading displacements



[1] Flow chart illustrating major steps in estimating liquefaction-induced lateral spreading displacements using the proposed approach



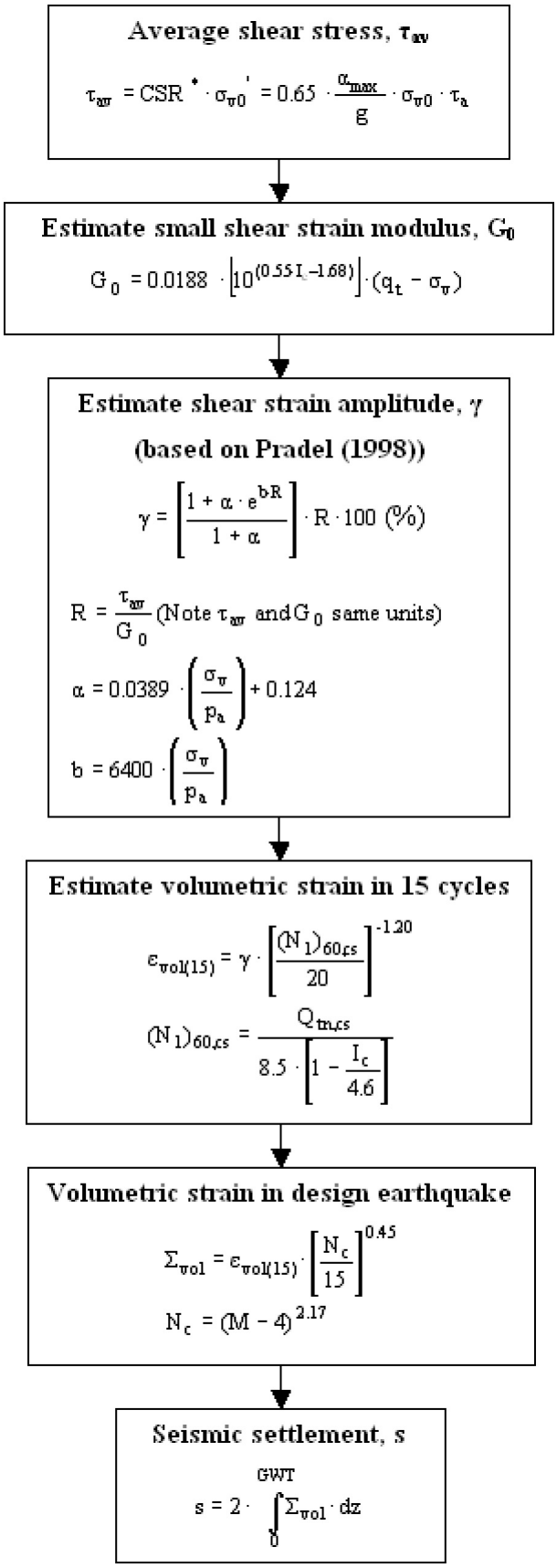
[1] **Figure 1**

$$LDI = \int_0^{z_{max}} \gamma_{max} dz$$

[1] **Equation [3]**

[1] "Estimating liquefaction-induced ground settlements from CPT for level ground", G. Zhang, P.K. Robertson, and R.W.I. Brachman

Procedure for the estimation of seismic induced settlements in dry sands



Robertson, P.K. and Lisheng, S., 2010, "Estimation of seismic compression in dry soils using the CPT" FIFTH INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN GEOTECHNICAL EARTHQUAKE ENGINEERING AND SOIL DYNAMICS, Symposium in honor of professor I. M. Idriss, San Diego, CA

Liquefaction Potential Index (LPI) calculation procedure

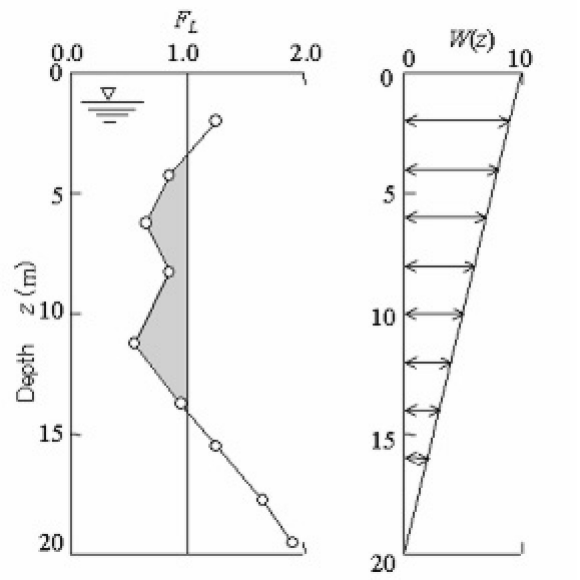
Calculation of the Liquefaction Potential Index (LPI) is used to interpret the liquefaction assessment calculations in terms of severity over depth. The calculation procedure is based on the methology developed by Iwasaki (1982) and is adopted by AFPS.

To estimate the severity of liquefaction extent at a given site, LPI is calculated based on the following equation:

$$\text{LPI} = \int_0^{20} (10 - 0{,}5z) \times F_L \times dz$$

where:
F_L = 1 - F.S. when F.S. less than 1
F_L = 0 when F.S. greater than 1
z depth of measurment in meters

Values of LPI range between zero (0) when no test point is characterized as liquefiable and 100 when all points are characterized as susceptible to liquefaction. Iwasaki proposed four (4) discrete categories based on the numeric value of LPI:



Graphical presentation of the LPI calculation procedure

APPENDIX D

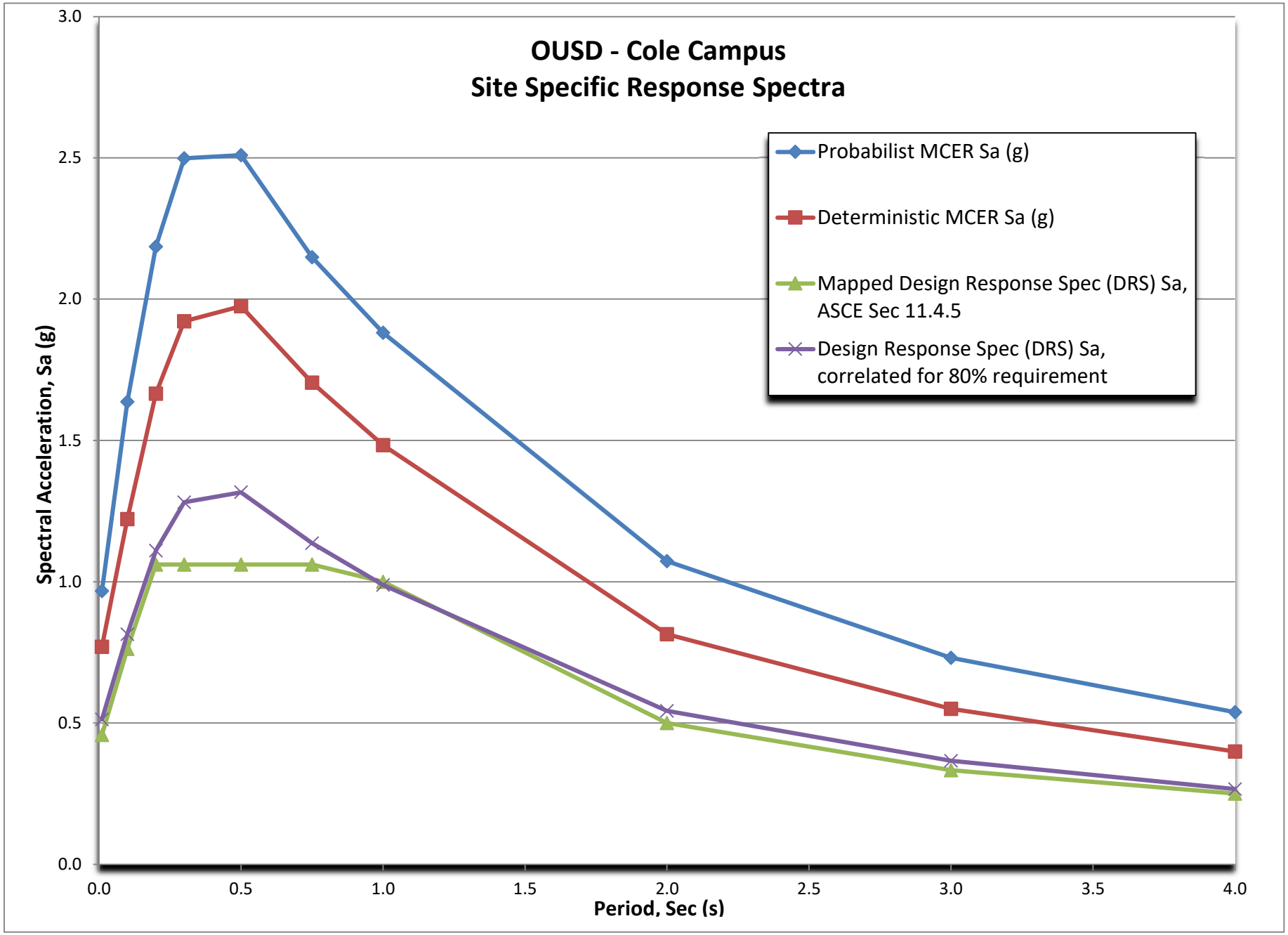
SITE SPECIFIC GROUND MOTION ANALYSIS
Summary Results
Site Specific Response Spectra

Cole Campus: Site Specific Seismic Ground Motion Analysis Summary Table

Period (s)	Probabilist MCER Sa (g)	Deterministic MCER Sa (g)	Site Specific MCER Sa (g)	Site Specific Design Response Spec (DRS) Sa, ASCE Sec 21.3	Mapped Design Response Spec (DRS) Sa, ASCE Sec 11.4.5	% DRS ASCE Sec 21.3 vs 11.4.5	80% of Mapped DRS (ASCE 11.4.5)	Design Response Spec (DRS) Sa, correlated for 80% requirement	per 21.4
0.010	0.967	0.769	0.769	0.513	0.458	112%	0.367	0.513	
0.100	1.637	1.222	1.222	0.815	0.762	107%	0.610	0.815	
0.200	2.186	1.665	1.665	1.110	1.061	105%	0.849	**1.110**	S_{DS}, 90% of max from 0.2 to 5s
0.300	2.499	1.922	1.922	1.281	1.061	121%	0.849	1.281	
0.500	2.510	1.975	1.975	1.317	1.061	124%	0.849	1.317	
0.750	2.148	1.705	1.705	1.136	1.061	107%	0.849	1.136	
1.000	1.881	1.483	1.483	0.989	1.000	99%	0.800	**0.989**	S_{D1}, max value of Tsa from1 to 5s for $v_{s,30} \leq$ 365.76 m/s
2.000	1.073	0.814	0.814	0.543	0.500	109%	0.400	0.543	
3.000	0.731	0.550	0.550	0.367	0.333	110%	0.267	0.367	
4.000	0.538	0.399	0.399	0.266	0.250	106%	0.200	0.266	
5.000	0.420	0.302	0.302	0.201	0.200	101%	0.160	0.201	
PGA	0.896	0.700	**0.700**						

Parameters	Value from Site Specific	Value from Mapped ASCE, Sec 11.4	% Ratio of Site Specific Vs. ASCE
S_{MS}	1.778	1.592	112
S_{M1}	1.650	1.500	110
S_{DS}	1.185	1.061	112
S_{D1}	1.100	1.000	110
T_0	0.186	0.188	**Fig 11.4-1**
T_S	0.928	0.942	**Fig 11.4-1**
T_L	-	8	**Fig 22-12**

F_a	1	**Table 11.4-1**
F_V	2.5	**Section 21.3**
S_S	1.592	**Fig 22-1**
S_1	0.6	**Fig 22-2**
C_{RS}	0.927	**Fig 22-17**
C_{R1}	0.912	**Fig 22-18**


OUSD - Cole Campus
Site Specific Response Spectra
Probabilist MCER Sa (g)
Deterministic MCER Sa (g)
Mapped Design Response Spec (DRS) Sa, ASCE Sec 11.4.5
Design Response Spec (DRS) Sa, correlated for 80% requirement
Spectral Acceleration, Sa (g)
Period, Sec (s)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0

Tadashi Nakadegawa
Acting Deputy Chief of Facilities
Oakland Unified School District
1000 Broadway, Suite 300,
Oakland, CA 94607

September 10, 2020

Subject: **Engineering Geology and Seismology Review for**
Central Administrative Center at Cole Campus – New Buildings
1011 Union Street, Oakland, CA
CGS Application No. 01-CGS4511

Dear Mr. Nakadegawa:

In accordance with your request and transmittal of documents received on July 17, 2020, the California Geological Survey (CGS) has reviewed the engineering geology and seismology aspects of the consulting report prepared for the subject project at the Central Administrative Center at Cole Campus in Oakland. It is our understanding that this project involves construction of a new two-story office building and a single-story multi-purpose building. This review was performed in accordance with Title 24, California Code of Regulations, 2019 California Building Code (CBC) and followed CGS Note 48 guidelines. We reviewed the following report:

> **Geotechnical Engineering and Geologic Hazards Study, Cole Campus – Central Administrative Center, Oakland, California:** Consolidated Engineering Laboratories, 2001 Crow Canyon Road, Suite 200, San Ramon, California 94583; company Project No. 84-04726-PWA, report dated May 22, 2020, 42 pages, 7 plates, 4 appendices.

Based on our review, the consultants provide a reasonable assessment of most of the engineering geology and seismology issues with respect to the proposed improvements. The principal concerns identified by the consultants are the potential for strong ground shaking. Their evaluation indicates surface fault rupture and deep-seated slope instability are not design concerns for the project.

However, CGS notes that the consultants have not included the possibility of rupture of all the segments of the Hayward fault together as is considered in the UCERF 3 community fault model, for their deterministic MCE_R spectrum used as input in the site-specific ground motion hazard analysis. The consultants are requested to **revise their site-specific ground motion analysis based on this recommendation and provide updated site-specific ground motion parameters, design response spectrum, and PGA_M.** The consultants are also requested to update their liquefaction analyses with the updated PGA_M, as needed.

In conclusion, ***the engineering geology and seismology issues at this site are not adequately assessed in the referenced reports***. It is recommended that additional information be provided as requested in the attached Note 48 Checklist Review Comments portion of this letter. The consultants are reminded that one copy of all supplemental documents should be submitted, should include the CGS application number, and should be uploaded directly to CGS at this link: https://www.conservation.ca.gov/cgs/upload-school. If you have any further questions about this review letter, please contact the primary reviewer at ((Jacqueline.bott@conservation.ca.gov).

Respectfully submitted,

Jacqueline Bott
Engineering Geologist
PG 1759, CEG 2382



Concur:

Jennifer Thornburg
Senior Engineering Geologist
PG 5476, CEG 2240



Enclosures:

Note 48 Checklist Review Comments
Keyed to: *Note 48 - Checklist for the Review of Engineering Geology and Seismology Reports for California Public Schools, Hospitals, and Essential Services Buildings*

Copies to:

Joel E. Baldwin II, *Certified Engineering Geologist*, and Corey T. Dare, *Registered Geotechnical Engineer*
Consolidated Engineering Laboratories, 2001 Crow Canyon Road, #200, San Ramon CA 94583

Philip Luo, *Architect*
Shah Kawaski Architects, 570 10th Street, Suite 201, Oakland, CA 94607

Karen Van Dorn, *Senior Architect*
Division of State Architect, 1515 Clay Street, Suite 1201, Oakland, CA 94612

Note 48 Checklist Review Comments

In the numbered paragraphs below, this review is keyed to the paragraph numbers of California Geological Survey Note 48 (November, 2019 edition), *Checklist for the Review of Engineering Geology and Seismology Reports for California Public Schools, Hospitals, and Essential Services Buildings.*

Project Location

1. Site Location Map, Street Address, County Name: Adequately addressed.
2. Plot Plan with Exploration Data with Building Footprint: Adequately addressed.
3. Site Coordinates: Adequately addressed. Latitude and Longitude provided in report: 37.8082°N, 122.2897°W

Engineering Geology/Site Characterization

4. Regional Geology and Regional Fault Maps: Adequately addressed.
5. Geologic Map of Site: Not addressed by the consultants, therefore not reviewed.
6. Geologic Hazard Zones: Adequately addressed. The consultants report the site is located within a Seismic Hazard Zone for liquefaction as identified by the State of California. The consultants report the site is not currently within a designated Earthquake Fault Zone as defined by the State.
7. Subsurface Geology: Adequately addressed. The consultants report the site is underlain by Pleistocene-epoch Merritt sand, consisting of beach or near-shore deposits. They report encountering dark brown sand to silty sand layers (Merritt sand) with frequent lenses of medium dense to very dense clayey to silty sand to a depth of 27 feet, which is underlain by fine clean sand to the maximum depth explored of 50 feet. In boring B-1 the consultants report they encountered loose undocumented fill comprised of sand with brick and concrete fragments. They also report free ground water was encountered between 13 to 19 feet in their various subsurface investigations.
8. Geologic Cross Sections: Adequately addressed.
9. Geotechnical Testing of Representative Samples: Adequately addressed.
10. Consideration of Geology in Geotechnical Engineering Recommendations: Adequately addressed.
11. Conditional Geotechnical Topics: Not applicable.

Seismology & Calculation of Earthquake Ground Motion

12. Evaluation of Historic Seismicity: Adequately addressed.
13. Classify the Geologic Subgrade (Site Class): Adequately addressed. The consultants classify the site soil profile as Site Class D, Stiff Soil, based on the measured average shear-wave velocity in CPT soundings of 300 m/sec. This classification appears reasonable based on the data presented.
14. General Procedure Ground Motion Analysis: Adequately addressed. The consultants report the following parameters derived from a map-based analysis:
    S_S = 1.592 and S_1 = 0.60
    S_{DS} = 1.061
15. Site-Specific Ground Motion Hazard Analysis: **Additional information is requested**. The consultants' probabilistic MCE spectrum appears reasonable based on comparison with

results from the National Seismic Hazard Model (from Petersen and others, 2014) but their deterministic MCE spectrum appears low. CGS notes that the consultants used a M 7.2 on the Hayward (North) fault to calculate their deterministic spectrum, **but they should consider the potential for the whole Hayward fault to rupture for this analysis**, as is considered in both UCERF2 and UCERF 3 community fault models. The consultants are requested to revise their site-specific ground motion analysis using the appropriate magnitude for their deterministic spectrum. The consultants should also check whether PGA_M used in their liquefaction analysis is also appropriate and according to ASCE 7-16 Section 21.5.3.

16. Deaggregated Seismic Source Parameters: Adequately addressed.
17. Time Histories of Earthquake Ground Motion: Not applicable.

Fault Rupture Hazard Evaluation

18. Active Faulting & Coseismic Deformation Across Site: Adequately addressed. The consultants report no faults are known to be present within or project towards the site. The consultants conclude the potential for fault ground rupture and surface manifestations from fault creep are very low to nil.

Liquefaction/Seismic Settlement Analysis

19. Geologic Setting for Occurrence of Liquefaction: Adequately addressed. The consultants report they analyzed their boring and CPT data for the potential for liquefaction settlement as they believe the soils below the water table include layers that may be susceptible to liquefaction in response to strong ground shaking. The consultants' approach appears reasonable.
20. Seismic Settlement Calculations: **Additional information is requested**. The consultants are requested to revise their seismic settlement calculations based on their response to Item 15, using a revised PGA_M, as needed.
21. Other Liquefaction Effects: Adequately addressed. The consultants report there are no significant free faces present at the site and there are no significant continuous liquefiable subsurface layers underlying the site based on their subsurface investigation. They conclude the potential for lateral spreading is low. This conclusion appears reasonable based on the data presented.
22. Mitigation Options for Liquefaction/Seismic Settlement: Not applicable.

Slope Stability Analysis

23. Geologic Setting for Occurrence of Landslides: Adequately addressed. The consultants consider the site is not susceptible to landsliding. This conclusion appears reasonable based on the data presented.
24. Determination of Static and Dynamic Strength Parameters: Not applicable.
25. Determination of Pseudo-Static Coefficient (K_{eq}): Not applicable.
26. Identify Critical Slip Surfaces for Static and Dynamic Analyses: Not applicable.
27. Dynamic Site Conditions: Not applicable.
28. Mitigation Options for Landsliding/Other Slope Failure: Not applicable.

Other Geologic Hazards or Adverse Site Conditions

29. Expansive Soils: Adequately addressed. The consultants report the near-surface soils are generally of very low expansion potential.
30. Corrosive/Reactive Geochemistry of the Geologic Subgrade: Adequately addressed. The consultants report the site soils should have a negligible impact on buried concrete structures and non-corrosive rating to cast and ductile iron pipes based on corrosion testing
31. Conditional Geologic Assessment: Adequately addressed. No significant conditional hazards of potential concern were identified by the consultants.

Report Documentation

32. Geology, Seismology, and Geotechnical References: Adequately addressed.
33. Certified Engineering Geologist: Adequately addressed.
    Joel E. Baldwin II, Certified Engineering Geologist #1132
34. Registered Geotechnical Engineer: Adequately addressed.
    Corey T. Dare, Registered Geotechnical Engineer #2013

Appendix F

Second Engineering Geology and Seismology Review for Central Administrative Center at Cole Campus – New Buildings

California Geological Survey, October 2, 2020

California
Department of Conservation
California Geological Survey

Gavin Newsom, Governor
David Shabazian, Director

Tadashi Nakadegawa
Acting Deputy Chief of Facilities
Oakland Unified School District
1000 Broadway, Suite 300,
Oakland, CA 94607

October 2, 2020

Subject: **Second Engineering Geology and Seismology Review for Central Administrative Center at Cole Campus – New Buildings 1011 Union Street, Oakland, CA CGS Application No. 01-CGS4511**

Dear Mr. Nakadegawa:

In accordance with your request and transmittal of additional documents received on July 17 and September 28, 2020, the California Geological Survey (CGS) has reviewed the engineering geology and seismology aspects of the consulting reports prepared for the subject project at the Central Administrative Center at Cole Campus in Oakland. It is our understanding that this project involves construction of a new two-story office building and a single-story multi-purpose building. This review was performed in accordance with Title 24, California Code of Regulations, 2019 California Building Code (CBC) and followed CGS Note 48 guidelines. We reviewed the following report for this additional review of the project:

> **Response to CGS Review Comments, Cole Campus – Central Administrative Center, 1011 Union Street, Oakland, California 94607:** Consolidated Engineering Laboratories, 2001 Crow Canyon Road, Suite 200, San Ramon, California 94583; company Project No. 84-04726-B, letter report dated September 25, 2020, 2 pages, 2 attachments (includes a revised Geotechnical Report dated September 25, 2020).

In addition, we previously reviewed the following report:

> **Geotechnical Engineering and Geologic Hazards Study, Cole Campus – Central Administrative Center, Oakland, California:** Consolidated Engineering Laboratories, 2001 Crow Canyon Road, Suite 200, San Ramon, California 94583; company Project No. 84-04726-PWA, report dated May 22, 2020, 42 pages, 7 plates, 4 appendices.

CGS previously submitted our findings regarding this project in a review letter dated September 10, 2020, in which CGS requested the consultants revise their site-specific ground motion analysis. This was based on the recommendation that the consultants include the possibility of rupture of all segments of the Hayward fault together, as is considered in the UCERF 3 community fault model, for their deterministic MCE_R spectrum. In addition, the consultants were requested to update their liquefaction analyses with the updated PGA_M resulting from the revised ground motion analysis, as needed.

Discussion of Site-Specific Ground Motion Analysis

Based on this second review, the consultants revised their site-specific ground motion analyses and include the possibly of a rupture of all segments of the Hayward fault together in their deterministic analyses. The consultants' updated deterministic and probabilistic MCE spectra both appear reasonable based on comparison with results from the National Seismic Hazard Model (from Petersen and others, 2014). The consultants report their site-specific seismic design parameters are: $\mathbf{S_{DS} = 1.185}\boldsymbol{g}$ and $\mathbf{S_{D1} = 1.100}\boldsymbol{g}$. Alternatively, S_a values presented in the last column of Table 5 (on page 25 of the revised Geotechnical Report dated September 25, 2020) may be used with the equivalent lateral force procedure, per ASCE 7, Section 21.4. The site-specific ground motion analysis presented in their revised Geotechnical Report dated September 25, 2020 appears to be reasonable and in accordance with ASCE 7-16.

Discussion of Liquefaction Analyses

Based on this second review, the consultants revised their liquefaction analyses based on an updated $\mathbf{PGA_M}$ **of 0.7***g* resulting from their revised ground motion analysis. They report liquefaction-induced seismic vertical settlement on the order of 0.34 to 0.66 inches and up to 0.1 inches of dynamic compaction settlement, resulting in total potential vertical settlement estimates of 0.42 to 0.72 inches. They estimate differential settlement to be half to two-thirds of the maximum total vertical settlement. They note that the liquefiable layer is at a depth of 15 to 18 feet and so overlain by 5 meters of non-liquefiable materials and thus they do not expect any manifestation of this settlement to significantly impact the bearing capacity of the soils. These results and conclusions appear reasonable based on the data presented.

Based on the discussions above, the consultants have now addressed our earlier concern regarding the site-specific ground motion analysis and liquefaction analyses for this site. The consultants have provided a thorough evaluation of engineering geology and seismology issues with respect to the proposed improvements. The principal concerns identified by the consultants are the potential for strong ground shaking, potential liquefaction-induced total vertical settlement of less than 1.0 inch, and the presence of loose undocumented fill in some areas at the site. The consultants recommend design spectral acceleration parameters of $\mathbf{S_{DS} = 1.185}\boldsymbol{g}$ and $\mathbf{S_{D1} = 1.100}\boldsymbol{g}$, which are considered reasonable. Their evaluation indicates surface fault rupture and deep-seated slope instability are not design concerns for the project.

In conclusion, ***the engineering geology and seismology issues at this site are adequately assessed in the referenced reports, and no further information is requested***. If you have any further questions about this review letter, please contact the primary reviewer at Jacqueline.Bott@conservation.ca.gov.

Respectfully submitted,

Jacqueline Bott
Engineering Geologist
PG 1759, CEG 2382



Concur:

Jennifer Thornburg
Senior Engineering Geologist
PG 5476, CEG 2240



Copies to:

Joel E. Baldwin II, *Certified Engineering Geologist*, and Corey T. Dare, *Registered Geotechnical Engineer*
Consolidated Engineering Laboratories, 2001 Crow Canyon Road, #200, San Ramon CA 94583

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Shah Kawaski Architects, 570 10th Street, Suite 201, Oakland, CA 94607

Karen Van Dorn, *Senior Architect*
Division of State Architect, 1515 Clay Street, Suite 1201, Oakland, CA 94612

Appendix G

Phase I Environmental Site Assessment Report for the OUSD Central Administrative Center at 1011 Union Street, prepared for Oakland Unified School District

Ninyo & Moore, December 17, 2019

Phase I Environmental Site Assessment Report

OUSD Central Administrative Center
1011 Union Street
Oakland, California

Oakland Unified School District

955 High Street | Oakland, CA 94601

December 17, 2019 | Project No. 403668001







Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness

Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

Phase I Environmental Site Assessment Report

OUSD Central Administrative Center
1011 Union Street
Oakland, California

Tadashi Nakadegawa
Oakland Unified School District
955 High Street | Oakland, CA 94601

December 17, 2019 | Project No. 403668001

Luke I. Swickard
Staff Environmental Scientist

Peter Sims
Project Environmental Geologist

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EXECUTIVE SUMMARY

Ninyo & Moore was retained by Oakland Unified School District (OUSD) to perform a Phase I Environmental Site Assessment (ESA) on the OUSD Central Administrative Center property located at 1011 Union Street in Oakland, California (site). The site is also identified as Alameda County Assessor's Parcel Number(s) 004 005300700.

The objective of this ESA is to identify, to the extent feasible pursuant to the process described in ASTM E1527-13, recognized environmental conditions (RECs), which are defined by ASTM as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The results of this ESA are summarized below:

- Historical research revealed that the site was developed in the late 1870s with an the Cole Grammar School on the southern portion of the site and several residential houses on the northern portion of the site. During the 1920s the original school building was burned down and the residential houses were demolished and they were replaced with a two-story elementary school building, a cafeteria building, five temporary classrooms, and a parking lot. In the 1950s several temporary classrooms were added and removed. In the late 1960s a Kindergarten building was constructed on the eastern portion of the site. In the early 1970s the Kindergarten building was removed and replaced with five portable buildings, which were later removed in the late 1970s. In the early 2010s the eastern portion of the parking lot on the site was fenced-off and used as the restricted parking of the Oakland School Police Department (OSPD), and a storage building was constructed in the northeastern corner of the site.
- On November 19th, 2019, Peter Sims of Ninyo & Moore conducted a site reconnaissance of the property. The reconnaissance involved a visual inspection of the site, and observations of adjoining properties. At the time of the reconnaissance, the approximate 2.59-acre site was developed with a two-story school building, a cafeteria building, a storage building, and a parking lot. According to Colland Jang, the site representative, the school building was used as an elementary school (Cole Elementary) until approximately 10 years ago. The OUSD special education program occupies the first floor of the school building and approximately 1/3 of the second floor as well as the former cafeteria building, while the OSPD occupies approximately 2/3 of the second floor.
- Interior construction materials included carpeting, ceramic floor tiles, painted and textured plaster walls, and plaster ceilings. Interior finishes appeared to be in good condition.
- The exterior of the buildings consisted of an asphalt parking area on the north side of the building.

- The areas surrounding the site consist primarily of residential buildings to the east south, and west, and an industrial building and a park to the north.
- Based on our site visit, there are currently no wells on the site.
- Ninyo & Moore did observe quantities of hazardous substances or petroleum products used or stored on site during our site reconnaissance. Diesel fuel that supplies the back up generator is stored within the back up generator.
- In August 1998 a 2,000-gallon heating oil tank, reportedly used to fuel the on-site boilers, was removed from the southern portion of the site by ACC Environmental Consultants (ACC). Soil samples were analyzed and only low to no concentrations of contaminants were detected in the soil. ACC recommended no further investigation. This is considered a HREC to the site.
- Indications of underground storage tanks (USTs), or hazardous material spills or leaks, were not observed during the site reconnaissance. The diesel fuel for the back up generator is stored in an aboveground storage tank (AST) inside the generator.
- In 1993 two 10,000-gallon petroleum fuel oil USTs and one 750-gallon diesel UST were removed from the California Cereal Products/Nabisco Brands Inc property located at 1267 14th Street, to the adjacent to the north of the site.
- Based on the age of the site buildings, lead from lead based paint, arsenic, and organochlorinated pesticides (OCPs), may be found in the soil surrounding the buildings. This is considered a REC.
- A waste incinerator is located in the basement on the site and could be a source of metals or semi-volatile organic compound (SVOC) contamination. This is considered a REC.
- Naturally occurring asbestos (NOA) can be found in some rocks, sediments, and soils throughout the world. According to the geotechnical report completed for the site included in Appendix D, there is no mapped sources of NOA in the site or site vicinity, therefore it is not considered a REC.
- In 1994, at the California Cereal Products/Nabisco Brands Inc property, five 55-gallon, two 30-gallon, and two 5-gallon containers of unknown substances were dumped and burned on the railroad tracks. The property is located downgradient of the site, to the north, at 1267 14th Street. The spill occurred approximately 300 feet north of the site. This was labeled as illegal dumping and Oakland Terminal Railroad took responsibility for the cleanup. Due to the exact location of the dumping being unknown, the quantity and type of contaminant being unknown, the fact that a clean up was completed, and that the dumping took place downgradient from the site, this is not considered a REC to the site.
- Review of an environmental database report obtained for this project indicated that the site is listed on several of the regulatory databases researched by Environmental Data Resources Inc. (EDR), including the CERS, EMI, HAZNET, and FINDS databases. The site is listed on the EMI database for emitting small amounts of organic hydrocarbon

gases, carbon monoxide, oxides of Nitrogen and Sulfur, and particulate matter, from 2013 to 2017. The site is listed on the HAZNET database for disposing of several tons of asbestos containing waste from 1992 to 2015. The site is also listed on the HAZNET database for disposing of 1.168 tons of polychlorinated biphenyls (PCBs) in 1994.

- Several off-site facilities were located within the EDR search radius from the site. None of the listed facilities are considered to be a REC to the site at this time based on several factors, including distance from the site, location relative to the regional groundwater flow direction (e.g. hydraulically downgradient or crossgradient to the site), database listing type, and affected media (soil only). Refer to Section 5.1.2 for additional information regarding potential off site facilities of concern.
- Based on the completion of the Vapor Encroachment Condition (VEC) screening matrix, it is presumed unlikely that a VEC currently exists beneath the site.

CONCLUSIONS

Ninyo & Moore has performed this ESA in conformance with the scope and limitations of ASTM E1527-13 of the OUSD Central Administrative Center property located at 1011 Union Street in Oakland, California. Based on the information compiled during the preparation of this report, this assessment has revealed no evidence of RECs in connection with the site at this time.

- The UST removed from the site by ACC Environmental Consultants in August 1998 represents a HREC to the site.
- Based on the age of the site buildings, lead from lead based paint, arsenic, and organochlorinated pesticides (OCPs), may be found in the soil surrounding the buildings. This is considered a REC to the site.
- A waste incinerator is located in the basement on the site and could be a source of metals or semi-volatile organic compound (SVOC) contamination. This is considered a REC to the site.

RECOMMENDATIONS

Based on the findings of this ESA, further investigation is recommended at this time.

- Based on the age of the site buildings, lead from lead based paint, arsenic, and organochlorinated pesticides, may be found in the soil surrounding the buildings. Soil samples should be collected around the perimeter of the buildings and analyzed for lead, arsenic, and OCPs.
- A waste incinerator is located in the basement on the site and could be a source of metals or semi-volatile organic compound (SVOC) contamination. Soil samples should be collected immediately adjacent to the incinerator and analyzed for metals and SVOCs.

1. INTRODUCTION

Ninyo & Moore has performed this ESA in conformance with the scope and limitations of ASTM E1527-13 of the OUSD Central Administrative Center property located at 1011 Union Street in Oakland, California (site). This ESA was conducted for Oakland Unified School District. The following sections identify the purpose, the involved parties, the scope of services, and the limitations and exceptions associated with this ESA.

1.1. Purpose

In accordance with ASTM E1527-13, the objective of the ESA is to identify recognized environmental conditions. The term recognized environmental conditions (RECs) means "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not recognized environmental conditions."

Identification of RECs will fall into three categories: existing REC (as defined above), Historical REC (HREC), or Controlled REC (CREC).

- HREC - An HREC is defined as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations (AULs), institutional controls, or engineering controls)."
- CREC - A CREC is defined as "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, AULs, institutional controls, or engineering controls)."

1.2. Involved Parties

Peter Sims, a Project Geologist with Ninyo & Moore, was the Environmental Professional assigned to this project. Kristopher Larson, Principal Geologist with Ninyo & Moore, performed project oversight and quality review. Resumes of these individuals are included in Appendix A.

1.3. Scope of Services

Ninyo & Moore's scope of services for this ESA included the following:

- Performance of a site reconnaissance to visually and/or physically observe the interior and exterior of structures and other features on the site as well as visible exterior features of adjoining properties to identify areas of possibly contaminated surface soil or surface water, improperly stored hazardous materials, and possible risks of contamination from activities at the site and adjoining properties. Photographs of relevant site features are provided in Appendix B.
- Review of reasonably ascertainable standard environmental record sources including federal, state, and tribal regulatory agency databases for the site and for properties located within a specified radius of the site (Appendix C). The purpose of this review was to evaluate possible environmental impacts to the site and site vicinity activities. These databases list locations of known hazardous waste sites, leaking underground storage tanks (LUSTs), permitted facilities that utilize USTs, and facilities that use, store, or dispose of hazardous materials, hazardous wastes, and/or petroleum products.
- Review of reasonably ascertainable additional environmental record sources including local records and/or additional state or tribal records for the site and for properties located within a specified radius of the site. The purpose of this review was to evaluate possible environmental impacts to the site and site vicinity activities. These databases list locations of known hazardous waste sites, solid waste landfills, registered storage tanks, emergency releases, contaminated public wells, and facilities that use, store, or dispose of hazardous materials and/or petroleum products.
- Provide supporting documentation, when available (Appendix D).
- Review of reasonably ascertainable standard physical setting sources including a current United States Geological Survey (USGS) 7.5-minute topographic map, and possibly including USGS and/or state groundwater and geologic maps, and soil maps. The purpose of this review was to note information about the geologic, hydrologic, and/or topographic characteristics of the site and site vicinity.
- Review of reasonably ascertainable historical documents may include aerial photographs, historical fire insurance maps, and/or city directories. The purpose of this review was to review obvious uses of the site from the present, back to the site's first developed use, or back to 1940, whichever is earlier (Appendix E).
- Performance of interviews with present owners, operators, and occupants of the site as well as other knowledgeable parties as appropriate/available. The purpose of these interviews is to obtain information regarding potential RECs in connection with the site.
- Perform a preliminary vapor encroachment screening assessment on the site and adjoining properties (Appendix F).

- Preparation of this ESA report documenting methodology, reporting findings, significant data gaps, and conclusions, and providing opinions of the impact on the site of conditions noted in the findings section regarding RECs at the site.

1.4. Limitations and Exceptions

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard of care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information or has questions regarding the content, interpretations presented, or completeness of this document.

The findings, opinions, and conclusions are based on an analysis of the observed site conditions and the referenced literature. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control. Ninyo & Moore cannot warrant or guarantee that not finding indicators of any particular hazardous material means that this particular hazardous material or any other hazardous materials do not exist on the site. Additional research, including invasive testing, can reduce the uncertainty, but no techniques now commonly employed can eliminate the uncertainty altogether.

1.5. Special Terms and Conditions

Ninyo & Moore was not made aware of any special terms and conditions associated with the site.

1.6. User Reliance

This report may be relied upon by, and is intended exclusively for, Oakland Unified School District. Any use or reuse of the findings, opinions, and/or conclusions of this report by parties other than the client is undertaken at said parties' sole risk.

1.7. Physical Limitations

Physical limitations were not encountered during the site reconnaissance.

1.8. Data Gaps

A data gap is a "lack of or inability to obtain data required by this practice despite good faith efforts to gather such data." In completing this ESA, Ninyo & Moore encountered no significant data gaps that affect the ability of the EP to identify RECs on the site.

2. SUBJECT SITE

The following sections provide a general description of the site and adjacent properties. Photographs taken during the site reconnaissance are provided in Appendix B.

2.1. Site Description

At the time of the site reconnaissance, the site was developed with a two-story former elementary school building, a former cafeteria building, a storage building, a playground, and two parking lots. The site was occupied by the OUSD special education program, and the OUSD Police Department. The site is located at 1011 Union Street in Oakland, California. The site is situated on one parcel totaling approximately 2.59 acres of land designated by Alameda County Assessor's Parcel Number 004 005300700. The site location is presented on Figure 1 and the site vicinity with additional information concerning the site and surrounding properties is presented on Figure 2.

2.2. Site Reconnaissance

On November 19th, 2019, Peter Sims, Project Geologist with Ninyo & Moore, conducted a site reconnaissance of the property. The reconnaissance involved a visual inspection of the site, and observations of adjoining properties. Colland Jang escorted Peter Sims around the property during the site reconnaissance.

2.2.1. Site Improvements

At the time of the site reconnaissance, the site was occupied by municipal development. Site development included one two-story school building, one former cafeteria building, one storage building, a playground, and two parking lots. The following summarizes key on-site observations for indications of the following potential environmental concerns:

On-Site Observations			
Conditions	**Observed Yes**	**Observed No**	**Comments**
Hazardous Substances/Petroleum Products	X		Diesel petroleum products are found in the AST associated with the diesel back-up generator located on the north side of the school building.
Waste Generation/Storage/Disposal		X	
Unidentified Substance Containers		X	
Storage Tanks (ASTs and/or USTs)	X		A diesel AST is associated with the diesel back-up generator located on the north side of the school building.
Potential PCB-Containing Equipment		X	
Chemical/Petroleum Odors		X	
Concrete Patches/Pads		X	
Pools of Liquid		X	
Sewage Discharge Pipes		X	

Conditions	Observed Yes	Observed No	Comments
Floor Drains/Sumps	X		Floor drains and a sump were located in the basement of the school building.
Elevator	X		An elevator is located on the exterior of the school building. The elevator maintenance room showed no signs of hydraulic leakage or staining.
Wells		X	
Drums		X	
Indications of Staining		X	
Stressed Vegetation		X	
Pits, Ponds, or Lagoons		X	
Waste Water Discharges/Disposal Systems		X	
Storm Water Systems	X		Storm drains were located in the parking lots.
Septic Systems/Cesspools		X	
Municipal Solid Waste Disposal Areas	X		A waste disposal area was located on the northwest corner of the former cafateria building.
Other Environmental Concerns or Conditions	X		Two boilers and an unused incinerator were located in the basement. According to the site contact Mr. Jang, the boilers are fueled by natural gas. The incinerator was used to dispose of waste generated by the school. A back-up generator was located on the northern exterior of the school building. According to the site contact Mr. Jang, the generator is fueled by diesel but does not have an associated underground storage tank (UST).

2.2.2. Roads

As shown on Figure 2, the site is accessible from Union Street to the east, 10th Street to the South, and Poplar Street to the west.

2.2.3. Site Occupants

The site is owned by the Oakland Unified School District (OUSD), and is occupied by the OUSD special education program on the first and part of the second floor, and by the OUSD Police Department, which occupies the remainder of the second floor.

2.2.4. Source of Potable Water

The East Bay Municipal Utilities District (EBMUD) provides potable water to the site and site vicinity.

2.2.5. Sewage Disposal System

EBMUD provides municipal sewer service to the site and surrounding areas.

2.2.6. Source of Fuel for Heating and Cooling

The fuel source for the on-site heating and cooling systems was provided by PG&E.

2.3. Adjoining Properties

The following table lists the properties adjoining the site and associated land use. Based on the nature of the adjoining properties, information available in agency databases, and observations made during our site reconnaissance, off-site properties may have impacted the environmental integrity of the site at this time.

- In 1994, at the California Cereal Products/Nabisco Brands Inc property, five 55-gallon, two 30-gallon, and two 5-gallon containers of unknown substances were dumped and burned on the railroad tracks. The property is located downgradient of the site, to the north, at 1267 14th Street. The spill occurred approximately 300 feet north of the site.This was labeled as illegal dumping and Oakland Terminal Railroad took responsibility for the cleanup. Due to the exact location of the dumping being unknown, the quantity and type of contaminant being unknown, the fact that a clean up was completed, and that the dumping took place downgradient from the site, this is not considered a REC to the site.

Adjoining Properties	
Location	**Description**
North	California Cereal Products/Nabisco Brands Inc (RCRA NONGEN/NLR, Envirostor, LUST, ALAMEDA COUNTY CS, HIST CORTESE, CERS, CERS HAZ WASTE, HAZNET, HIST UST, NOTIFY 65), and a playground.
South	Oakland Housing Authority (LUST, SWEEPS UST, HIST UST, CA FID UST, HIST CORTESE, CERS), and several row houses.
East	Several residential houses
West	Several row houses

3. USER PROVIDED INFORMATION

The following sections summarize information provided by the user to assist the environmental professional in identifying the possibility of RECs in connection with the site and to fulfill the user's responsibilities in accordance with Section 6 of ASTM E1527-13. The User Questionnaire was completed by Tadashi Nakadegawa. A copy of the User Questionnaire is included in Appendix D.

3.1. Title Records

A Preliminary Title Report was not provided to Ninyo & Moore.

3.2. Environmental Liens or AULs

Ninyo & Moore was not informed of the existence of environmental liens or AULs associated with the site.

3.3. Specialized Knowledge

Colland Jang provided no specialized knowledge regarding the site.

3.4. Commonly Known or Reasonably Ascertainable Information

_Ninyo & Moore was not informed of the existence of commonly known or reasonably ascertainable information pertaining to the site that is material to the identification of RECs in connection with the site.

3.5. Valuation Reduction for Environmental Issues

Information pertaining to valuation reduction was not communicated to Ninyo & Moore for the purpose of this assessment.

3.6. Owner, Property Manager, and Occupant Information

The site is currently owned by the Oakland Unified School District (OUSD).

3.7. Reason for Performing Phase I

This ESA has been completed for the exclusive use of Oakland Unified School District as part of their due diligence of the property.

4. PHYSICAL SETTING

The following sections include discussions of topographic, geologic, and hydrologic conditions.

4.1. Topographic Conditions

Based on a review of the United States Geological Survey (USGS) 7.5-Minute Topographic Quadrangle Map Series of the Oakland West 2012 Quadrangle, the site is situated at an elevation of approximately 20 feet above mean sea level. The topography of the site generally slopes towards the northwest.

4.2. Geology and Soil Conditions

The site is located in the Coast Range geomorphic province of California. The Coast Ranges are northwest-trending mountain ranges (2,000 to 4,000, occasionally 6,000 feet elevation above sea level), and valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. Strata dip beneath alluvium of the Great Valley. To the west is the Pacific Ocean. The coastline is uplifted, terraced and wave-cut. The Coast Ranges are composed of thick Mesozoic and Cenozoic sedimentary strata. The northern and southern ranges are separated by a depression containing the San Francisco Bay. The northern Coast Ranges are dominated by irregular, knobby, landslide-topography of the Franciscan Complex. The eastern border is characterized by strike-ridges and valleys in Upper Mesozoic strata. In several areas, Franciscan rocks are overlain by volcanic cones and flows of the Quien Sabe, Sonoma and Clear Lake volcanic fields. The Coast Ranges are subparallel to the active San Andreas Fault. The San Andreas is more than 600 miles long, extending from Pt. Arena to the Gulf of California. West of the San Andreas is the Salinian Block, a granitic core extending from the southern extremity of the Coast Ranges to the north of the Farallon Islands (CGS, 2002).

According to the geotechnical report included in Appendix D, the site is located in the flatlands west of the base of the Oakland Hills, which is proximal to the San Francisco Bay structural depression to the west. Bedrock underlying the Oakland-San Leandro area and exposed in the hills to the east primarily consists of gabbro and basalt of the Jurassic Coast Range Ophiolite, Late Jurassic-Early Cretaceous Franciscan rocks, Jurassic silicic volcanics and Late Jurassic-Early Cretaceous Knoxville Formation .

The 1977 California Division of Mines and Geology, *Geologic Map of California*: (Jennings C.W.) shows the site to be underlain by Quaternary Marine and Non-marine Sand Deposits (Qs).

Based on our review of the EDR Radius Map report, the primary soil type beneath the site is mapped as Urban Land (EDR, 2019).

According to the geotechnical report, the site is located in a seismically active region dominated by major faults of the San Andreas Fault System. Major active faults include the aforementioned San Andreas Fault; the Hayward Fault, located approximately 4 miles northeast of the site; the Calaveras Fault, located around 14 miles northeast of the site; the Concord-Green Valley Fault, located around 18 miles northeast of the site and the San Gregorio Fault, estimated to be around 23 miles southwest of the site.

4.3. Site Hydrology

The following sections discuss the site hydrology in terms of surface water and groundwater.

4.3.1. Surface Waters

Surface waters, including ponds, streams, creeks, lagoons and other naturally-occurring bodies of water, were not observed on the site at the time of our reconnaissance.

4.3.2. Groundwater

Groundwater information for the site was not available. Ninyo & Moore reviewed the State Water Resources Control Board's GeoTracker website (GeoTracker) for groundwater information in the site vicinity. According to GeoTracker, groundwater information reported in a Second Half 2018 groundwater monitoring report for the former Shell-branded service station located at 1230 14th Street (approximately 750 feet northeast of the site), the groundwater flow direction in the site vicinity was reported to be towards the northeast and the depth to groundwater was reported to be approximately 11 to 13 feet below ground surface (ft bgs). Groundwater depths and flow directions can vary due to seasonal variations, groundwater withdrawal or injection, tidal influences, and other factors.

According to the geotechnical report included in Appendix D, free groundwater was encountered at a depth of 18 to 19 ft bgs borings advanced for the geotechnical investigation in November, 2019.

5. RECORDS REVIEW

The following sections summarize records reviewed for the site.

5.1. Environmental Record Sources

Environmental Data Resources, Inc. (EDR) performed a computerized environmental information database search for the site and site vicinity. The EDR report included federal, state, and local databases. The review was conducted to evaluate whether or not the site or properties within the vicinity of the site have been listed as having experienced significant unauthorized releases of hazardous substances or other events with potentially adverse environmental effects for the site. A summary of the environmental databases searched, their corresponding search distance, and the number of listed off-site properties of potential environmental concern to the site are presented in the following table. A copy of the EDR Radius Map Report is presented in Appendix C.

Map Findings Summary								
Database	**Target Property**	**Search Distance (Miles)**	**< 1/8**	**1/8 - 1/4**	**1/4 - 1/2**	**1/2 - 1**	**> 1**	**Total Plotted**
National Priority List		1	0	0	1	0	NR	1
Corrective Action Report		1	0	0	0	2	NR	2
RCRA - Large Quantity Generators		0.25	0	1	NR	NR	NR	1
RCRA - Small Quantity Generators		0.25	0	8	NR	NR	NR	8
Department of Defense Sites		1	0	0	0	1	NR	1
Formerly Used Defense Sites		1	0	0	0	2	NR	2
A Listing of Brownfields Sites		0.5	0	1	4	NR	NR	5
Facility Index System/Facility Registry System	X	TP	NR	NR	NR	NR	NR	1
EDR Exclusive Historical Auto Stations		0.125	2	NR	NR	NR	NR	2
Superfund Enterprise Management System		0.5	0	0	4	NR	NR	4
Superfund Enterprise Management System Archive		0.5	0	0	5	NR	NR	5
RCRA - Non Generators / No Longer Regulated		0.25	6	9	NR	NR	NR	15
Leaking Underground Fuel Tank Report (GEOTRACKER)		0.5	3	13	30	NR	NR	46
Active UST Facilities		0.25	1	0	NR	NR	NR	1
Hazardous Substance Storage Container Database		0.25	4	7	NR	NR	NR	11

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Aboveground Petroleum Storage Tank Facilities		0.25	0	4	NR	NR	NR	4
Voluntary Cleanup Program Properties		0.5	1	1	14	NR	NR	16
Considered Brownfieds Sites Listing		0.5	0	0	2	NR	NR	2
Deed Restriction Listing		0.5	0	1	4	NR	NR	5
Bond Expenditure Plan		1	0	0	0	1	NR	1
"Cortese" Hazardous Waste & Substances Sites List		0.5	0	4	7	NR	NR	11
SWEEPS UST Listing		0.25	1	8	NR	NR	NR	9
CERS HAZ WASTE		0.25	2	4	NR	NR	NR	6
EnviroStor Database		1	2	4	23	58	NR	87
Toxic Pits Cleanup Act Sites		1	0	0	0	2	NR	2
CalEPA Regulated Site Portal Data	X	TP	NR	NR	NR	NR	NR	1
Calsites Database		1	0	0	3	9	NR	12
Contaminated Sites		0.5	1	15	31	NR	NR	47
EnviroStor Permitted Facilities Listing		1	0	0	0	3	NR	3
Recycler Database		0.5	1	0	0	NR	NR	1
State Response Sites		1	0	1	2	12	NR	15
Hazardous Waste & Substance Site List		0.5	2	11	24	NR	NR	37
Facility Inventory Database		0.25	1	6	NR	NR	NR	7
California Environmental Reporting System (CERS) Tanks		0.25	1	1	NR	NR	NR	2
Facility and Manifest Data	X	TP	NR	NR	NR	NR	NR	5
Emissions Inventory Data	X	TP	NR	NR	NR	NR	NR	1
Statewide SLIC Cases (GEOTRACKER)		0.5	0	5	11	NR	NR	16
Certified Processors Database		0.5	1	0	0	NR	NR	1
EDR Proprietary Manufactured Gas Plants		1	0	0	0	2	NR	2

5.1.1. Regulatory Database Listings for the Site

The following table summarizes the database listings related to the site:

On-Site Database Listings	
Site Name	OAKLAND UNIFIED SCHOOL DISTRICT
Site Address	1011 UNION STREET
Database	CERS, EMI, HAZNET, FINDS
Comments	The site is listed on the EMI database for emitting: -0.003 tons of total organic hydrocarbon gases, 0.008 tons of carbon monoxide gases, 0.053 tons of oxides of nitrogen, and 0.002 tons of particulate matter, in 2013. -0.003 tons of total organic hydrocarbon gases, 0.008 tons of carbon monoxide gases, 0.053 tons of oxides of nitrogen, 0.00009 tons of oxides of sulphur, and 0.002 tons of particulate matter, in 2014. -0.003 tons of total organic hydrocarbon gases, 0.008 tons of carbon monoxide gases, 0.053 tons of oxides of nitrogen, 0.00009 tons of oxides of sulphur, and 0.002 tons of particulate matter, in 2015. -0.003 tons of total organic hydrocarbon gases, 0.008 tons of carbon monoxide gases, 0.053 tons of oxides of nitrogen, 0.00009 tons of oxides of sulphur, and 0.002 tons of particulate

Comments	matter, in 2016. -0.003 tons of total organic hydrocarbon gases, 0.008 tons of carbon monoxide gases, 0.053 tons of oxides of nitrogen, 0.00009 tons of oxides of sulphur, and 0.002 tons of particulate matter, in 2017. The site is listed on the HAZNET database for: -disposing 2.53 tons of asbestos containing waste in a landfill, in 1992. -recycling 1.168 tons of polychlorinated biphenyls (PCBs) and materials contianing PCBs in 1994. -disposing 29.49 tons of asbestos containing waste in a landfill, in 2002. -disposing 0.4 tons of asbestos containing waste in a landfill, in 2011. -disposing 0.23 tons of asbestos containing waste in a landfill, in 2015. None of these listings are considered a REC to the site.

5.1.2. Regulatory Database Listings for Off-Site Properties

Off-site properties/facilities listed in the **Map Findings Summary** table above were evaluated as to their potential to impact soil, soil vapor, and/or groundwater at the site. The following table presents the properties/facilities that were interpreted to represent a potential environmental concern to the site, based on their proximity to the site, the nature of the database on which they are listed, and/or the assumed direction of groundwater flow in the site vicinity.

It is our opinion that there is a low likelihood that the off-site properties listed in the Facilities of Potential Concern table below (or other facilities listing in the Map Findings Summary table above) represent a REC to the site. This opinion is based on one or more of the following factors:

- The nature of the database(s) on which the property is listed, and/or because the property was not listed on a database that reports unauthorized releases of hazardous substances;
- Reported regulatory agency status (i.e., case closed);
- Reported nature of the case (i.e., soil contamination only);
- Reported distance of the property from the site; and/or
- Location of the property in relation to the site with respect to topography or expected groundwater flow direction (northeast).

Facilities of Potential Concern	
Site Name	OAKLAND CITY OF HOUSING AUTHORITY
Site Address	935 UNION ST
Distance from Site	50 feet
Direction from Site	South and upgradient
Database	CERS, LUST, SWEEPS UST, HIST CORTESE, CA FID UST, HIST UST
Comments	This property is listed on the LUST database for a gasoline leak from an underground storage tank (UST). The case was opened in October 1988 and after remediation and cleanup activities were completed to the satisfaction of the regulatory agency, the case was closed in June 1993. Due to the closed nature of the case, this is not considered a REC to the site.

Site Name	NABISCO BRANDS INC
Site Address	1267 14TH ST
Distance from Site	352 feet
Direction from Site	NNE and downgradient
Database	CERS, LUST, HIST CORTESE, Alameda County CS, ENVIROSTOR
Comments	This property is listed on the LUST database for a waste oil leak from an UST contaminating non-potable groundwater. The case was opened in August 1988 and after remediation and cleanup activities were completed to the satisfaction of the regulatory agency, the case was closed in June 1993. Due to the closed nature of the case, the downgradient rtelationship to the site, and the distance from the site, this is not considered a REC to the site. This property is listed on the Envirostor database for a "site screening" in August 2006, which concluded that remediation for the closed LUST case was completed in 1992 and that no contamniants of concern (COCs) remained in the soil or groundwater at levels of concern. Due to the findings of the "site screening", this is not considered a REC to the site.

Site Name	CALIFORNIA CEREAL PRODUCTS, INC.
Site Address	1267 14TH ST
Distance from Site	352 feet
Direction from Site	NNE and downgradient
Database	CERS, HAZNET, CERS HAZ WASTE
Comments	This property is listed on the HAZNET database for: -storing 0.05 tons of unspecified oil-containing waste in 2008. -storing 0.092 tons of pff-specification, aged or surplus organics in 2009. -storing 0.15 tons of unspecified oil-containing waste in 2010. -storing 0.15 tons of unspecified oil-containing waste in 2011. -storing 0.3 tons of unspecified oil-containing waste in 2012. This property is listed on the CERS database for several violations and failures of the California Health and Safety Code in 2018. All of the violations and failures were corrected and returned to compliance. This is not considered a REC to the site. In 1994, at the California Cereal Products/Nabisco Brands Inc property, five 55-gallon, two 30-gallon, and two 5-gallon containers of unknown substances were dumped and burned on the railroad tracks. The property is located downgradient of the site, to the north, at 1267 14th Street. The spill occurred approximately 300 feet north of the site. This was labeled as illegal dumping and Oakland Terminal Railroad took responsibility for the cleanup. Due to the exact location of the dumping being unknown, the quantity and type of contaminant being unknown, the fact that a clean up was completed, and that the dumping took place downgradient from the site, this is not considered a REC to the site.

Site Name	PALM COURT
Site Address	902 UNION STREET
Distance from Site	495 feet
Direction from Site	South and upgradient
Database	VCP, ENVIROSTOR
Comments	This property is listed on the VCP and Environstor databases for a voluntary cleanup program that took place in 2005, in an effort to cleanup chlordane and lead in the soil. Due to the distance from the site, and the media affected (soil), this is not considered a REC to the site.

5.2. Additional Environmental Record Sources

To enhance and supplement the standard environmental record sources identified in Section 5.1, additional local and/or federal, state, or tribal records shall be checked when, in the judgement of the EP, such additional records (1) are reasonably ascertainable, (2) and sufficiently useful, accurate, and complete in light of the objective of the records review. Examples of additional record sources include department of health/environmental division, fire

department, planning/building department, or local/regional water quality agencies. Ninyo & Moore contacted the following additional record sources:

- Alameda County Environmental Health Department (ACEHD)
- The City of Oakland
- California Regional Water Quality Control Board (RWQCB)
- California Department of Toxic Substances Control (DTSC)
- State of California, Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR)

Descriptions of these agencies are provided in Sections 5.2.1 through 5.2.3 below.

5.2.1. State/County Environmental Record Sources

The RWQCB and DTSC had no records on file for the site.

The ACEHD was contacted regarding hazardous materials or hazardous wastes records associated with the site addresses. The ACEHD had records on file for the site. According to the ACEHD a 2,000-gallon heating oil UST was removed from the southern portion of the site under the supervision of ACC Environmental Consultants in August 1998. After the UST was removed, two soil samples were taken from the sidewalls of the excavation (109-T1F-11 and 109-T1-11) and four soil samples were taken from the soil stockpile (109-SP (A-D)). The samples were analyzed for total petroleum hydrocarbons as diesel (TPHd) and for benzene, toluene, ethylbenzene, and xylene (BTEX). All of the samples were below the respective detection limits except 109-T1F-11 with 1.4 milligrams per kilogram (mg/kg), and 109-SP (A-D) with 0.016 mg/kg of xylenes. No indications of staining or leakage was observed in the soil during the UST removal. Due to the lack of significant concentrations of contaminants in the soil, this is considered an HREC to the site. A copy of the UST removal report is included in Appendix D.

The ACEHD was contacted regarding hazardous materials or hazardous wastes records associated with the property adjacent to the north of the site, at 1267 14th Street (California Cereal Products/Nabisco Brands Inc). The ACEHD had records on file for the site. According to the ACEHD the property had numerous violations of the California Health and Safety Code in 2018 and 2019 including; not submitting a hazardous materials business plan (HMBP), not properly labeling empty 55-gallon drums or propane tanks, and not completing a hazardous waste manifest. The property also has records for several hazardous materials stored and used on the property in 2006. There is no indication that the violations or hazardous waste has impacted the site. This is not considered a REC.

According to the ACEHD in 1994, at the California Cereal Products/Nabisco Brands Inc property, five 55-gallon, two 30-gallon, and two 5-gallon containers of unknown substances

were dumped and burned on the railroad tracks. The property is located downgradient of the site, to the north, at 1267 14th Street. The spill occurred approximately 300 feet north of the site. This was labeled as illegal dumping and Oakland Terminal Railroad took responsibility for the cleanup. Due to the exact location of the dumping being unknown, the quantity and type of contaminant being unknown, the fact that a clean up was completed, and that the dumping took place downgradient from the site, this is not considered a REC to the site.

5.2.2. Local Record Sources

A Public Records Request was submitted to the City of Oakland Fire Department (OFD) regarding hazardous materials, hazardous wastes and/or underground storage tank records for the site. The OFD responded via email that they had no records on file for the site address due to the OFD transferring all files to the ACEHD in 2015. A copy of the OFD email is included in Appendix D.

5.2.3. Gas & Oil Maps

According to the DOGGR Online Mapping System, the site does not lie within the administrative boundaries of an oil field and no oil or gas wells are located on the site.

5.3. Historical Use Information

Ninyo & Moore conducted a historical record search for the site. This included a review of one or more of the following resources that were found to be both reasonably ascertainable and useful for the purposes of this ESA: historical aerial photographs, historical fire insurance maps, historical topographic maps, land use records, and interviews with property representatives. Although one or more of the sources listed above provided limited information regarding the historical use of the site, the information gathered from the sources reviewed as a whole is adequate to develop a history of the previous uses of the site and the surrounding area in accordance with Section 8.3 of ASTM E1527-13. The following sections summarize information obtained from the historical sources utilized for this assessment. The following table provides a list of historical sources reviewed for this ESA. Copies of historical research documentation, such as fire insurance maps, historical aerial photographs, and topographic maps, are provided in Appendix E.

Historical Use Information		
Data Type	**Year(s)**	**Data Limitations**
EDR Aerial Photo Decade Package (Inquiry Number 5871762.8S) Ship Date: November 15th, 2019	1939, 1946, 1958, 1963, 1968, 1974, 1982, 1993, 1998, 2005, 2009, 2012, 2016	
EDR City Directory Abstract (Inquiry Number 5871762.5S) Ship Date: November 15th, 2019	1920, 1925, 1926, 1928, 1932, 1933, 1938, 1940, 1943, 1945, 1946, 1950, 1951, 1954, 1955, 1956, 1959, 1960, 1962, 1965, 1967, 1970, 1973, 1975, 1976, 1979, 1980, 1982, 1984, 1986, 1991, 1992, 1993, 1996, 2000, 2002, 2006, 2010, 2014	

EDR Historical Topo Map (Inquiry Number 5871762.4S) Ship Date: November 15th, 2019	1895, 1899, 1915, 1948, 1949, 1959, 1968, 1973, 1980, 1996, 2012	
EDR Sanborn Map Search/Print (Inquiry Number 5871762.3S) Ship Date: November 17th, 2019	1889, 1902, 1912, 1951, 1952, 1957, 1958, 1961, 1967, 1970	
EDR Radius Map Report (Inquiry Number 5871762.2S) Ship Date: November 15th, 2019		

Historical research revealed that the site was vacant land until the late 1870s when the original Cole Grammar School was built on the site. The northern portion of the site was occupied by residential buildings. In late 1923 the school was destroyed by fire and a new Cole Elementary School building, replacing the burned down building as well as the residential buildings, was built in 1925. In the 1950s several temporary classrooms were added and removed. In the late 1960s a Kindergarten building was constructed on the eastern portion of the site. In the early 1970s the Kindergarten building was removed and replaced with five portable buildings, which were later removed in the late 1970s. In the early 2010s the eastern portion of the parking lot on the site was fenced-off and used as the restricted parking of the Oakland School Police Department (OSPD), and a storage building was constructed in the northeastern corner of the site.

5.3.1. Sanborn Fire Insurance Maps

Ninyo & Moore requested historic fire insurance rate maps (Sanborn Maps) of the site through EDR. Sanborn Fire Insurance Rate Maps for the site and surrounding areas were available for review. A summary of the Sanborn Maps reviewed is presented in the following table. A copy of the Sanborn Map Report is included in Appendix E.

Summary of Sanborn Map Listings		
Year(s)	**Site Comments**	**Adjoining Area Comments**
1889	No buildings are mapped on the site.	No buildings are mapped in the area surrounding the site.
1902	A building labeled "Cole School" is mapped on the southern portion of the site and nine residential houses are mapped on the northern portion of the site.	The area surrounding the site to the north, east, south, and west are mapped with residential houses.
1912	Three of the residential houses on the northern portion of the site are no longer mapped. Two additional houses and three apartment buildings are mapped on the northern portion of the site. A "manual training room" is mapped in the center of the site.	Two stores are mapped to the west of the site. Part of the rail way system is mapped to the north of the site.
1951	All of the residential houses and apartment buildings, along with the "manual training room" building, and the "Cole School" building, are no longer mapped on the site. A new building labeled "Cole School" as well as a cafateria building, both of which are on the site presently, as well five temporary classroom buildings are mapped on the eastern portion of the site.	The residential houses and stores to the south and west of the site are replaced with the "Peralta Villa USHA Project" consisting of several row houses as well an administative building to the south. A large industril building, with storage tanks, auto storage, and several smaller buildings, are mapped to the north of the site.
1952	No significant changes noted.	No significant changes noted.

Year(s)	Site Comments	Adjoining Area Comments
1957	Three additional temporary classrooms are mapped on the western portion of the site. One of the temporary classrooms from the eastern portion of the site is no longer mapped.	No significant changes noted.
1958	No significant changes noted.	No significant changes noted.
1961	Two additional temporary classrooms are mapped on the eastern portion of the site.	No significant changes noted.
1967	The three temporary classrooms from the western portion of the site along with four of the temporary classrooms from the eastern portion of the site, are no longer mapped. A Kindergarten building is mapped on the eastern portion of the site.	The administrative building to the south of the site is mapped as expanded.
1970	The Kindergarten building and the remaining temporary classroom are mapped as replaced five portable buildings.	No significant changes noted.

5.3.2. Historical Aerial Photographs

Ninyo & Moore reviewed historical aerial photographs of the site provided by EDR. A listing of the photographs reviewed is presented in the following table. Copies of the historical aerial photographs are provided in Appendix E.

Summary of Aerial Photographs			
Year(s)	Source	Site Comments	Adjoining Area Comments
1939	EDR	The southern portion of the site is noted to have a school building and a smaller building while the northern portion of the site is a parking lot.	The site is noted to be surrounded by residential houses to the east, south, and west, and by an industrial building to the north.
1946	EDR	A temporary classroom is noted on the eastern portion of the site.	The residential houses to the south and west of the site are noted to be removed and replaced with row houses, and an administrative building to the south.
1958	EDR	Three additional temporary classrooms are noted on the eastern portion of the site, along with three temporary classrooms on the western portion of the site.	No significant changes noted.
1963	EDR	No significant changes noted.	No significant changes noted.
1968	EDR	All of the temporary classrooms are noted to be removed. A storage building is noted on the eastern portion of the site.	No significant changes noted.
1974	EDR	The storage building on the eastern portion of the site is noted to be removed.	The residential houses to the northwest of the site are noted to be removed.
1982	EDR	No significant changes noted.	The street bordering the site to the north, 12th street, is noted to be removed. A playground and a park are noted to the north of the site.
1993	EDR	No significant changes noted.	No significant changes noted.
1998	EDR	No significant changes noted.	No significant changes noted.
2005	EDR	No significant changes noted.	The administrative building to the south of the site is noted to be removed and replaced with another building.
2009	EDR	No significant changes noted.	No significant changes noted.
2012	EDR	A playground is noted in the northern portion of the site. Two storage containers are noted on the eastern portion of the site, inside a fenced-off portion of the parking lot.	No significant changes noted.
2016	EDR	One of the storage containers on the eastern portion of the site is no longer noted.	No significant changes noted.

5.3.3. City Directories

Ninyo & Moore reviewed historical city directory listings for the site addresses to evaluate facilities of potential concern, which may have been historically located on the site. A summary of notable city directory listings is presented in the following table, and the EDR City Directory abstract is provided in Appendix E.

Summary of City Directory Listings	
Year(s)	**Notable Listings in Address Range of Site**
1920-1932	Address not listed.
1933	Cole School
1938-1940	Address not listed.
1943	Cole School
1945-1946	Address not listed.
1950	Johansen Marvin W R, Cole School
1951-1954	Address not listed.
1955	Cole School, Hiller Orville T Alameda
1956-1960	Address not listed.
1962	Cole School
1965-1967	Address not listed.
1970	Oakland Public Schools
1973-1979	Address not listed.
1980	Cole, Follow Through Program
1982-1984	Address not listed.
1986	Follow Through Program, Preschool Programs Administration
1991	Cole Elementary
1992	Oakland Public Schools
1993	Address not listed.
1996	Oakland Public Schools
2000	Project Yield
2002	Address not listed.
2006	Oakland SC Elementry
2010-2014	Oakland Unified School District

5.3.4. Historical Topographic Maps

Ninyo & Moore reviewed historical topographic maps of the site provided by EDR. A listing of the maps reviewed is presented in the following table. Copies of the historical topographic maps are provided in Appendix E.

Summary of Topographic Maps		
Year(s)	**Quadrangle**	**Site Comments**
1895	San Francisco	The site is mapped with several buildings around the perimeter of the site.
1899	San Francisco	No significant changes noted.
1915	San Francisco	No significant changes noted.
1948	San Francisco	The site is mapped with a school building in the southern portion of the site. The site mapped as urban land.
1949	Oakland West	No significant changes noted.
1959	Oakland West	The site is mapped with six additional buildings.
1968	Oakland West	No significant changes noted.
1973	Oakland West	No significant changes noted.
1980	Oakland West	Five of the additional buildings mapped on the site are no longer mapped.
1996	Oakland West	No buildings are mapped on the 1996 topographical map.
2012	Oakland West	No buildings are mapped on the 2012 topographical map.

5.3.5. Title Records

A historical chain-of-title report was not requested by the Client for review by Ninyo & Moore during the completion of this report.

5.3.6. Recorded Environmental Liens and AULs

An environmental lien search report was not requested by the Client for review by Ninyo & Moore during the completion of this report.

5.3.7. Previous Investigations

In August 1998 ACC Environmental Consultants removed a 2,000-gallon heating oil UST from the southern portion of the site. The previous investigation is described fully in Section 5.2.1.

Summary of Previous Investigations		
Report Name	**Year(s)**	**Findings**
ACC Environmental Consultants Underground Storage Tank Closure Report October 12, 1998	1998	The samples were analyzed for total petroleum hydrocarbons as diesel (TPHd) and for benzene, toluene, ethylbenzene, and xylene (BTEX). All of the samples were below the respective detection limits except 109-T1F-11 with 1.4 milligrams per kilogram (mg/kg), and 109-SP (A-D) with 0.016 mg/kg of xylenes. No indications of staining or leakage was observed in the soil during the UST removal. Due to the low concentrations of the contaminants, ACC recommended no further investigation.

5.4. Adjoining Property Use Information

Adjoining properties were described in Section 2.3. Based on the adjoining property types, none of the adjoining properties are considered to have affected the site at this time. See Section 2.3 for additional details.

6. PRELIMINARY VAPOR ENCROACHMENT SCREENING

Ninyo & Moore conducted a preliminary vapor encroachment screen (pVES) for potential chemicals of concern (COC). The pVES was based on the guidelines presented in the ASTM E2600-10 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions. The purpose of the pVES was to identify a vapor encroachment condition (VEC), which is the presence or likely presence of COC vapors in sub-surface soils at the site as a result of a release of vapors from contaminated soil or groundwater either on or near the site. The potential for VECs beneath the site was evaluated using a Vapor Encroachment Screening Matrix (VESM). The VESM included performing a Search Distance Test to identify if there are any known or suspected contaminated sites surrounding or upgradient of the site within specific search radii, a COC Test (for those known or suspect contaminated sites identified within the Search Distance Test) to evaluate whether or not COC are likely to be present, and a Critical Distance Test to evaluate whether or not COC in a contaminated plume may be within the critical distance of the site (100 feet for non-petroleum hydrocarbon contaminants, and 30 feet for petroleum hydrocarbon contaminants).

Based on the completion of the VESM, it is presumed unlikely that a VEC currently exists beneath the site. A copy of the VESM is included in Appendix F.

7. INTERVIEWS

Interviews were conducted by Ninyo & Moore with the objective of obtaining information regarding potential environmental concerns in connection with the site.

7.1. Owner or Key Site Manager

Colland Jang, the School Facilities Planning Consultant, was interviewed during the site reconnaissance. According to Colland Jang, the site building was constructed in the 1920s as an elementary school. Colland Jang was not aware of any hazardous materials incidents, spills, leaks or violations related to the site.

7.2. Past Owners

Past ownership entities were not made available to Ninyo & Moore during the preparation of this report. Therefore, interviews with past site owners was not conducted.

7.3. Environmental Regulatory Agency Inquiries

Ninyo & Moore submitted Public Records Requests for the site address to County, State and Local environmental regulatory agencies. The following sections describe the agencies contacted and whether or not representatives from the agencies were interviewed.

7.3.1. State/County Environmental Agencies

Ninyo & Moore requested hazardous materials records from the County Environmental Health Department ACEHD. The ACEHD had records on file for the site and a file review was conducted for the site address. The records from the ACEHD are described in Section 5.2.1.

Ninyo & Moore submitted a Public Records Request to the California Department of Toxic Substances Control (DTSC), through the EnviroStor online database, for the site address. The DTSC indicated that they had no records for the site address. Based on this information, interviews were not conducted with DTSC representatives.

Ninyo & Moore submitted a Public Records Request to the Regional Water Quality Control Board (RWQCB), through the GeoTracker online database, for the site address. The RWQCB indicated that they had no records for the site address. Based on this information, interviews were not conducted with RWQCB representatives.

7.3.2. Local Environmental Agencies

The City of Oakland Fire Department (OFD) was contacted during the preparation of this report. The OFD responded via email that they had no records on file for the site address,

due to the OFD transferring all files to the ACEHD in 2015, therefore no interviews with OFD representatives were conducted.

8. ASTM NON-SCOPE CONSIDERATIONS

Non-Scope considerations such as mold, radon, wetlands, asbestos, or flood zones were not addressed as part of this report.

9. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The following findings, opinions, conclusions and recommendations are provided.

9.1. Findings

- Historical research revealed that the site was developed in the late 1870s with an the Cole Grammar School on the southern portion of the site and several residential houses on the northern portion of the site. During the 1920s the original school building was burned down and the residential houses were demolished and they were replaced with a two-story elementary school building, a cafeteria building, five temporary classrooms, and a parking lot. In the 1950s several temporary classrooms were added and removed. In the late 1960s a Kindergarten building was constructed on the eastern portion of the site. In the early 1970s the Kindergarten building was removed and replaced with five portable buildings, which were later removed in the late 1970s. In the early 2010s the eastern portion of the parking lot on the site was fenced-off and used as the restricted parking of the Oakland School Police Department (OSPD), and a storage building was constructed in the northeastern corner of the site.
- On November 19th, 2019, Peter Sims of Ninyo & Moore conducted a site reconnaissance of the property. The reconnaissance involved a visual inspection of the site, and observations of adjoining properties. At the time of the reconnaissance, the approximate 2.59-acre site was developed with a two-story school building, a cafeteria building, a storage building, and a parking lot. According to Colland Jang, the site representative, the school building was used as an elementary school (Cole Elementary) until approximately 10 years ago. The OUSD special education program occupies the first floor of the school building and approximately 1/3 of the second floor as well as the former cafeteria building, while the OSPD occupies approximately 2/3 of the second floor.
- Interior construction materials included carpeting, ceramic floor tiles, painted and textured plaster walls, and plaster ceilings. Interior finishes appeared to be in good condition.
- The exterior of the buildings consisted of an asphalt parking area on the north side of the building.
- The areas surrounding the site consist primarily of residential buildings to the east south, and west, and an industrial building and a park to the north.
- Based on our site visit, there are currently no wells on the site.

- Ninyo & Moore did observe quantities of hazardous substances or petroleum products used or stored on site during our site reconnaissance. Diesel fuel that supplies the back up generator is stored within the back up generator.
- In August 1998 a 2,000-gallon heating oil tank, reportedly used to fuel the on-site boilers, was removed from the southern portion of the site by ACC Environmental Consultants (ACC). Soil samples were analyzed and only low to no concentrations of contaminants were detected in the soil. ACC recommended no further investigation. This is considered a HREC to the site.
- Indications of underground storage tanks (USTs), or hazardous material spills or leaks, were not observed during the site reconnaissance. The diesel fuel for the back up generator is stored in an aboveground storage tank (AST) inside the generator.
- In 1993 two 10,000-gallon petroleum fuel oil USTs and one 750-gallon diesel UST were removed from the California Cereal Products/Nabisco Brands Inc property located at 1267 14th Street, to the adjacent to the north of the site.
- Based on the age of the site buildings, lead from lead based paint, arsenic, and organochlorinated pesticides (OCPs), may be found in the soil surrounding the buildings. This is considered a REC.
- A waste incinerator is located in the basement on the site and could be a source of metals or semi-volatile organic compound (SVOC) contamination. This is considered a REC.
- Naturally occurring asbestos (NOA) can be found in some rocks, sediments, and soils throughout the world. According to the geotechnical report completed for the site included in Appendix D, there is no mapped sources of NOA in the site or site vicinity, therefore it is not considered a REC.
- In 1994, at the California Cereal Products/Nabisco Brands Inc property, five 55-gallon, two 30-gallon, and two 5-gallon containers of unknown substances were dumped and burned on the railroad tracks. The property is located downgradient of the site, to the north, at 1267 14th Street. The spill occurred approximately 300 feet north of the site. This was labeled as illegal dumping and Oakland Terminal Railroad took responsibility for the cleanup. Due to the exact location of the dumping being unknown, the quantity and type of contaminant being unknown, the fact that a clean up was completed, and that the dumping took place downgradient from the site, this is not considered a REC to the site.
- Review of an environmental database report obtained for this project indicated that the site is listed on several of the regulatory databases researched by Environmental Data Resources Inc. (EDR), including the CERS, EMI, HAZNET, and FINDS databases. The site is listed on the EMI database for emitting small amounts of organic hydrocarbon gases, carbon monoxide, oxides of Nitrogen and Sulfur, and particulate matter, from 2013 to 2017. The site is listed on the HAZNET database for disposing of several tons of

asbestos containing waste from 1992 to 2015. The site is also listed on the HAZNET database for disposing of 1.168 tons of polychlorinated biphenyls (PCBs) in 1994.

- Several off-site facilities were located within the EDR search radius from the site. None of the listed facilities are considered to be a REC to the site at this time based on several factors, including distance from the site, location relative to the regional groundwater flow direction (e.g. hydraulically downgradient or crossgradient to the site), database listing type, and affected media (soil only). Refer to Section 5.1.2 for additional information regarding potential off site facilities of concern.
- Based on the completion of the Vapor Encroachment Condition (VEC) screening matrix, it is presumed unlikely that a VEC currently exists beneath the site.

9.2. Conclusions

Ninyo & Moore has performed this ESA in conformance with the scope and limitations of ASTM E1527-13 of the OUSD Central Administrative Center property located at 1011 Union Street in Oakland, California. Based on the information compiled during the preparation of this report, this assessment has revealed no evidence of RECs in connection with the site at this time.

- The UST removed from the site by ACC Environmental Consultants in August 1998 represents a HREC to the site.
- Based on the age of the site buildings, lead from lead based paint, arsenic, and organochlorinated pesticides (OCPs), may be found in the soil surrounding the buildings. This is considered a REC to the site.
- A waste incinerator is located in the basement on the site and could be a source of metals or semi-volatile organic compound (SVOC) contamination. This is considered a REC to the site.

9.2.1. RECs

- Based on the age of the site buildings, lead from lead based paint, arsenic, and organochlorinated pesticides (OCPs), may be found in the soil surrounding the buildings. This is considered a REC to the site.
- A waste incinerator is located in the basement on the site and could be a source of metals or semi-volatile organic compound (SVOC) contamination. This is considered a REC to the site.

9.2.2. CRECs

CRECs were not identified during the preparation of this report.

9.2.3. HRECs

The following HRECs were identified during the preparation of this report.

- The UST removed from the site by ACC Environmental Consultants in August 1998 represents a HREC to the site.

9.2.4. De Minimis Conditions

De minimis conditions were not identified during the preparation of this report.

9.3. Recommendations

Based on the findings of this ESA, further investigation is recommended at this time.

- Based on the age of the site buildings, lead from lead based paint, arsenic, and organochlorinated pesticides, may be found in the soil surrounding the buildings. Soil samples should be collected around the perimeter of the buildings and analyzed for lead, arsenic, and OCPs.
- A waste incinerator is located in the basement on the site and could be a source of metals or semi-volatile organic compound (SVOC) contamination. Soil samples should be collected immediately adjacent to the incinerator and analyzed for metals and SVOCs.

9.4. Limiting Conditions/Deviations

This report was prepared in accordance with ASTM E1527-13. No deviations from the standard occurred in this ESA. Based on the information gathered by Ninyo & Moore for the purposes of this ESA, it is Ninyo & Moore's opinion the data obtained from the site reconnaissance, records reviewed, and interviews conducted, is adequate to make a conclusion on the environmental condition of the site with respect to the existence or lack of RECs associated with the site.

10. ENVIRONMENTAL PROFESSIONAL STATEMENT

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined by 312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Site Assessor



Luke I. Swickard
Staff Environmental Scientist

Senior Reviewer



Peter Sims
Project Environmental Geologist

Certification:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR Part 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Peter Sims - Project Environmental Geologist

11. REFERENCES

US Environmental Protection Agency (EPA). All Appropriate Inquiry (AAI), Title 40 of Code of Federal Regulations (CFR) Section 312.10.

ASTM International, 2013, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E1527-13.

California Department of Conservation, California Geological Survey (CGS), 2010. California Geomorphic Provinces, Note 36.

Environmental Data Resources, Inc., 2019, The Environmental Data Resources Sanborn Map Report, dated November 15, 2019.

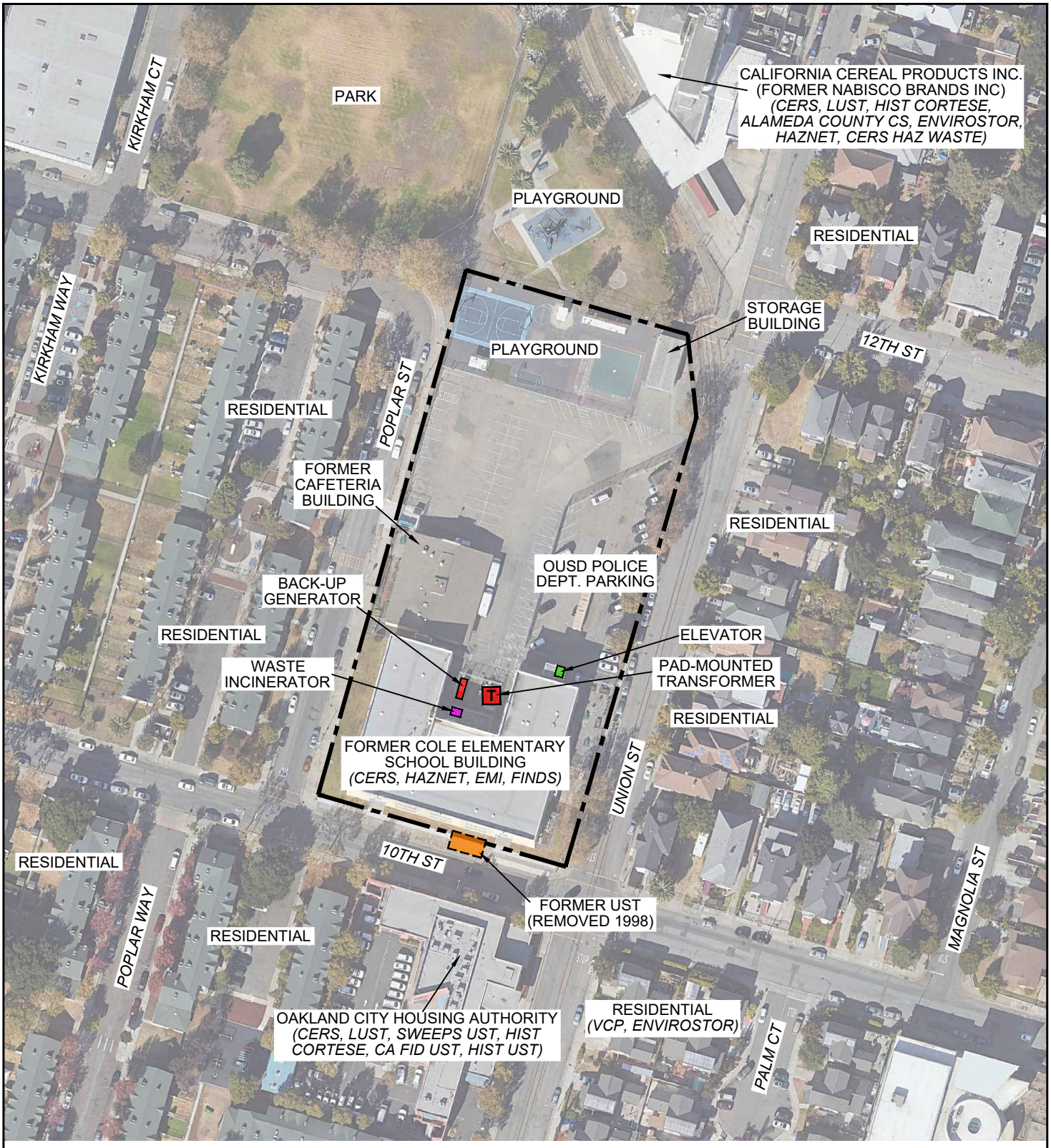
Environmental Data Resources, Inc., 2019, The Environmental Data Resources Aerial Photo Decade Package, dated November 15, 2019.

Environmental Data Resources, Inc., 2019, The Environmental Data Resources City Directory Report, dated November 15, 2019.

Environmental Data Resources, Inc., 2019, The Environmental Data Resources Historical Topographic Map Report, dated November 15, 2019.

Environmental Data Resources, Inc., 2019, The Environmental Data Resources Radius Map Report with GeoCheck, dated November 15, 2019.

FIGURES



LEGEND

SITE BOUNDARY

NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE I REFERENCE: GOOGLE EARTH, 2019

N

SCALE (FEET)

0 125 250

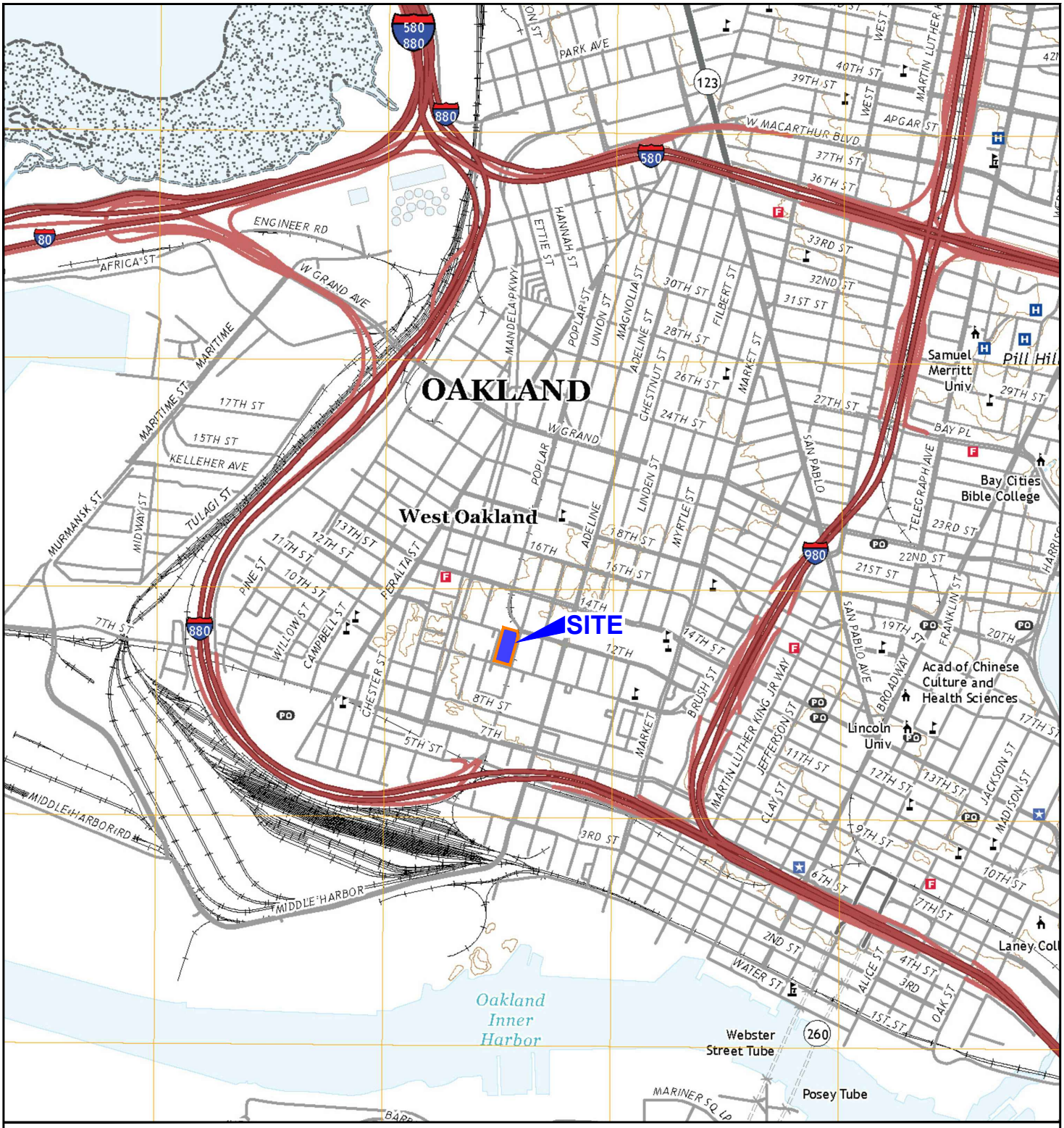
403668001.dwg 01/07/2020 AEK

FIGURE 2

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

SITE PLAN

PHASE I ENVIRONMENTAL SITE ASSESSMENT
1011 UNION STREET
OAKLAND, CALIFORNIA
403668001 I 01/20



403668001.dwg 01/07/2020 AEK

NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE I REFERENCE: USGS, 2018

N

SCALE (FEET)

0 2,000 4,000

FIGURE 1

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

SITE LOCATION

PHASE I ENVIRONMENTAL SITE ASSESSMENT
1011 UNION STREET
OAKLAND, CALIFORNIA
403668001 I 01/20

Appendix A:

RESUMES

LUKE I. SWICKARD

Staff Environmental Scientist

EDUCATION

B.S., Environmental Science and Management, 2017, University of California, Davis

EXPERIENCE HIGHLIGHTS

Phase I and II Environmental Site Assessments

Storm Water Pollution Prevention Plans (SWPPP)

Underground Telecommunication Vault Sampling

Hazardous waste handling, storage and facility auditing

PROFESSIONAL AFFILIATIONS

As a Staff Environmental Scientist, Mr. Swickard conducts Phase I Environmental Site Assessments and assists with the planning and implementation of Phase II soil, soil gas, and groundwater investigations. Past project types have included single-family residential developments, commercial facilities, city redevelopment areas, and large scale agricultural lands.

REPRESENTATIVE PROJECT EXPERIENCE

Former Richmond Hospital, Richmond, California: Provided project support for the completion of a Phase I Environmental Site Assessment (ESA) of the former Richmond Hospital for potential redevelopment. Ninyo & Moore conducted the Phase I ESA to evaluate the potential for Recognized Environmental Conditions (RECs) on or adjacent to the site. Phase I ESA Activities included reviewing historical and regulatory environmental data, conducting a site reconnaissance and preparing the Phase I ESA Report.

Floating Photovoltaic (PV) Solar Array, Windsor, California: Provided project support for the completion of a Phase I Environmental Site Assessment (ESA) of a proposed floating PV solar array on an existing water treatment facility. Ninyo & Moore conducted the Phase I ESA to evaluate the potential for Recognized Environmental Conditions (RECs) adjacent to the site so that electrical infrastructure could be installed from the floating PV solar array to a collection system. Phase I ESA Activities included reviewing historical and regulatory environmental data, conducting a site reconnaissance and preparing the Phase I ESA Report.

Multi-family Housing Project, Mountain View, California: Provided project support for the completion of a Phase I Environmental Site Assessment (ESA) on a multi-family housing complex to evaluate the potential for Recognized Environmental Conditions (RECs) on and adjacent to the site for planned redevelopment of the property. Phase I ESA Activities included reviewing historical and regulatory environmental data, conducting a site reconnaissance and preparing the Phase I ESA Report.

Agricultural land, Capay Valley, California: Provided project support for the completion of a Phase I Environmental Site Assessment (ESA) on an approximate 310-acre agricultural property that is utilized for cattle grazing and olive orchards. The Phase I ESA was conducted to evaluate the potential for Recognized Environmental Conditions (RECs) on and adjacent to the site for on-gong use of the property. Phase I ESA Activities included reviewing historical and regulatory environmental data, conducting a site reconnaissance and preparing the Phase I ESA Report.

PETER SIMS

PROJECT ENVIRONMENTAL GEOLOGIST

EDUCATION

B.A., Geology, 2006, University of California, Davis

REGISTRATIONS AND CERTIFICATIONS

OSHA 40-Hour Health & Safety Training with Annual Updates

OSHA 8-Hour Supervisor Training

OSHA Excavation Competent Person

EXPERIENCE HIGHLIGHTS

Phase I ESAs

Phase II Subsurface Investigations

Sampling Surveys

Installation and Development of Groundwater Monitoring Wells

PEA soil sampling

Pesticide and aerially deposited lead in soil sampling

As Project Environmental Geologist for Ninyo & Moore, Mr. Sims' is responsible for writing reports and conducting associated fieldwork for a variety of environmental projects, including Soil and Groundwater Management Plans; Phase I and Phase II Environmental Site Assessments; groundwater remediation; and soil remediation. His fieldwork experience includes air, soil and groundwater sample collection, groundwater monitoring well installations/destructions, soil-vapor well installation and monitoring, and remediation system installation and maintenance. Through the course of his work, Mr. Sims has become adept at communicating with clients and regulatory agencies, safely and efficiently performing fieldwork, analyzing and compiling data, writing reports and managing his time.

REPRESENTATIVE PROJECT EXPERIENCE

East Bay Regional Parks District (EBRPD), Eastshore Park/Berkeley Brickyard, Stockpile Sampling and Reporting, Berkeley, California: Project Manager for preparation and performing sampling of a 250,000 cubic yard stockpile in two phases as well as reporting to evaluate the suitability of the stockpiled soil for reuse at the Point Pinole Regional Shoreline under EBRPD requirements and for reuse at the various Eastshore Park properties under the Regional Water Quality Control Board cleanup requirements. Activities conducted included soil sampling and report writing.

Oakland Unified School District, Downtown Education Complex/Pipeline Risk Assessment (PRA), Railroad Safety Study (RSS), Removal Action (RA) Implementation, and Operations & Maintenance (O&M) Activities, Oakland, California: Performed a PRA and RSS under California Department of Toxic Substances Control (DTSC) oversight to evaluate suitability of the site for use as a school. Project Manager for RA implementation and O&M activities under DTSC oversight to address environmental conditions revealed in previous environmental investigations. Activities conducted include historical research, regulatory file reviews, interviews, report writing, soil vapor well installation, and soil and soil vapor sampling.

Resources for Community Development, Ashland Housing Project, Phase I Environmental Site Assessment (ESA), Phase II ESA, Interim Removal Action Plan (IRAP) Preparation and Implementation, Ashland, California: Project Manager for preparation of a Phase I ESA, Phase II ESA, and IRAP as well as implementation of the IRAP under Alameda County Department of Environmental Health (ACDEH) oversight to evaluate the suitability of the site for redevelopment as low-income housing. Activities conducted included historical research, regulatory file reviews, interviews, soil sampling, impacted soil excavation oversight, and report writing.

Former Bill Chun Service Station, Soil, Soil Vapor, and Indoor Air Sampling, Groundwater Monitoring, Site Investigation (SI) Report, Corrective Action Plan (CAP), O&M Plan, Alameda, California: Project manager and field staff for sampling of soil, soil vapor, indoor air and groundwater and provided oversight of groundwater monitoring well installation under ACDEH oversight. Project manager for preparation of multiple semi-annual groundwater monitoring reports, an SI Report, a CAP detailing enhanced bioremediation by groundwater recirculation, and an O&M Plan for remediation of a release from former underground storage tanks.

City of Oakland Public Works Agency On Call Environmental Services Contract, Oakland, California: Project manager for the City of Oakland On-Call Environmental Services contract. The scope of services for the contract includes preparation of Phase I and Phase II ESAs for evaluation of soil to be disturbed in the maintenance of sewers and storm drains.

Kristopher M. Larson, PG, QSD/QSP

Principal Environmental Geologist



EDUCATION

B.S., Geology, 1996, San Francisco State University

REGISTRATIONS/CERTIFICATIONS

PG 8059 (California)

Qualified SWPPP Practitioner (QSP) and Qualified SWPPP Developer (QSD), #20715 (California)

As a Principal Environmental Geologist for Ninyo & Moore, Mr. Larson has 25 years of environmental experience. He is the Operations Manager for environmental services in Ninyo & Moore's Alameda office and his areas of expertise include Brownfields investigations and remediation, transactional environmental due diligence, subsurface site characterization, storm water management, site remediation and construction/ demolition planning and supervision. Prior to joining Ninyo & Moore, Mr. Larson worked as an environmental specialist at the San Francisco Bay Regional Water Quality Control Board (RWQCB). He has worked closely with all local, state and federal environmental agencies, including the California EPA Department of Toxic Substances Control (DTSC), United States Environmental Protection Agency (US EPA), RWQCB, Army Corps of Engineers, and numerous local oversight programs.

EXPERIENCE

Oakland Unified School District, Downtown Campus, Oakland, California: Principal-In-Charge responsible for technical oversight which included working closely with the DTSC in preparing a Preliminary Site Investigation (PSI), Supplemental Site Investigation (SSI), and Remedial Action Plan (RAP) for investigation and remediation of metal and petroleum impacted soil on the site property. Mr. Larson was involved in report review and project oversight, as well as client correspondence. The plan development for this site is the construction of two intermediate schools and an administrative building.

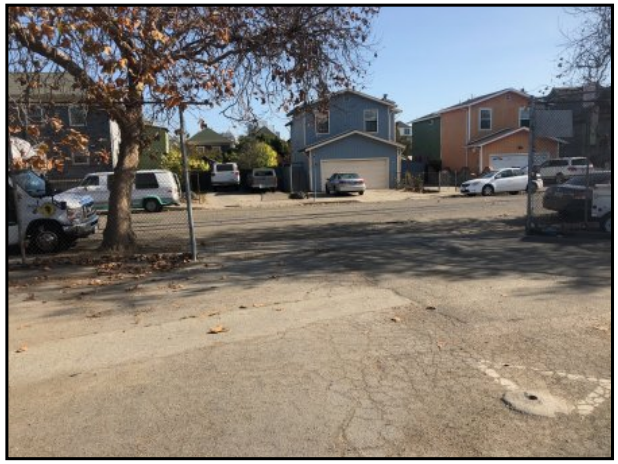
Oakland Unified School District, Oakland, California: Principal-In-Charge responsible for technical oversight of numerous OUSD projects including La Escuelita Education Center, Life Academy and the Calvin Simmons School. A Phase I Environmental Site Assessment (ESA) was prepared for each of these facilities, and a Phase II ESA was prepared for the Calvin Simmons School. At the La Escuelita and Life Academy facilities we worked closely with the Department of Toxic Substances Control in preparing a Preliminary Environmental Evaluations (PEA) and Supplemental Site Investigation. We also prepared a pipeline risk analysis, an indoor air sampling event and a Remedial Action Plan for investigation and remediation of metal and petroleum impacted soil for La Escuelita. Mr. Larson's responsibilities included report review and project oversight, as well as client and regulatory correspondence.

Oakland Unified School District, Downtown Education Complex, Phase I ESA, PRA, RSS, PEA, SSI & Removal Action Workplan (RAW): Principal-In-Charge responsible for for a Phase I ESA, PEA, SSI, RAW preparation and implementation under DTSC oversight to evaluate suitability and prepare the site for use as a school. Activities conducted include evaluation of potential hazards associated with multiple large diameter natural gas transmission lines, high volume water lines, and petroleum product pipelines in the site vicinity; evaluation of potential hazards associated with the presence of railroad tracks in the site vicinity which are also adjacent to petroleum pipelines; PEA and SSI work plan preparation; soil, groundwater, soil vapor and indoor air sampling to evaluate contamination from metals in shallow soil and contamination from petroleum products associated with on-site and off-site leaking USTs; risk assessment preparation; RAW preparation including coordinating public participation; oversight of remediation activities; and preparation of a Remedial Action Completion Report.

Oakland Unified School District, Phase I Environmental Site Assessment (ESA), Life Academy High School, Oakland, California: Principal Environmental Geologist providing technical consultation for Phase I ESA at the high school site.

Appendix B:

SITE PHOTOGRAPHS



1 : View of the entrance to the parking lot on the site, facing east.



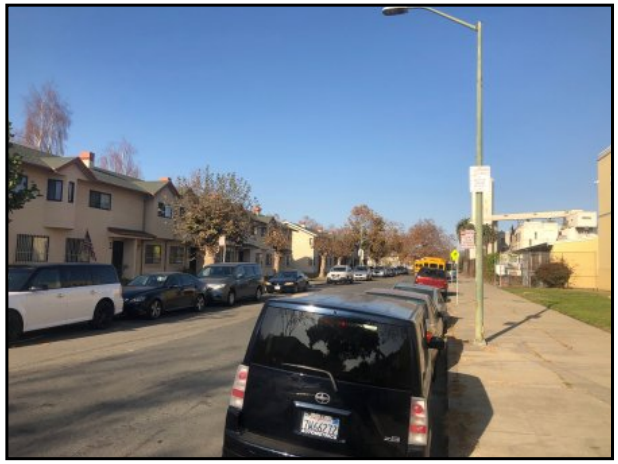
2 : View down Union Street, facing north.



3 : View down Union Street, facing south.



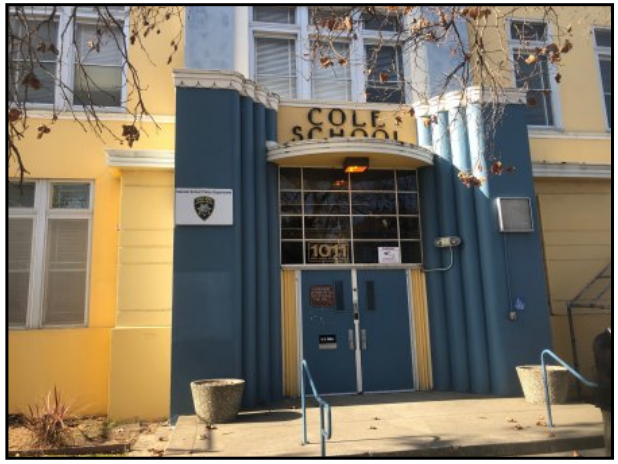
4 : View down 10th Street, facing west.



5 : View down Poplar Street, facing north.



6 : View of the exterior of the site, facing south.



7 : View of the eastern exterior of the building.



8 : View of the southern exterior of the building.



9 : View of the western exterior of the building.



10 : View of the property adjacent to the east of the site.



11 : View of the property adjacent to the west of the site.



12 : View of the property adjacent to the south of the site.



13 : View of a satalite office of the OUSD Police Department.



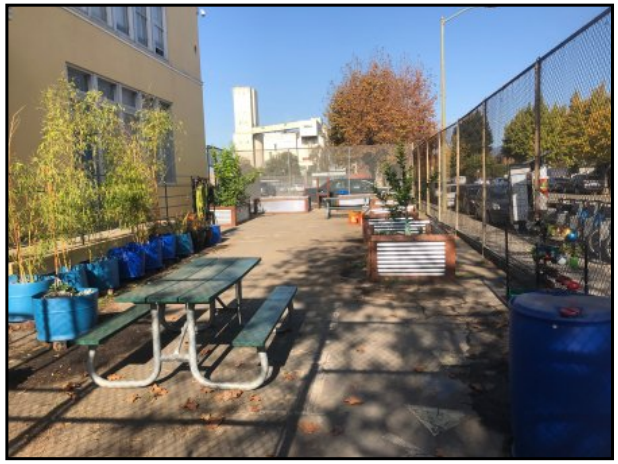
14 : View of the parking lot facing west.



15 : View of the property adjacent to the north of the site.



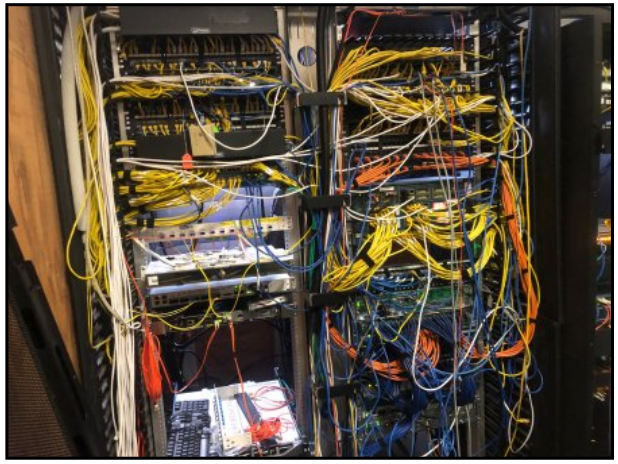
16 : View of the parking lot facing southeast.



17 : View of an exterior garden area.



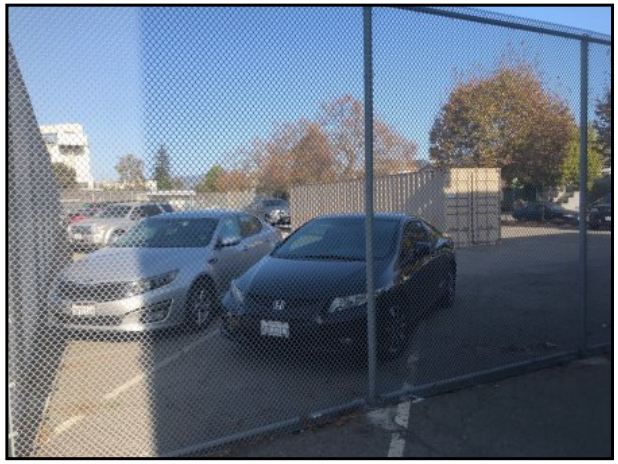
18 : View of the IT storage room.



19 : View of the IT server room.



20 : View of the on-site elevator.



21 : View of the restricted OUSD Police Department parking lot.



22 : View of the old cafeteria building, facing west.



23 : View of the on-site generator.



24 : View of the on-site transformers.



25 : View of an on-site waste incinerator.



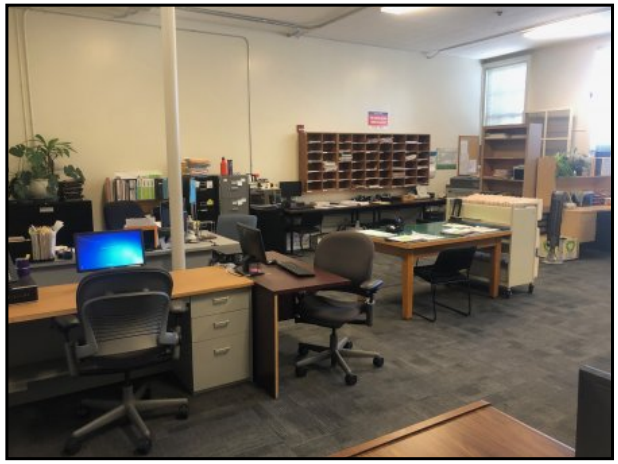
26 : View of a boiler in the boiler room.



27 : View of a boiler in the boiler room.



28 : View of the sump in the boiler room.



29 : View of a representative office used by the special education department, in the old cafeteria building.



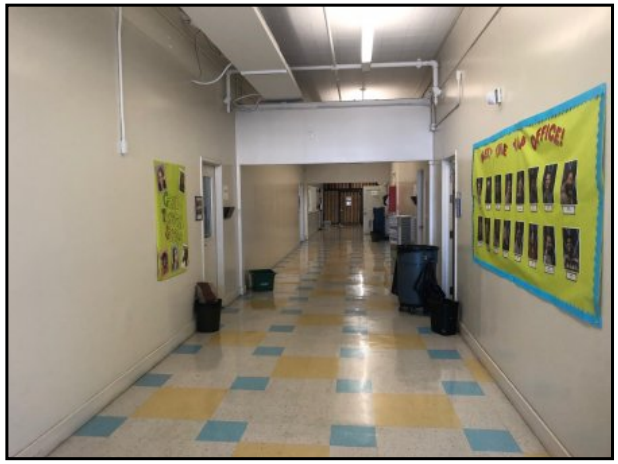
30 : View of the records room used by the special education department, in the old cafeteria building.



31 : View of the old kitchen formerly used by the special education department, in the old cafeteria building.



32 : View of the municipal trash storage area.



33 : View of a representative hallway.



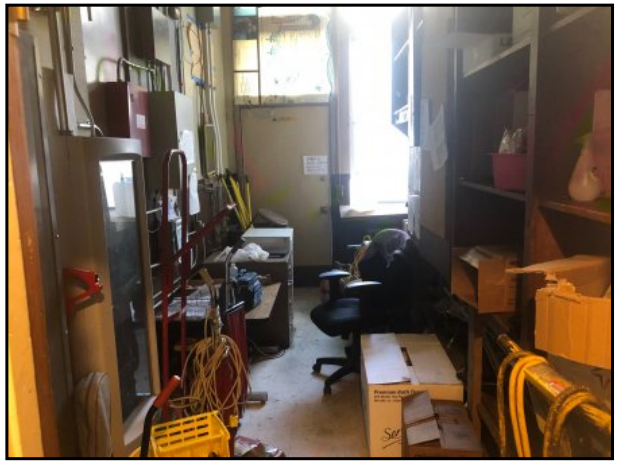
34 : View of a representative office used by the OUSD Police Department.



35 : View of the elevator equipment room.



36 : View of the auditorium.



37 : View of the janitors closet.

Appendix C:

ENVIRONMENTAL DATA RESOURCES (EDR) RADIUS MAP REPORT

OUSD Central Administrative Center
1011 Union Street
Oakland, CA 94607

Inquiry Number: 5871762.2s
November 15, 2019

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	944
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-7
Physical Setting Source Map	A-9
Physical Setting Source Map Findings	A-11
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1011 UNION STREET
OAKLAND, CA 94607

COORDINATES

Latitude (North):	37.8079580 - 37° 48' 28.64''
Longitude (West):	122.2896050 - 122° 17' 22.57''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	562535.1
UTM Y (Meters):	4184540.2
Elevation:	20 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5641112 OAKLAND WEST, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140608
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
1011 UNION STREET
OAKLAND, CA 94607

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	OAKLAND UNIFIED SCHO	1011 UNION STREET	EMI, HAZNET, CERS		TP
A2	COLE MIDDLE SCHOOL	1011 UNION ST	HAZNET		TP
A3	OUSD - COLE ELEMENTA	1011 UNION ST	HAZNET		TP
A4	OAKLAND UNIFIED SCHO	1011 UNION STREET	FINDS		TP
A5	OAKLAND UNIFIED SCHO	1011 UNION ST	HAZNET		TP
A6	1X COLE ELEMENTARY	1011 UNION ST	HAZNET		TP
Reg	OAKLAND ARMY BASE (C		DOD	Same	5135, 0.973, NW
Reg	AMCO CHEMICAL	1414 THIRD STREET	NPL, SEMS, RCRA-VSQG, ENVIROSTOR, HIST Cal-Sites,...	Same	1887, 0.357, SW
B7	OAKLAND CITY OF HOUS	935 UNION ST	LUST, SWEEPS UST, HIST UST, CA FID UST, HIST...	Higher	9, 0.002, South
B8	WEST DISTRICT OFFICE	935 UNION ST	HIST UST	Higher	9, 0.002, South
C9	NAVAL SUPPLY CENTER,	1200 12TH STREET	CERS TANKS	Higher	342, 0.065, ENE
C10	NAVAL SUPPLY CENTER,	1200 12TH STREET	UST	Higher	342, 0.065, ENE
D11	CALIFORNIA CEREAL PR	1267 14TH ST	RCRA NonGen / NLR	Higher	352, 0.067, NNE
D12	NABISCO BRANDS INC	1267 14TH ST	ENVIROSTOR, LUST, Alameda County CS, HIST CORTESE,...	Higher	352, 0.067, NNE
D13	CALIFORNIA CEREAL PR	1267 14TH ST	CERS HAZ WASTE, HAZNET, CERS	Higher	352, 0.067, NNE
D14	NABISCO BRANDS	1267 14TH ST	HIST UST	Higher	352, 0.067, NNE
D15	STEPHEN R BELL	1267 14TH ST	HIST UST, PEST LIC	Higher	352, 0.067, NNE
D16	NABISCO BRANDS, INC.	1267 14TH STREET	Notify 65	Higher	352, 0.067, NNE
C17	GIBSON PAINT COMPANY	1199 12TH ST E	LUST	Higher	375, 0.071, ENE
D18	LALLY J L	1308 UNION AVE	EDR Hist Auto	Higher	401, 0.076, NNE
E19	NATIONAL RECYCLING C	1312 KIRKHAM ST	CERS HAZ WASTE, CERS	Lower	475, 0.090, NNW
E20	NATIONAL RECYCLING C	1312 KIRKHAM ST	RCRA NonGen / NLR	Lower	475, 0.090, NNW
E21	NATIONAL RECYCLING C	1312 KIRKHAM ST	SWRCY, NPDES, PROC, WDS, CIWQS	Lower	475, 0.090, NNW
F22	ACORN TOWERS	914 UNION ST	RCRA NonGen / NLR	Higher	479, 0.091, South
F23	ACORN TOWERS / 910 U	910 UNION ST	RCRA NonGen / NLR	Higher	484, 0.092, South
F24	PALM COURT	902 UNION STREET	ENVIROSTOR, VCP	Higher	495, 0.094, South
25	BERG, ANNA	1015 ADELINE STREET	RCRA NonGen / NLR	Higher	621, 0.118, ESE
E26	TALLARICO PHILIP	1333 14TH ST	EDR Hist Auto	Lower	622, 0.118, North
F27	DARRYL BRICE	808 UNION ST	RCRA NonGen / NLR	Higher	627, 0.119, South
E28	CARNATION DIARIES	1310 14TH ST	RCRA-SQG, LUST, CPS-SLIC, Alameda County CS,...	Lower	664, 0.126, North
E29	CARNATION DAIRIES	1310 14TH STREET/131	RESPONSE, ENVIROSTOR, CERS	Lower	664, 0.126, North
E30	FORMER OAKLAND CARNA	1310 14TH ST	HIST UST, HAZNET	Lower	664, 0.126, North
G31	COMM AIR	1266 14TH ST	LUST, Alameda County CS, SWEEPS UST, HIST CORTESE,...	Lower	669, 0.127, NNE
G32	CARRON AIR	1266 14TH ST	HIST UST	Lower	669, 0.127, NNE
G33	COMMAIR MECHANICAL S	1266 14TH STREET	ENVIROSTOR	Lower	669, 0.127, NNE
G34	COMMAIR OAKLAND	1266 14TH ST	RCRA-SQG	Lower	669, 0.127, NNE
H35	COCA COLA	1340 MANDELA PARKWAY	LUST, Alameda County CS, CERS	Lower	672, 0.127, NNW
E36	AUTO CHLOR PROJ	1350 14TH ST	ENVIROSTOR, CIWQS	Lower	676, 0.128, North
E37	AUTO-CHLOR SYSTEM	1350 14TH STREET	CERS HAZ WASTE, CERS	Lower	676, 0.128, North

MAPPED SITES SUMMARY

Target Property Address:
1011 UNION STREET
OAKLAND, CA 94607

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
E38	UNITED TECHNOLOGIES	1358 14TH ST	RCRA-SQG, HAZNET	Lower	676, 0.128, North
E39	OTIS ELEVATOR COMPAN	1358 14TH ST	CERS HAZ WASTE, CERS	Lower	676, 0.128, North
G40	VACANT LOT SABEK INC	1230 14TH ST	LUST, Alameda County CS, HIST UST, Cortese, EMI,...	Lower	684, 0.130, NNE
G41	SABEK, INC.	1230 14TH ST	HIST UST	Lower	684, 0.130, NNE
H42	PACIFIC RIM	1338 CYPRESS AVE AT	RCRA-SQG, FINDS, ECHO	Lower	761, 0.144, NNW
H43	COCA COLA	1340 CYPRESS	HIST CORTESE	Lower	764, 0.145, NNW
H44	OAKLAND PRODUCTION A	1340 CYPRESS ST	SWEEPS UST, CA FID UST	Lower	764, 0.145, NNW
H45	COCA-COLA BOTTLING C	1340 CYPRESS ST	RCRA-SQG	Lower	764, 0.145, NNW
H46	COCA COLA BOTTLING O	1340 CYPRESS STREET	RCRA NonGen / NLR	Lower	764, 0.145, NNW
H47	OAKLAND PRODUCTION A	1340 CYPRESS ST	HIST UST	Lower	764, 0.145, NNW
I48	ACORN TOWERS	1174 8TH STREET	RCRA NonGen / NLR	Higher	818, 0.155, SSE
J49	1125 MANDELA PKWY	1125 MANDELA PKWY	CPS-SLIC, Alameda County CS, CERS	Higher	821, 0.155, WNW
J50	1125 MANDELA REUSE	1125 MANDELA PARKWAY	CPS-SLIC, Alameda County CS, CERS	Higher	821, 0.155, WNW
51	MANDELA TRUCKING	1225 MANDELA PKWY	LUST, Alameda County CS, Cortese, HIST CORTESE	Higher	823, 0.156, NW
J52	THOMPSON PROPERTY	1409-1417 12TH STREE	LUST, Alameda County CS, CERS	Higher	829, 0.157, WNW
I53	ACORN	1162 8TH ST	RCRA NonGen / NLR	Higher	856, 0.162, SSE
K54	NABISCO BRANDS	1267 014TH ST	SWEEPS UST, CA FID UST	Lower	858, 0.162, North
L55	AT SYTEMS INTERNATIO	1333 8TH STREET	AST	Lower	888, 0.168, SW
L56	ARMORED TRANSPORT	1333 8TH ST	RCRA-SQG, LUST, Alameda County CS, FINDS, ECHO,...	Lower	888, 0.168, SW
I57	ACORN	831 ADELINE STREET	RCRA NonGen / NLR	Higher	896, 0.170, SSE
K58	SABEK, INC.	1230 014TH ST	SWEEPS UST, CA FID UST	Lower	918, 0.174, North
M59	THE CRUCIBLE	1260 7TH ST	RCRA NonGen / NLR	Lower	1050, 0.199, SSW
M60	THE CRUCIBLE	1260 7TH ST	CERS HAZ WASTE, CERS	Lower	1050, 0.199, SSW
61	WEST OAKLAND AREA I	7TH STREET BETWEEN P	US BROWNFIELDS, FINDS	Higher	1101, 0.209, West
M62	WILLIE EVERIDGE	1211 007TH ST	CA FID UST	Lower	1137, 0.215, SSW
N63	ALL MERCEDES DISMANT	1225 7TH ST	SWEEPS UST, CA FID UST	Lower	1182, 0.224, South
N64	ZENTRUM MOTORS	1225 7TH ST	CERS HAZ WASTE, CERS	Lower	1182, 0.224, South
N65	ZENTRUM MOTORS	1225 7TH ST	AST	Lower	1182, 0.224, South
N66	ZENTRUM MOTORS	1225 7TH ST	RCRA NonGen / NLR	Lower	1182, 0.224, South
N67	ALL MERCEDES DISMANT	1225 SEVENTH ST	RCRA-SQG	Lower	1182, 0.224, South
N68	ALL MERCEDES DISMANT	1255 7TH ST	LUST, Alameda County CS, HIST CORTESE, CERS	Lower	1190, 0.225, South
O69	OAKLAND FIRE SERVICE	1445 14TH ST	RCRA-SQG, FINDS, ECHO, HAZNET	Lower	1197, 0.227, NW
O70	FIRE STATION #03	1445 14TH ST	AST	Lower	1197, 0.227, NW
O71	FIRE STATION #03	1445 14TH ST	CERS TANKS, CERS	Lower	1197, 0.227, NW
O72	CITY OF OAKLAND FIRE	1445 14TH ST.	AST	Lower	1197, 0.227, NW
P73		800 CENTER ST.	RCRA-LQG	Lower	1204, 0.228, WSW
P74	CHEVRON USA STATION	800 CENTER ST	RCRA NonGen / NLR	Lower	1204, 0.228, WSW
P75	SIGNAL SS/CHEVRON 20	800 CENTER ST	LUST, CPS-SLIC, Alameda County CS, Cortese, HIST...	Lower	1204, 0.228, WSW
N76	WILLIE EVERIDGE	1211 7TH ST	HIST UST	Lower	1208, 0.229, South

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N77	FORMER EVERIDGE SERV	1211 7TH	LUST, Cortese, CERS	Lower	1208, 0.229, South
N78	EVERIDGE SERVICE COM	1211 7TH ST	LUST, Alameda County CS, SWEEPS UST, HIST CORTESE	Lower	1208, 0.229, South
Q79	ARMORED TRANSPORT IN	1333 7TH ST	SWEEPS UST	Lower	1221, 0.231, SW
80	CONTAINER CARE LIMIT	1350 16TH ST	LUST, Alameda County CS, HIST CORTESE, CERS	Lower	1221, 0.231, North
Q81	KELLY'S TRUCK REPAIR	1390 7TH ST	LUST, Alameda County CS, HIST CORTESE	Lower	1242, 0.235, SW
O82	NEW OAKLAND FIRE STA	CENTER AND 14TH STRE	ENVIROSTOR, VCP	Lower	1257, 0.238, NW
R83	ARNICE RODGERS	1109 LINDEN STREET	RCRA NonGen / NLR	Higher	1268, 0.240, ESE
R84	DOROTHY WHITEHEAD	1127 LINDEN STREET	RCRA NonGen / NLR	Higher	1269, 0.240, East
85	MANDELA GATEWAY REDE	0 7TH ST & MANDELA	CPS-SLIC, Alameda County CS, CERS	Lower	1285, 0.243, WSW
N86	5TH ST AND MAGNOLIA	0 5TH ST & MAGNOLIA	CPS-SLIC, CERS	Lower	1342, 0.254, South
Q87	CHRYSLER AUTO UNLOAD	1401 7 MIDDLE HARBOR	HIST CORTESE	Lower	1345, 0.255, SW
S88	J & A TRUCK REPAIR	500 KIRKHAM ST	ENVIROSTOR, LUST, Alameda County CS, VCP, Cortese,...	Lower	1354, 0.256, SSW
S89	SMILO CHEMICAL COMPA	500 KIRKHAM ST	SEMS-ARCHIVE, RCRA-SQG, FINDS, ECHO	Lower	1354, 0.256, SSW
Q90	CHEVRON	1395 7TH ST	LUST	Lower	1362, 0.258, SW
Q91	TRUCKER'S FRIEND	1395 7TH	LUST, Alameda County CS, Cortese, HIST CORTESE	Lower	1362, 0.258, SW
92	UNION PACIFIC RAILRO	CROSS 5TH & UNION	CPS-SLIC, NON-CASE INFO	Lower	1367, 0.259, SSW
N93	CONDOR FREIGHT LINES	324 UNION ST	ENVIROSTOR, LUST, Alameda County CS, VCP, SWEEPS...	Lower	1397, 0.265, SSW
S94	CONTAINER FREIGHT	1285 5TH ST	ENVIROSTOR, LUST, Alameda County CS, VCP, Cortese,...	Lower	1526, 0.289, SSW
T95	CALTRANS CYPRESS PRO	UNKNOWN 5TH & ADELIN	LUST, HIST CORTESE	Lower	1568, 0.297, South
96	RED STAR YEAST / 139	1396 5TH	CPS-SLIC, Alameda County CS, CERS	Lower	1581, 0.299, SW
S97	SOUTHERN PACIFIC TRA	0 5TH AVE & KIRKHAM	LUST, Alameda County CS, CERS	Lower	1588, 0.301, SSW
T98	CALTRANS CYPRESS PRO	0 5TH ST AND ADELINE	LUST, Alameda County CS, CERS	Lower	1589, 0.301, South
T99	RINO PACIFIC OAKLAND	1107 5TH ST	LUST, Alameda County CS, HIST UST, HIST CORTESE,...	Lower	1602, 0.303, South
100	PACIFIC BELL	1075 7TH	LUST, Alameda County CS, CERS	Lower	1616, 0.306, SSE
U101	OSAGIE PROPERTY	1532 PERALTA STREET	LUST, Alameda County CS, Cortese, CERS	Lower	1617, 0.306, NNW
V102	WEST OAKLAND BART ST	1451 7TH STREET	ENVIROSTOR, VCP	Lower	1633, 0.309, WSW
V103	WEST OAKLAND BART ST	1451 7TH STREET	US BROWNFIELDS, FINDS	Lower	1633, 0.309, WSW
U104	MANNY SERVICES	1600 PERALTA STREET	SEMS-ARCHIVE	Lower	1698, 0.322, NNW
U105	MANNYSERVICES/MCKINN	1600 PERALTA	ENVIROSTOR	Lower	1698, 0.322, NNW
W106	VEND MART PROPERTY	1035 7TH ST	ENVIROSTOR, LUST, Alameda County CS, VCP, HIST...	Higher	1838, 0.348, SSE
107	RELIABLE HANDI CAB	1520 7TH ST	LUST, Alameda County CS, HIST CORTESE, CERS	Lower	1847, 0.350, WSW
X108	CALIFORNIA SODA COMP	355 MANDELA PARKWAY	ENVIROSTOR, HAZNET	Lower	1907, 0.361, SW
X109	CALIFORNIA SODA COMP	355 MANDELA PARKWAY	SEMS-ARCHIVE	Lower	1907, 0.361, SW
Y110	WESTERN PACIFIC RAIL	UNION STREET	ENVIROSTOR, VCP, DEED	Lower	1933, 0.366, South
W111	CHANG'S AUTOMOTIVE	1009 7TH STREET	ENVIROSTOR, VCP, HAZNET	Higher	1940, 0.367, SSE
X112	SF BAY AREA RAPID TR	349 MANDELA PKWY	RESPONSE, ENVIROSTOR, HIST Cal-Sites	Lower	1947, 0.369, SW
Y113	THE BURKE COMPANY	310 UNION	CPS-SLIC, Alameda County CS, CERS	Lower	1984, 0.376, South
114	PACIFIC PIPE COMPANY	1901 POPLAR ST	LUST, Alameda County CS, SWEEPS UST, CA FID UST,...	Lower	1993, 0.377, North
115	AMTRAK MAINTENANCE F	3RD & UNION STREETS	ENVIROSTOR, VCP, DEED	Lower	1995, 0.378, SSW

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116	HALL PROPERTY	1455 5TH	CPS-SLIC, Alameda County CS, CERS	Lower	2014, 0.381, SW
Z117	ALTA PLATING & CHEMI	1433 18TH STREET	ENVIROSTOR	Lower	2028, 0.384, NNW
AA118	FORMER ADELINE CLEAN	979 7TH ST	CPS-SLIC, Alameda County CS, BROWNFIELDS, CERS	Higher	2073, 0.393, SE
119	GARDINER MFG COMPANY	1920 UNION ST	LUST, Alameda County CS, HIST CORTESE, CERS	Lower	2111, 0.400, NNE
AB120	RELIANCE UPHOLSTERY	1614 CAMPBELL ST	RCRA-LQG, ENVIROSTOR, Alameda County CS, VCP,...	Lower	2122, 0.402, NNW
AB121	GREITZER PROPERTY	1614 CAMPBELL ST	LUST, CERS	Lower	2122, 0.402, NNW
122	ARATEX SERVICES, INC	330 CHESTNUT ST	RCRA-SQG, LUST, Alameda County CS, SWEEPS UST,...	Lower	2138, 0.405, SSE
AA123	MICRONESIAN CARGO IN	955 7TH STREET	ENVIROSTOR, VCP, HAZNET	Higher	2175, 0.412, SE
Z124	MARK ABOUDI PROPERTY	1639 18TH STREET	ENVIROSTOR, VCP, DEED, HAZNET	Lower	2176, 0.412, NNW
Z125	BERCOVICH, A., CO. A	1639 18TH	SEMS, LEAD SMELTERS	Lower	2176, 0.412, NNW
Z126	FOOD EXPRESS INC	1639 18TH ST	ENVIROSTOR, NPDES, CIWQS	Lower	2176, 0.412, NNW
127	OAKLAND WAREHOUSE	1221 3RD ST	LUST, Alameda County CS, SWEEPS UST, CA FID UST,...	Lower	2202, 0.417, South
Z128	CADEMARTORI TRUCKING	1833 PERALTA ST	LUST, Alameda County CS, SWEEPS UST, HIST UST, CA...	Lower	2216, 0.420, NNW
Z129	CADOMARTORI TRUCKING	1833 PERALTA ST	LUST	Lower	2216, 0.420, NNW
AC130	WEST OAKLAND LEAD	1414 3RD STREET	SEMS	Lower	2278, 0.431, SW
AC131	DC METALS	1414 3RD ST	LUST, Alameda County CS, HIST UST, Cortese, HIST...	Lower	2278, 0.431, SW
AC132	BOBO'S JUNKYARD	1401 THIRD STREET	ENVIROSTOR, VCP, DEED	Lower	2347, 0.445, SW
AD133	CITY OF OAKLAND (PUB	1368 WILLOW ST	ENVIROSTOR, VCP, HAZNET	Lower	2356, 0.446, NW
AE134	FACILITY 10201-1	1121 3RD	HIST CORTESE, NPDES, CIWQS, CERS	Lower	2356, 0.446, South
AE135	NOR CAL METAL FABRIC	1121 3RD ST	SEMS-ARCHIVE, RCRA-SQG, FINDS, ECHO	Lower	2356, 0.446, South
AF136	DTSC AT 528 LEWIS ST	528 LEWIS ST	RESPONSE, ENVIROSTOR, HAZNET	Lower	2403, 0.455, WSW
AF137	528 LEWIS STREET	528 LEWIS STREET	HIST Cal-Sites, CERS	Lower	2403, 0.455, WSW
AF138	LOT AT 530-542 LEWIS	530-542 LEWIS STREET	SEMS-ARCHIVE	Lower	2413, 0.457, WSW
AG139	ACME GALVANIZING	1655 17TH	ENVIROSTOR, CPS-SLIC, Alameda County CS, CERS	Lower	2414, 0.457, NNW
AG140	ACME GALVANIZING CO	1655 17TH ST	SEMS, RCRA-SQG	Lower	2414, 0.457, NNW
AD141	WILLOW PARK	14TH AND WILLOW ST W	US BROWNFIELDS, FINDS	Lower	2427, 0.460, NW
142	EAST BAY FORD TRUCK	333 FIBERT ST	RCRA-SQG, LUST, CPS-SLIC, Alameda County CS,...	Lower	2429, 0.460, SSE
AH143	JR USED AUTO PARTS	823 12TH	HIST CORTESE	Higher	2440, 0.462, ESE
AH144	JB AUTO	819 12TH	CPS-SLIC, CERS	Higher	2440, 0.462, ESE
145	EAST BAY MUNICIPAL U	1200 21ST STREET	RCRA-LQG, LUST, Alameda County CS, FINDS, ECHO,...	Lower	2471, 0.468, NNE
146	SUNSET WHOLESALE COM	105 EMBARCADERO AVE	LUST, Alameda County CS, HIST CORTESE, CERS	Lower	2490, 0.472, South
AG147	ROADWAY EXPRESS INC	1708 WOOD ST	LUST, CPS-SLIC, Alameda County CS, SWEEPS UST, CA...	Lower	2521, 0.477, NNW
148	FRANK'S TIRE SERVICE	1115 21ST ST	LUST, Alameda County CS	Lower	2525, 0.478, NE
149	OAK VILLAGE APARTMEN	780 AND 828 13TH STR	CPS-SLIC, CERS	Higher	2526, 0.478, East
AG150	WEST OAKLAND III	WOOD, 9TH, 12TH AND	US BROWNFIELDS, FINDS	Lower	2547, 0.482, NNW
AG151	WEST OAKLAND AREA II	WOOD AND PERALTA STR	US BROWNFIELDS, FINDS	Lower	2547, 0.482, NNW
AI152	BASF CORPORATION	1545 WILLOW ST	LUST, RCRA NonGen / NLR, FINDS, ECHO, CERS	Lower	2562, 0.485, NW
AI153	INMONT CORPORATION	1545 WILLOW STREET	ENVIROSTOR, LUST, Alameda County CS, HIST UST,...	Lower	2562, 0.485, NW
AJ154	NORCAL METAL FABRICA	114 ADELINE ST	LUST, Alameda County CS, HIST CORTESE, CERS	Lower	2627, 0.498, South

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AJ155	LEHAR SALES	150 CHESTNUT ST	LUST, Alameda County CS, CHMIRS, HIST CORTESE,...	Lower	2637, 0.499, South
AK156	SOUTHERN PACIFIC 3RD	1509/1513 THIRD STRE	ENVIROSTOR, VCP	Lower	2640, 0.500, SW
AK157	1536 THIRD STREET	1536 THIRD STREET	ENVIROSTOR	Lower	2758, 0.522, SW
158	TAYLOR ROOF STRUCTUR	1769 13TH STREET	Notify 65	Lower	2770, 0.525, WNW
AK159	SO. PRESCOTT NEIGHBO	3RD STREET	ENVIROSTOR, VCP	Lower	2804, 0.531, SW
160	FRANCIS PLATING OF O	785 7TH ST	SEMS, CORRACTS, RCRA-TSDF, RCRA-SQG, ENVIROSTOR,	Higher	2861, 0.542, SE
AL161	MANDELA PARKWAY CORR	MANDELA PARKWAY BETW	ENVIROSTOR, VCP	Lower	2884, 0.546, North
162	US POSTAL SERVICE	1675 7TH ST	ENVIROSTOR, LUST, CPS-SLIC, Alameda County CS,...	Lower	2890, 0.547, WSW
AL163	MANDELA GRAND	MANDELA PARKWAY AND	ENVIROSTOR, VCP	Lower	2905, 0.550, North
AM164	CYPRESS FREEWAY-3RD	3RD STREET BETWEEN C	ENVIROSTOR, VCP	Lower	2920, 0.553, SW
165	ZUEDELAC APARTMENTS	1600 3RD AVE	ENVIROSTOR, VCP, HAZNET	Lower	2951, 0.559, WSW
AN166	SAFETY-KLEEN CORP.	404 MARKET ST	SWEEPS UST, HIST UST, CA FID UST, HWP, CERS	Lower	2960, 0.561, SE
AN167	SAFETY-KLEEN SYSTEMS	400 MARKET STREET	SEMS, CORRACTS, RCRA-TSDF, RCRA-LQG, US INST...	Lower	2960, 0.561, SE
AN168	SAFETYKLEEN SER CTR	400 MARKET ST	ENVIROSTOR, DEED, CHMIRS, WDS, CERS	Lower	2960, 0.561, SE
169	COMMERCIAL BUILDINGS	1250-1276, 1284 W. G	RESPONSE, ENVIROSTOR, HIST Cal-Sites, Cortese,...	Lower	2997, 0.568, NNE
170	SCHNITZER STEEL	1101 EMBARCADERO WES	ENVIROSTOR, HAZNET	Lower	3076, 0.583, South
171	WEST RECYCLER BIN ST	1405 WOOD STREET	ENVIROSTOR	Lower	3081, 0.584, NW
AM172	SOUTHERN PACIFIC -WE	CYPRESS CORRIDOR	RESPONSE, ENVIROSTOR, HIST Cal-Sites, DEED,...	Lower	3086, 0.584, WSW
AO173	NED CLYDE CONSTRUCTI	2311 ADELINE STREET	Notify 65	Lower	3233, 0.612, NNE
AP174	SOUTHERN PACIFIC TRA	1707 WOOD STREET	CA BOND EXP. PLAN	Lower	3239, 0.613, NNW
AP175	SOUTHERN PACIFIC TRA	1707 WOOD ST	RESPONSE, ENVIROSTOR, CPS-SLIC, FTTS, HIST FTTS,...	Lower	3239, 0.613, NNW
AP176	SP, W.OAKLAND YD.-(O	1707 WOOD STREET	Toxic Pits	Lower	3239, 0.613, NNW
AP177	SP, W.OAKLAND YARD-(	1707 WOOD STREET	Toxic Pits	Lower	3239, 0.613, NNW
178	COLE BROTHERS AUTO W	1797 12TH STREET	ENVIROSTOR	Lower	3261, 0.618, WNW
AQ179	JENKINS AUTO WRECKER	1778 10TH STREET	ENVIROSTOR, ENF	Lower	3269, 0.619, WNW
AO180	ARTESIAN OIL RECOVER	2306 MAGNOLIA ST	ICE, HWP, CERS	Lower	3324, 0.630, NNE
AO181	ARTESIAN OIL RECOVER	2306 MAGNOLIA STREET	ENVIROSTOR	Lower	3324, 0.630, NNE
AQ182	GAINES PROPERTY	1795 11TH STREET	RESPONSE, ENVIROSTOR, HAZNET	Lower	3326, 0.630, WNW
AQ183	GAINES PROPERTY	1795 11TH STREET	SEMS-ARCHIVE, HIST Cal-Sites, CERS	Lower	3326, 0.630, WNW
AQ184	RADOMSKY PROPERTY	930 PINE STREET	ENVIROSTOR	Lower	3446, 0.653, WNW
185	E-D COAT INC	715 4TH STREET	RESPONSE, ENVIROSTOR, CERS	Lower	3455, 0.654, SE
AR186	NORTHWESTERN VENETIA	1218 24TH STREET	HIST Cal-Sites	Lower	3539, 0.670, NNE
AR187	NORTHWESTERN VENETIA	1218 24TH ST	RESPONSE, ENVIROSTOR, CPS-SLIC, LIENS, DEED,...	Lower	3539, 0.670, NNE
188	CHURCH'S FRIED CHICK	1766 7TH STREET	ENVIROSTOR, LUST, Alameda County CS, VCP, HIST...	Lower	3581, 0.678, West
189	CA WASTE SOLUTIONS I	1820 10TH ST	ENVIROSTOR, NPDES, CIWQS	Lower	3662, 0.694, WNW
AR190	LAHER SPRING AND ELE	2419 MAGNOLIA STREET	ENVIROSTOR	Lower	3669, 0.695, NNE
AS191	PG&E OAKLAND-1 MGP	50 MARKET STREET AND	ENVIROSTOR, VCP, DEED	Lower	3827, 0.725, SSE
AS192	PG AND E OAKLAND	50 MARKET ST BTWN 1S	EDR MGP	Lower	3827, 0.725, SSE
193	MERRITT TWO SITE	655 3RD STREET	ENVIROSTOR, VCP, DEED, HAZNET	Lower	3881, 0.735, SE

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194	DEPT OF TRANSPORTATI	800 CEDAR ST	ENVIROSTOR, VCP, HAZNET	Lower	3885, 0.736, West
195	BELL METAL FABRICATO	2500 ADELINE	ENVIROSTOR	Lower	3925, 0.743, NNE
196	BATAVIA PROPERTY	1832 9TH STREET	ENVIROSTOR	Lower	3933, 0.745, WNW
AT197	LDS TRUCKING	2233 WOOD STREET	ENVIROSTOR, VCP	Lower	3952, 0.748, NNW
AU198	VACANT AUTO REPAIR	SHOREY STREET	RESPONSE, ENVIROSTOR, CERS	Lower	3953, 0.749, West
AT199	ARMY-NAVY DISTRIBUTI	2233 WOOD STREET	ENVIROSTOR	Lower	3953, 0.749, NNW
AV200	OLD OAKLAND FIRE HOU	727 PINE STREET	ENVIROSTOR, VCP, HAZNET	Lower	3954, 0.749, West
AW201	TKG CALIFORNIA STORA	2450 MANDELA PARKWAY	ENVIROSTOR, VCP, DEED	Lower	3958, 0.750, North
AT202	BNSF WOOD STREET YAR	WOOD STREET & WEST G	RESPONSE, ENVIROSTOR, HIST Cal-Sites, DEED	Lower	4002, 0.758, NNW
AU203	B & A AUTO DISMANTLE	1823 SHOREY STREET	ENVIROSTOR, VCP	Lower	4066, 0.770, West
AW204	KANTOR WAREHOUSE	2525 MANDELA PARKWAY	LUST, Alameda County CS, HIST CORTESE, Notify 65,...	Lower	4087, 0.774, North
AV205	WILFRED'S AUTO WRECK	1834 7TH STREET	ENVIROSTOR, VCP	Lower	4100, 0.777, West
206	HOWARD MARINE TERMIN	EMBARCADERO WEST AND	RESPONSE, ENVIROSTOR, HIST Cal-Sites, DEED,...	Lower	4156, 0.787, SSE
207	C. E. TOLAND & SON,	2635 PERALTA	LUST, Alameda County CS, HIST CORTESE, Notify 65,...	Lower	4287, 0.812, North
208	ARMY-NAVY DISTRIBUTI		FUDS	Lower	4288, 0.812, North
209	SHEREX CHEMICAL COMP	1401 MIDDLE HARBOR R	SEMS-ARCHIVE, ENVIROSTOR, CPS-SLIC, SWEEPS UST,...	Lower	4315, 0.817, SSW
AX210	PHOENIX 766 PROPERTY	766 CEDAR	ENVIROSTOR, VCP, HIST CORTESE	Lower	4433, 0.840, West
211	PG & E OAKLAND POWER	50 MARTIN LUTHER KIN	ENVIROSTOR, LUST, Alameda County CS, AST, VCP,...	Lower	4449, 0.843, SSE
AY212	PHOENIX 524 PROPERTY	524 CEDAR	ENVIROSTOR, VCP, HIST CORTESE	Lower	4500, 0.852, West
213	ALL WEATHER DOOR	1851 5TH ST	ENVIROSTOR, LUST, Alameda County CS, VCP, CHMIRS,...	Lower	4552, 0.862, West
AY214	CAL EAST FOODS	505 CEDAR ST	ENVIROSTOR, LUST, Alameda County CS, VCP, SWEEPS...	Lower	4557, 0.863, West
AX215	LIPS PROPELLERS	1899 7TH	ENVIROSTOR, VCP, HIST CORTESE	Lower	4566, 0.865, West
216	MARSHALL STEEL CLEAN	1229 28TH	LUST, Alameda County CS, HIST CORTESE, Notify 65,...	Lower	4582, 0.868, NNE
AZ217	B & P DISMANTLERS	2525 WOOD STREET	ENVIROSTOR, VCP, HIST CORTESE	Lower	4596, 0.870, North
AZ218	RUSS ELLIOT, INC.	2526 WOOD STREET	ENVIROSTOR	Lower	4622, 0.875, North
BA219	CUSTOM ALLOY SCRAP S	2730 PERALTA ST	ENVIROSTOR, LUST, WDS	Lower	4624, 0.876, NNE
BA220	ALAMEDA CHEMICAL AND	2668 HANNAH STREET	ENVIROSTOR, HIST Cal-Sites	Lower	4642, 0.879, NNE
221	OAKLAND ARMY BASE-EA	700 MURMANSK STREET,	RESPONSE, ENVIROSTOR, HIST Cal-Sites, DEED	Lower	4726, 0.895, WNW
222	SOUTHERN PACIFIC - D	CYPRESS CORRIDOR	RESPONSE, ENVIROSTOR, HIST Cal-Sites, DEED, HIST...	Lower	4817, 0.912, North
BB223	LINDFORD AIR & REFRI	2850 POPLAR	Notify 65	Lower	4828, 0.914, NNE
BB224	LINDFORD AIR & REFRI	2850 POPLAR	LUST, Alameda County CS, HIST UST, HIST CORTESE,...	Lower	4828, 0.914, NNE
BC225	CALIFORNIA DEPARTMEN	2601 WOOD STREET	ENVIROSTOR, VCP, DEED, HAZNET	Lower	4855, 0.920, North
226	BUILDING 331 EAST	7 MERRITIME	Notify 65	Lower	4914, 0.931, NW
BC227	PACIFIC OVERSEAS AIR		FUDS	Lower	4925, 0.933, North
228	PAC OVERSEA AIR SVCC	2801 MANDELA PKWY	ENVIROSTOR	Lower	4936, 0.935, North
229	PERALTA	2847 PERALTA STREET	ENVIROSTOR, VCP, HAZNET, NPDES	Lower	4973, 0.942, NNE
230	CHRIS AND GEORGE'S A	2520 WEST STREET	ENVIROSTOR	Higher	4999, 0.947, ENE
231	OAKLAND CITY HALL	#1 CITY HALL PLAZA	RCRA-SQG, LUST, Alameda County CS, HIST CORTESE,...	Higher	5084, 0.963, East
232	ABC DRY CLEANERS	2701 SAN PABLO AVENU	ENVIROSTOR, HIST UST, DRYCLEANERS, EMI	Higher	5111, 0.968, NE

MAPPED SITES SUMMARY

Target Property Address:
1011 UNION STREET
OAKLAND, CA 94607

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
233	PG AND E GAS PLANT O	FIRST AND WASHINGTON	EDR MGP	Lower	5117, 0.969, SE
234	CITY OF OAKLAND - SU	WAKE AVENUE AND WEST	RESPONSE, ENVIROSTOR, DEED	Lower	5197, 0.984, NNW
235	AT & SF RAILROAD PRO	ALONG WOOD & 32ND ST	ENVIROSTOR, VCP	Lower	5224, 0.989, North

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
OAKLAND UNIFIED SCHO 1011 UNION STREET OAKLAND, CA 94607	EMI Facility Id: 20527 HAZNET GEPAID: CAC002659716 CERS	N/A
COLE MIDDLE SCHOOL 1011 UNION ST OAKLAND, CA 94607	HAZNET GEPAID: CAC002837988	N/A
OUSD - COLE ELEMENTA 1011 UNION ST OAKLAND, CA 94607	HAZNET GEPAID: CAC001327848	N/A
OAKLAND UNIFIED SCHO 1011 UNION STREET OAKLAND, CA 94607	FINDS Registry ID:: 110070062628	N/A
OAKLAND UNIFIED SCHO 1011 UNION ST OAKLAND, CA 94607	HAZNET GEPAID: CAC000980408	N/A
1X COLE ELEMENTARY 1011 UNION ST OAKLAND, CA 94607	HAZNET GEPAID: CAC000805480	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

Proposed NPL..... Proposed National Priority List Sites

NPL LIENS ---- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---- Federal Facility Site Information listing

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-VSQG ---- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---- Land Use Control Information System
US ENG CONTROLS ---- Engineering Controls Sites List
US INST CONTROL ---- Sites with Institutional Controls

Federal ERNS list

ERNS ---- Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---- Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ---- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST ---- Underground Storage Tank Listing
INDIAN UST ---- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ---- Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ---- Waste Management Unit Database
HAULERS ---- Registered Waste Tire Haulers Listing
INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands
ODI ---- Open Dump Inventory

DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
SCH ..... School Property Evaluation Program
CDL ..... Clandestine Drug Labs
US CDL ..... National Clandestine Laboratory Register
PFAS ..... PFAS Contamination Site Location Listing

Local Land Records

LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ..... Financial Assurance Information
EPA WATCH LIST ..... EPA WATCH LIST
2020 COR ACTION ..... 2020 Corrective Action Program List
TSCA ..... Toxic Substances Control Act
TRIS ..... Toxic Chemical Release Inventory System
SSTS ..... Section 7 Tracking Systems
ROD ..... Records Of Decision
RMP ..... Risk Management Plans
RAATS ..... RCRA Administrative Action Tracking System
PRP ..... Potentially Responsible Parties
PADS ..... PCB Activity Database System
ICIS ..... Integrated Compliance Information System
FTTS ..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ..... Material Licensing Tracking System
COAL ASH DOE ..... Steam-Electric Plant Operation Data
COAL ASH EPA ..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ..... PCB Transformer Registration Database
RADINFO ..... Radiation Information Database
HIST FTTS ..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ..... Incident and Accident Data
CONSENT ..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV ..... Indian Reservations
FUSRAP ..... Formerly Utilized Sites Remedial Action Program
UMTRA ..... Uranium Mill Tailings Sites
LEAD SMELTERS ..... Lead Smelter Sites
US AIRS ..... Aerometric Information Retrieval System Facility Subsystem
US MINES ..... Mines Master Index File

EXECUTIVE SUMMARY

ABANDONED MINES - Abandoned Mines
DOCKET HWC - Hazardous Waste Compliance Docket Listing
ECHO - Enforcement & Compliance History Information
UXO - Unexploded Ordnance Sites
FUELS PROGRAM - EPA Fuels Program Registered Listing
CUPA Listings - CUPA Resources List
DRYCLEANERS - Cleaner Facilities
ENF - Enforcement Action Listing
Financial Assurance - Financial Assurance Information Listing
ICE - ICE
HWT - Registered Hazardous Waste Transporter Database
MINES - Mines Site Location Listing
MWMP - Medical Waste Management Program Listing
NPDES - NPDES Permits Listing
PEST LIC - Pesticide Regulation Licenses Listing
UIC - UIC Listing
UIC GEO - UIC GEO (GEOTRACKER)
WASTEWATER PITS - Oil Wastewater Pits Listing
WDS - Waste Discharge System
WIP - Well Investigation Program Case List
MILITARY PRIV SITES - MILITARY PRIV SITES (GEOTRACKER)
PROJECT - PROJECT (GEOTRACKER)
WDR - Waste Discharge Requirements Listing
CIWQS - California Integrated Water Quality System
NON-CASE INFO - NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS - OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS - PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT - SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ - Well Stimulation Project (GEOTRACKER)
MINES MRDS - Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Cleaner - EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF - Recovered Government Archive Solid Waste Facilities List
RGA LUST - Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 07/19/2019 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMCO CHEMICAL Cerclis ID:: 905334 EPA Id: CA0001576081	***1414 THIRD STREET***	***SW 1/4 - 1/2 (0.357 mi.)***	***0***	***13***

Federal CERCLIS list

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 07/19/2019 has revealed that there are 4 SEMS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMCO CHEMICAL Site ID: 0905334 EPA Id: CA0001576081	***1414 THIRD STREET***	***SW 1/4 - 1/2 (0.357 mi.)***	***0***	***13***

Lower Elevation	Address	Direction / Distance	Map ID	Page
BERCOVICH, A., CO. A WEST OAKLAND LEAD Site ID: 0908776 EPA Id: CAN000908776	***1639 18TH*** 1414 3RD STREET	***NNW 1/4 - 1/2 (0.412 mi.)*** SW 1/4 - 1/2 (0.431 mi.)	***Z125*** AC130	***410*** 437
ACME GALVANIZING CO Site ID: 0905931 EPA Id: CAD009108861	***1655 17TH ST***	***NNW 1/4 - 1/2 (0.457 mi.)***	***AG140***	***472***

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 07/19/2019 has revealed that there are 5 SEMS-ARCHIVE sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SMILO CHEMICAL COMPA Site ID: 0901286 EPA Id: CAD029247319	***500 KIRKHAM ST***	***SSW 1/4 - 1/2 (0.256 mi.)***	***S89***	***280***
MANNY SERVICES Site ID: 0905432 EPA Id: CASFN0905432	1600 PERALTA STREET	NNW 1/4 - 1/2 (0.322 mi.)	U104	342
CALIFORNIA SODA COMP Site ID: 0905381 EPA Id: CAD009122409	355 MANDELA PARKWAY	SW 1/4 - 1/2 (0.361 mi.)	X109	359
NOR CAL METAL FABRIC Site ID: 0901171 EPA Id: CAD009148669	***1121 3RD ST***	***S 1/4 - 1/2 (0.446 mi.)***	***AE135***	***456***
LOT AT 530-542 LEWIS Site ID: 0905369 EPA Id: CA0002059467	530-542 LEWIS STREET	WSW 1/4 - 1/2 (0.457 mi.)	AF138	468

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 06/24/2019 has revealed that there are 2 CORRACTS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FRANCIS PLATING OF O EPA ID:: CAD009206160	***785 7TH ST***	***SE 1/2 - 1 (0.542 mi.)***	***160***	***556***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SAFETY-KLEEN SYSTEMS	***400 MARKET STREET***	***SE 1/2 - 1 (0.561 mi.)***	***AN167***	***604***

EPA ID:: CAD053044053

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 06/24/2019 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported EPA ID:: CAP000067231	800 CENTER ST.	WSW 1/8 - 1/4 (0.228 mi.)	P73	225

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/24/2019 has revealed that there are 8 RCRA-SQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES EPA ID:: CAD130171283	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***86***
COMMAIR OAKLAND EPA ID:: CAR000162388	1266 14TH ST	NNE 1/8 - 1/4 (0.127 mi.)	G34	106
UNITED TECHNOLOGIES EPA ID:: CAR000222323	***1358 14TH ST***	***N 1/8 - 1/4 (0.128 mi.)***	***E38***	***124***
PACIFIC RIM EPA ID:: CA0001012269	***1338 CYPRESS AVE AT***	***NNW 1/8 - 1/4 (0.144 mi.)***	***H42***	***144***
COCA-COLA BOTTLING C EPA ID:: CAD009103748	1340 CYPRESS ST	NNW 1/8 - 1/4 (0.145 mi.)	H45	148
ARMORED TRANSPORT EPA ID:: CAD981967391	***1333 8TH ST***	***SW 1/8 - 1/4 (0.168 mi.)***	***L56***	***180***
ALL MERCEDES DISMANT EPA ID:: CAD983670985	1225 SEVENTH ST	S 1/8 - 1/4 (0.224 mi.)	N67	212
OAKLAND FIRE SERVICE EPA ID:: CAR000046425	***1445 14TH ST***	***NW 1/8 - 1/4 (0.227 mi.)***	***O69***	***215***

State- and tribal - equivalent NPL

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, has revealed that there are 15 RESPONSE sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DAIRIES	***1310 14TH STREET/131***	***N 1/8 - 1/4 (0.126 mi.)***	***E29***	***96***
Database: RESPONSE, Date of Government Version: 07/29/2019 Status: Refer: Other Agency Facility Id: 60000370				
SF BAY AREA RAPID TR	***349 MANDELA PKWY***	***SW 1/4 - 1/2 (0.369 mi.)***	***X112***	***365***
Database: RESPONSE, Date of Government Version: 07/29/2019 Status: Certified Facility Id: 1750021				
DTSC AT 528 LEWIS ST	***528 LEWIS ST***	***WSW 1/4 - 1/2 (0.455 mi.)***	***AF136***	***460***
Database: RESPONSE, Date of Government Version: 07/29/2019 Status: Certified Facility Id: 1880002				
COMMERCIAL BUILDINGS	***1250-1276, 1284 W. G***	***NNE 1/2 - 1 (0.568 mi.)***	***169***	***717***
Database: RESPONSE, Date of Government Version: 07/29/2019 AWP Facility Id: 01720110 Status: Active Facility Id: 1720110				
SOUTHERN PACIFIC -WE	***CYPRESS CORRIDOR***	***WSW 1/2 - 1 (0.584 mi.)***	***AM172***	***728***
Database: RESPONSE, Date of Government Version: 07/29/2019 AWP Facility Id: 01400010 Status: Certified / Operation & Maintenance Facility Id: 1400010				
SOUTHERN PACIFIC TRA	***1707 WOOD ST***	***NNW 1/2 - 1 (0.613 mi.)***	***AP175***	***737***
Database: RESPONSE, Date of Government Version: 07/29/2019 Status: Refer: RWQCB Facility Id: 1400001				
GAINES PROPERTY	***1795 11TH STREET***	***WNW 1/2 - 1 (0.630 mi.)***	***AQ182***	***750***
Database: RESPONSE, Date of Government Version: 07/29/2019 Status: Certified Facility Id: 1750030				
E-D COAT INC	***715 4TH STREET***	***SE 1/2 - 1 (0.654 mi.)***	***185***	***759***
Database: RESPONSE, Date of Government Version: 07/29/2019 Status: Active Facility Id: 60002501				
NORTHWESTERN VENETIA	***1218 24TH ST***	***NNE 1/2 - 1 (0.670 mi.)***	***AR187***	***769***
Database: RESPONSE, Date of Government Version: 07/29/2019 Status: Active Facility Id: 1340123				
VACANT AUTO REPAIR	***SHOREY STREET***	***W 1/2 - 1 (0.749 mi.)***	***AU198***	***802***
Database: RESPONSE, Date of Government Version: 07/29/2019 Status: No Further Action Facility Id: 1750020				
BNSF WOOD STREET YAR	***WOOD STREET & WEST G***	***NNW 1/2 - 1 (0.758 mi.)***	***AT202***	***820***
Database: RESPONSE, Date of Government Version: 07/29/2019				

AWP Facility Id: 01400017
Status: Certified O&M - Land Use Restrictions Only
Facility Id: 1400017

HOWARD MARINE TERMIN	***EMBARCADERO WEST AND***	***SSE 1/2 - 1 (0.787 mi.)***	***206***	***829***

Database: RESPONSE, Date of Government Version: 07/29/2019
Status: Certified / Operation & Maintenance
Facility Id: 1440006

OAKLAND ARMY BASE-EA	***700 MURMANSK STREET,***	***WNW 1/2 - 1 (0.895 mi.)***	***221***	***888***

Database: RESPONSE, Date of Government Version: 07/29/2019
AWP Facility Id: 01970016
Status: Active
Facility Id: 1970016

SOUTHERN PACIFIC - D	***CYPRESS CORRIDOR***	***N 1/2 - 1 (0.912 mi.)***	***222***	***900***

Database: RESPONSE, Date of Government Version: 07/29/2019
AWP Facility Id: 01400009
Status: Certified O&M - Land Use Restrictions Only
Facility Id: 1400009

CITY OF OAKLAND - SU	***WAKE AVENUE AND WEST***	***NNW 1/2 - 1 (0.984 mi.)***	***234***	***927***

Database: RESPONSE, Date of Government Version: 07/29/2019
Status: Certified O&M - Land Use Restrictions Only
Facility Id: 80001227

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 07/29/2019 has revealed that there are 87 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMCO CHEMICAL	***1414 THIRD STREET***	***SW 1/4 - 1/2 (0.357 mi.)***	***0***	***13***

Status: Active
Facility Id: 1390001

NABISCO BRANDS INC	***1267 14TH ST***	***NNE 0 - 1/8 (0.067 mi.)***	***D12***	***36***

Status: No Further Action
Facility Id: 60000369

PALM COURT	***902 UNION STREET***	***S 0 - 1/8 (0.094 mi.)***	***F24***	***82***

Status: No Further Action
Facility Id: 1990027

VEND MART PROPERTY	***1035 7TH ST***	***SSE 1/4 - 1/2 (0.348 mi.)***	***W106***	***344***

Status: Certified
Facility Id: 1990012

CHANG'S AUTOMOTIVE	***1009 7TH STREET***	***SSE 1/4 - 1/2 (0.367 mi.)***	***W111***	***362***
Status: Certified Facility Id: 1750019				
MICRONESIAN CARGO IN	***955 7TH STREET***	***SE 1/4 - 1/2 (0.412 mi.)***	***AA123***	***405***
Status: No Further Action Facility Id: 1420129				
FRANCIS PLATING OF O	***785 7TH ST***	***SE 1/2 - 1 (0.542 mi.)***	***160***	***556***
Status: No Further Action Status: Refer: Local Agency Facility Id: 1330049 Facility Id: 80001620				
CHRIS AND GEORGE'S A	2520 WEST STREET	ENE 1/2 - 1 (0.947 mi.)	230	920
Status: Refer: Local Agency Facility Id: 60000362				
ABC DRY CLEANERS	***2701 SAN PABLO AVENU***	***NE 1/2 - 1 (0.968 mi.)***	***232***	***924***
Status: Inactive - Needs Evaluation Facility Id: 60000359				

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DAIRIES	***1310 14TH STREET/131***	***N 1/8 - 1/4 (0.126 mi.)***	***E29***	***96***
Status: Refer: Other Agency Facility Id: 60000370				
COMMAIR MECHANICAL S	1266 14TH STREET	NNE 1/8 - 1/4 (0.127 mi.)	G33	105
Status: No Action Required Facility Id: 60000366				
AUTO CHLOR PROJ	***1350 14TH ST***	***N 1/8 - 1/4 (0.128 mi.)***	***E36***	***110***
Status: Active Facility Id: 60002513				
NEW OAKLAND FIRE STA	***CENTER AND 14TH STRE***	***NW 1/8 - 1/4 (0.238 mi.)***	***O82***	***268***
Status: Certified Facility Id: 1920063				
J & A TRUCK REPAIR	***500 KIRKHAM ST***	***SSW 1/4 - 1/2 (0.256 mi.)***	***S88***	***275***
Status: Active Facility Id: 1510022				
CONDOR FREIGHT LINES	***324 UNION ST***	***SSW 1/4 - 1/2 (0.265 mi.)***	***N93***	***294***
Status: No Further Action Facility Id: 1420126				
CONTAINER FREIGHT	***1285 5TH ST***	***SSW 1/4 - 1/2 (0.289 mi.)***	***S94***	***301***
Status: Inactive - Needs Evaluation Facility Id: 1420128				
WEST OAKLAND BART ST	***1451 7TH STREET***	***WSW 1/4 - 1/2 (0.309 mi.)***	***V102***	***336***
Status: Active Facility Id: 70000133				
MANNYSERVICES/MCKINN	1600 PERALTA	NNW 1/4 - 1/2 (0.322 mi.)	U105	343
Status: Refer: Other Agency Facility Id: 1750027				
CALIFORNIA SODA COMP	***355 MANDELA PARKWAY***	***SW 1/4 - 1/2 (0.361 mi.)***	***X108***	***356***

Status: No Further Action Facility Id: 1280091				
WESTERN PACIFIC RAIL Status: Certified / Operation & Maintenance Facility Id: 1400008	***UNION STREET***	***S 1/4 - 1/2 (0.366 mi.)***	***Y110***	***360***
SF BAY AREA RAPID TR Status: Certified Facility Id: 1750021	***349 MANDELA PKWY***	***SW 1/4 - 1/2 (0.369 mi.)***	***X112***	***365***
AMTRAK MAINTENANCE F Status: Certified / Operation & Maintenance Facility Id: 1400014	***3RD & UNION STREETS***	***SSW 1/4 - 1/2 (0.378 mi.)***	***115***	***375***
ALTA PLATING & CHEMI Status: Inactive - Needs Evaluation Facility Id: 70000088	1433 18TH STREET	NNW 1/4 - 1/2 (0.384 mi.)	Z117	378
RELIANCE UPHOLSTERY Status: Certified Facility Id: 70000082	***1614 CAMPBELL ST***	***NNW 1/4 - 1/2 (0.402 mi.)***	***AB120***	***383***
MARK ABOUDI PROPERTY Status: Certified O&M - Land Use Restrictions Only Facility Id: 1420131	***1639 18TH STREET***	***NNW 1/4 - 1/2 (0.412 mi.)***	***Z124***	***407***
FOOD EXPRESS INC Status: Active Facility Id: 60002775	***1639 18TH ST***	***NNW 1/4 - 1/2 (0.412 mi.)***	***Z126***	***413***
BOBO'S JUNKYARD Status: Certified / Operation & Maintenance Facility Id: 1400003	***1401 THIRD STREET***	***SW 1/4 - 1/2 (0.445 mi.)***	***AC132***	***441***
CITY OF OAKLAND (PUB Status: No Further Action Facility Id: 1990028	***1368 WILLOW ST***	***NW 1/4 - 1/2 (0.446 mi.)***	***AD133***	***443***
DTSC AT 528 LEWIS ST Status: Certified Facility Id: 1880002	***528 LEWIS ST***	***WSW 1/4 - 1/2 (0.455 mi.)***	***AF136***	***460***
ACME GALVANIZING Status: Active Facility Id: 60002571	***1655 17TH***	***NNW 1/4 - 1/2 (0.457 mi.)***	***AG139***	***469***
INMONT CORPORATION Status: Refer: RWQCB Facility Id: 60000360	***1545 WILLOW STREET***	***NW 1/4 - 1/2 (0.485 mi.)***	***AI153***	***542***
SOUTHERN PACIFIC 3RD Status: Certified Facility Id: 1400013	***1509/1513 THIRD STRE***	***SW 1/4 - 1/2 (0.500 mi.)***	***AK156***	***551***
1536 THIRD STREET Status: Refer: Other Agency Facility Id: 1880003	1536 THIRD STREET	SW 1/2 - 1 (0.522 mi.)	AK157	553
SO. PRESCOTT NEIGHBO Status: Certified Facility Id: 1990019	***3RD STREET***	***SW 1/2 - 1 (0.531 mi.)***	***AK159***	***554***
MANDELA PARKWAY CORR Status: Certified	***MANDELA PARKWAY BETW***	***N 1/2 - 1 (0.546 mi.)***	***AL161***	***570***

Facility Id: 1410118				
US POSTAL SERVICE	***1675 7TH ST***	***WSW 1/2 - 1 (0.547 mi.)***	***162***	***572***
Status: Certified Facility Id: 1430001				
MANDELA GRAND	***MANDELA PARKWAY AND***	***N 1/2 - 1 (0.550 mi.)***	***AL163***	***589***
Status: Inactive - Needs Evaluation Facility Id: 60000433				
CYPRESS FREEWAY-3RD	***3RD STREET BETWEEN C***	***SW 1/2 - 1 (0.553 mi.)***	***AM164***	***592***
Status: Certified Facility Id: 1400012				
ZUEDELAC APARTMENTS	***1600 3RD AVE***	***WSW 1/2 - 1 (0.559 mi.)***	***165***	***594***
Status: Certified Facility Id: 1990014				
SAFETYKLEEN SER CTR	***400 MARKET ST***	***SE 1/2 - 1 (0.561 mi.)***	***AN168***	***692***
Status: Active Facility Id: 80001412				
COMMERCIAL BUILDINGS	***1250-1276, 1284 W. G***	***NNE 1/2 - 1 (0.568 mi.)***	***169***	***717***
Status: Active Facility Id: 1720110				
SCHNITZER STEEL	***1101 EMBARCADERO WES***	***S 1/2 - 1 (0.583 mi.)***	***170***	***724***
Status: Active Facility Id: 60002854				
WEST RECYCLER BIN ST	1405 WOOD STREET	NW 1/2 - 1 (0.584 mi.)	171	727
Status: Refer: RWQCB Facility Id: 1890018				
SOUTHERN PACIFIC -WE	***CYPRESS CORRIDOR***	***WSW 1/2 - 1 (0.584 mi.)***	***AM172***	***728***
Status: Certified / Operation & Maintenance Facility Id: 1400010				
SOUTHERN PACIFIC TRA	***1707 WOOD ST***	***NNW 1/2 - 1 (0.613 mi.)***	***AP175***	***737***
Status: Refer: RWQCB Facility Id: 1400001				
COLE BROTHERS AUTO W	1797 12TH STREET	WNW 1/2 - 1 (0.618 mi.)	178	741
Status: No Action Required Facility Id: 60000365				
JENKINS AUTO WRECKER	***1778 10TH STREET***	***WNW 1/2 - 1 (0.619 mi.)***	***AQ179***	***742***
Status: Inactive - Needs Evaluation Facility Id: 1750025				
ARTESIAN OIL RECOVER	2306 MAGNOLIA STREET	NNE 1/2 - 1 (0.630 mi.)	AO181	748
Status: No Action Required Facility Id: 60000364				
GAINES PROPERTY	***1795 11TH STREET***	***WNW 1/2 - 1 (0.630 mi.)***	***AQ182***	***750***
Status: Certified Facility Id: 1750030				
RADOMSKY PROPERTY	930 PINE STREET	WNW 1/2 - 1 (0.653 mi.)	AQ184	758
Status: No Action Required Facility Id: 1880001				
E-D COAT INC	***715 4TH STREET***	***SE 1/2 - 1 (0.654 mi.)***	***185***	***759***
Status: Active Facility Id: 60002501				
NORTHWESTERN VENETIA	***1218 24TH ST***	***NNE 1/2 - 1 (0.670 mi.)***	***AR187***	***769***

Status: Active Facility Id: 1340123				
CHURCH'S FRIED CHICK Status: Certified Facility Id: 1540002	***1766 7TH STREET***	***W 1/2 - 1 (0.678 mi.)***	***188***	***773***
CA WASTE SOLUTIONS I Status: Active Facility Id: 60002788	***1820 10TH ST***	***WNW 1/2 - 1 (0.694 mi.)***	***189***	***777***
LAHER SPRING AND ELE Status: Certified Facility Id: 1990016	2419 MAGNOLIA STREET	NNE 1/2 - 1 (0.695 mi.)	AR190	782
PG&E OAKLAND-1 MGP Status: Certified / Operation & Maintenance Facility Id: 1490012	***50 MARKET STREET AND***	***SSE 1/2 - 1 (0.725 mi.)***	***AS191***	***783***
MERRITT TWO SITE Status: Certified O&M - Land Use Restrictions Only Facility Id: 60002149	***655 3RD STREET***	***SE 1/2 - 1 (0.735 mi.)***	***193***	***786***
DEPT OF TRANSPORTATI Status: Inactive - Needs Evaluation Facility Id: 1330037	***800 CEDAR ST***	***W 1/2 - 1 (0.736 mi.)***	***194***	***796***
BELL METAL FABRICATO Status: No Further Action Facility Id: 60000361	2500 ADELINE	NNE 1/2 - 1 (0.743 mi.)	195	798
BATAVIA PROPERTY Status: No Further Action Facility Id: 1990021	1832 9TH STREET	WNW 1/2 - 1 (0.745 mi.)	196	799
LDS TRUCKING Status: Certified Facility Id: 1420127	***2233 WOOD STREET***	***NNW 1/2 - 1 (0.748 mi.)***	***AT197***	***800***
VACANT AUTO REPAIR Status: No Further Action Facility Id: 1750020	***SHOREY STREET***	***W 1/2 - 1 (0.749 mi.)***	***AU198***	***802***
ARMY-NAVY DISTRIBUTI Status: No Further Action Facility Id: 80000374	2233 WOOD STREET	NNW 1/2 - 1 (0.749 mi.)	AT199	804
OLD OAKLAND FIRE HOU Status: Certified Facility Id: 1920064	***727 PINE STREET***	***W 1/2 - 1 (0.749 mi.)***	***AV200***	***805***
TKG CALIFORNIA STORA Status: Certified O&M - Land Use Restrictions Only Facility Id: 60000712	***2450 MANDELA PARKWAY***	***N 1/2 - 1 (0.750 mi.)***	***AW201***	***809***
BNSF WOOD STREET YAR Status: Certified O&M - Land Use Restrictions Only Facility Id: 1400017	***WOOD STREET & WEST G***	***NNW 1/2 - 1 (0.758 mi.)***	***AT202***	***820***
B & A AUTO DISMANTLE Status: Certified Facility Id: 1500106	***1823 SHOREY STREET***	***W 1/2 - 1 (0.770 mi.)***	***AU203***	***824***
WILFRED'S AUTO WRECK Status: Certified	***1834 7TH STREET***	***W 1/2 - 1 (0.777 mi.)***	***AV205***	***828***

Facility Id: 1500105				
HOWARD MARINE TERMIN	***EMBARCADERO WEST AND***	***SSE 1/2 - 1 (0.787 mi.)***	***206***	***829***
Status: Certified / Operation & Maintenance Facility Id: 1440006				
SHEREX CHEMICAL COMP	***1401 MIDDLE HARBOR R***	***SSW 1/2 - 1 (0.817 mi.)***	***209***	***839***
Status: Refer: Local Agency Facility Id: 1730096				
PHOENIX 766 PROPERTY	***766 CEDAR***	***W 1/2 - 1 (0.840 mi.)***	***AX210***	***845***
Status: Certified Facility Id: 1330036				
PG & E OAKLAND POWER	***50 MARTIN LUTHER KIN***	***SSE 1/2 - 1 (0.843 mi.)***	***211***	***847***
Status: Certified / Operation & Maintenance Facility Id: 1490020				
PHOENIX 524 PROPERTY	***524 CEDAR***	***W 1/2 - 1 (0.852 mi.)***	***AY212***	***860***
Status: Inactive - Needs Evaluation Facility Id: 1330038				
ALL WEATHER DOOR	***1851 5TH ST***	***W 1/2 - 1 (0.862 mi.)***	***213***	***862***
Status: Inactive - Needs Evaluation Facility Id: 1990013				
CAL EAST FOODS	***505 CEDAR ST***	***W 1/2 - 1 (0.863 mi.)***	***AY214***	***869***
Status: Certified Facility Id: 1510024				
LIPS PROPELLERS	***1899 7TH***	***W 1/2 - 1 (0.865 mi.)***	***AX215***	***875***
Status: No Further Action Facility Id: 1350121				
B & P DISMANTLERS	***2525 WOOD STREET***	***N 1/2 - 1 (0.870 mi.)***	***AZ217***	***879***
Status: Certified Facility Id: 1750017				
RUSS ELLIOT, INC.	2526 WOOD STREET	N 1/2 - 1 (0.875 mi.)	AZ218	881
Status: No Action Required Facility Id: 60000363				
CUSTOM ALLOY SCRAP S	***2730 PERALTA ST***	***NNE 1/2 - 1 (0.876 mi.)***	***BA219***	***882***
Status: Active Facility Id: 60000374				
ALAMEDA CHEMICAL AND	***2668 HANNAH STREET***	***NNE 1/2 - 1 (0.879 mi.)***	***BA220***	***885***
Status: Certified Facility Id: 1280089				
OAKLAND ARMY BASE-EA	***700 MURMANSK STREET,***	***WNW 1/2 - 1 (0.895 mi.)***	***221***	***888***
Status: Active Facility Id: 1970016				
SOUTHERN PACIFIC - D	***CYPRESS CORRIDOR***	***N 1/2 - 1 (0.912 mi.)***	***222***	***900***
Status: Certified O&M - Land Use Restrictions Only Facility Id: 1400009				
CALIFORNIA DEPARTMEN	***2601 WOOD STREET***	***N 1/2 - 1 (0.920 mi.)***	***BC225***	***910***
Status: Certified O&M - Land Use Restrictions Only Facility Id: 1280090				
PAC OVERSEA AIR SVCC	2801 MANDELA PKWY	N 1/2 - 1 (0.935 mi.)	228	914
Status: Inactive - Needs Evaluation Facility Id: 80000689				
PERALTA	***2847 PERALTA STREET***	***NNE 1/2 - 1 (0.942 mi.)***	***229***	***916***

Status: No Further Action
Facility Id: 1750038

CITY OF OAKLAND - SU ***WAKE AVENUE AND WEST*** ***NNW 1/2 - 1 (0.984 mi.)*** ***234*** ***927***
Status: Certified O&M - Land Use Restrictions Only
Facility Id: 80001227

AT & SF RAILROAD PRO ***ALONG WOOD & 32ND ST*** ***N 1/2 - 1 (0.989 mi.)*** ***235*** ***941***
Status: Inactive - Needs Evaluation
Facility Id: 1400005

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 46 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAKLAND CITY OF HOUS	***935 UNION ST***	***S 0 - 1/8 (0.002 mi.)***	***B7***	***30***
Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST, Date of Government Version: 09/09/2019 Status: Completed - Case Closed Facility Id: 01-0414 Facility Status: Case Closed Global Id: T0600100378 date9: 6/30/1993				
NABISCO BRANDS INC	***1267 14TH ST***	***NNE 0 - 1/8 (0.067 mi.)***	***D12***	***36***
Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST, Date of Government Version: 09/09/2019 Status: Completed - Case Closed Facility Id: 01-1028 Facility Status: Case Closed Global Id: T0600100949 date9: 6/8/1993				
GIBSON PAINT COMPANY	1199 12TH ST E	ENE 0 - 1/8 (0.071 mi.)	C17	51
Database: LUST REG 2, Date of Government Version: 09/30/2004 Facility Id: 01-0699 Facility Status: Case Closed date9: 3/10/1998				
MANDELA TRUCKING	***1225 MANDELA PKWY***	***NW 1/8 - 1/4 (0.156 mi.)***	***51***	***156***
Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST, Date of Government Version: 09/09/2019 Status: Open - Site Assessment Facility Id: 01-2437 Facility Status: Preliminary site assessment underway Global Id: T0600102246				
THOMPSON PROPERTY	***1409-1417 12TH STREE***	***WNW 1/8 - 1/4 (0.157 mi.)***	***J52***	***169***
Database: LUST, Date of Government Version: 09/09/2019 Status: Completed - Case Closed				

Global Id: T0600158621

VEND MART PROPERTY ***1035 7TH ST*** ***SSE 1/4 - 1/2 (0.348 mi.)*** ***W106*** ***344***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-1778
Facility Status: Preliminary site assessment underway
Global Id: T0600101646

Lower Elevation	Address	Direction / Distance	Map ID	Page

CARNATION DIARIES ***1310 14TH ST*** ***N 1/8 - 1/4 (0.126 mi.)*** ***E28*** ***86***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 01-0282
Facility Status: Remedial action (cleanup) Underway

COMM AIR ***1266 14TH ST*** ***NNE 1/8 - 1/4 (0.127 mi.)*** ***G31*** ***101***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-2287
Facility Status: Case Closed
Global Id: T0600102103
date9: 8/21/2000

COCA COLA ***1340 MANDELA PARKWAY*** ***NNW 1/8 - 1/4 (0.127 mi.)*** ***H35*** ***108***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-0438
Facility Status: Case Closed
Global Id: T0600100398
date9: 2/18/1998

VACANT LOT SABEK INC ***1230 14TH ST*** ***NNE 1/8 - 1/4 (0.130 mi.)*** ***G40*** ***130***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Eligible for Closure
Facility Id: 01-1825
Facility Status: Preliminary site assessment underway
Global Id: T0600101691

ARMORED TRANSPORT ***1333 8TH ST*** ***SW 1/8 - 1/4 (0.168 mi.)*** ***L56*** ***180***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-2212
Facility Status: Case Closed
Global Id: T0600102031
date9: 7/8/1997

ALL MERCEDES DISMANT ***1255 7TH ST*** ***S 1/8 - 1/4 (0.225 mi.)*** ***N68*** ***213***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-1266
Facility Status: Case Closed
Global Id: T0600101163

date9: 6/6/1997

SIGNAL SS/CHEVRON 20 ***800 CENTER ST*** ***WSW 1/8 - 1/4 (0.228 mi.)*** ***P75*** ***227***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Verification Monitoring
Facility Id: 01-2421
Facility Status: Preliminary site assessment underway
Global Id: T0600102230

FORMER EVERIDGE SERV ***1211 7TH*** ***S 1/8 - 1/4 (0.229 mi.)*** ***N77*** ***253***
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Site Assessment
Global Id: T0600100683

EVERIDGE SERVICE COM ***1211 7TH ST*** ***S 1/8 - 1/4 (0.229 mi.)*** ***N78*** ***260***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 01-0741
Facility Status: Preliminary site assessment underway

CONTAINER CARE LIMIT ***1350 16TH ST*** ***N 1/8 - 1/4 (0.231 mi.)*** ***80*** ***264***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-2221
Facility Status: Case Closed
Global Id: T0600102039
date9: 7/11/1997

KELLY'S TRUCK REPAIR ***1390 7TH ST*** ***SW 1/8 - 1/4 (0.235 mi.)*** ***Q81*** ***266***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-2118
Facility Status: Case Closed
Global Id: T0600101944
date9: 3/6/1997

J & A TRUCK REPAIR ***500 KIRKHAM ST*** ***SSW 1/4 - 1/2 (0.256 mi.)*** ***S88*** ***275***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Site Assessment
Facility Id: 01-2433
Facility Status: Leak being confirmed
Global Id: T0600102242

CHEVRON 1395 7TH ST SW 1/4 - 1/2 (0.258 mi.) Q90 284
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 01-0323
Facility Status: Preliminary site assessment underway

TRUCKER'S FRIEND ***1395 7TH*** ***SW 1/4 - 1/2 (0.258 mi.)*** ***Q91*** ***284***
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Assessment & Interim Remedial Action
Global Id: T0600100296

CONDOR FREIGHT LINES ***324 UNION ST*** ***SSW 1/4 - 1/2 (0.265 mi.)*** ***N93*** ***294***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-1305

Facility Status: Case Closed
Global Id: T0600101200
date9: 11/6/1997

CONTAINER FREIGHT ***1285 5TH ST*** ***SSW 1/4 - 1/2 (0.289 mi.)*** ***S94*** ***301***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Remediation
Facility Id: 01-2399
Facility Status: Leak being confirmed
Global Id: T0600102209

CALTRANS CYPRESS PRO ***UNKNOWN 5TH & ADELIN*** ***S 1/4 - 1/2 (0.297 mi.)*** ***T95*** ***307***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 01-2398
Facility Status: Leak being confirmed

SOUTHERN PACIFIC TRA ***0 5TH AVE & KIRKHAM*** ***SSW 1/4 - 1/2 (0.301 mi.)*** ***S97*** ***311***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: T0600101304

CALTRANS CYPRESS PRO ***0 5TH ST AND ADELINE*** ***S 1/4 - 1/2 (0.301 mi.)*** ***T98*** ***313***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: T0600102208

RINO PACIFIC OAKLAND ***1107 5TH ST*** ***S 1/4 - 1/2 (0.303 mi.)*** ***T99*** ***319***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-2322
Facility Status: Preliminary site assessment underway
Global Id: T0600102136

PACIFIC BELL ***1075 7TH*** ***SSE 1/4 - 1/2 (0.306 mi.)*** ***100*** ***327***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: T06019796972

OSAGIE PROPERTY ***1532 PERALTA STREET*** ***NNW 1/4 - 1/2 (0.306 mi.)*** ***U101*** ***328***
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Remediation
Global Id: T0600191668

RELIABLE HANDI CAB ***1520 7TH ST*** ***WSW 1/4 - 1/2 (0.350 mi.)*** ***107*** ***354***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-1234
Facility Status: Case Closed
Global Id: T0600101133
date9: 6/14/1995

PACIFIC PIPE COMPANY ***1901 POPLAR ST*** ***N 1/4 - 1/2 (0.377 mi.)*** ***114*** ***371***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-2048
Facility Status: Case Closed
Global Id: T0600101893

date9: 10/24/1995

GARDINER MFG COMPANY ***1920 UNION ST*** ***NNE 1/4 - 1/2 (0.400 mi.)*** ***119*** ***381***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-0681
Facility Status: Case Closed
Global Id: T0600100626
date9: 1/8/1998

GREITZER PROPERTY ***1614 CAMPBELL ST*** ***NNW 1/4 - 1/2 (0.402 mi.)*** ***AB121*** ***394***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: SL0600145137

ARATEX SERVICES, INC ***330 CHESTNUT ST*** ***SSE 1/4 - 1/2 (0.405 mi.)*** ***122*** ***395***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-0086
Facility Status: Preliminary site assessment underway
Global Id: T0600100079

OAKLAND WAREHOUSE ***1221 3RD ST*** ***S 1/4 - 1/2 (0.417 mi.)*** ***127*** ***417***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-1054
Facility Status: Case Closed
Global Id: T0600100972
date9: 2/7/2000

CADEMARTORI TRUCKING ***1833 PERALTA ST*** ***NNW 1/4 - 1/2 (0.420 mi.)*** ***Z128*** ***428***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: T0600100239

CADOMARTORI TRUCKING 1833 PERALTA ST NNW 1/4 - 1/2 (0.420 mi.) Z129 436
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 01-0254
Facility Status: Preliminary site assessment underway

DC METALS ***1414 3RD ST*** ***SW 1/4 - 1/2 (0.431 mi.)*** ***AC131*** ***438***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Site Assessment
Facility Id: 01-2396
Facility Status: Preliminary site assessment underway
Global Id: T0600102206

EAST BAY FORD TRUCK ***333 FIBERT ST*** ***SSE 1/4 - 1/2 (0.460 mi.)*** ***142*** ***486***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-0531
Facility Status: Case Closed
Global Id: T0600100485
date9: 8/1/1994

EAST BAY MUNICIPAL U ***1200 21ST STREET*** ***NNE 1/4 - 1/2 (0.468 mi.)*** ***145*** ***503***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019

Status: Open - Remediation
Facility Id: 01-2299
Facility Status: Preliminary site assessment underway
Global Id: T0600102115

SUNSET WHOLESALE COM ***105 EMBARCADERO AVE*** ***S 1/4 - 1/2 (0.472 mi.)*** ***146*** ***516***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-1742
Facility Status: Case Closed
Global Id: T0600101613
date9: 10/17/1996

ROADWAY EXPRESS INC ***1708 WOOD ST*** ***NNW 1/4 - 1/2 (0.477 mi.)*** ***AG147*** ***518***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-2291
Facility Status: Preliminary site assessment underway
Global Id: T0600102107

FRANK'S TIRE SERVICE ***1115 21ST ST*** ***NE 1/4 - 1/2 (0.478 mi.)*** ***148*** ***531***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: T06019759797

BASF CORPORATION ***1545 WILLOW ST*** ***NW 1/4 - 1/2 (0.485 mi.)*** ***AI152*** ***539***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 01-0152
Facility Status: Case Closed
date9: 11/4/1994

INMONT CORPORATION ***1545 WILLOW STREET*** ***NW 1/4 - 1/2 (0.485 mi.)*** ***AI153*** ***542***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: SLT19763584
Global Id: T0600100141

NORCAL METAL FABRICA ***114 ADELINE ST*** ***S 1/4 - 1/2 (0.498 mi.)*** ***AJ154*** ***546***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-1636
Facility Status: Case Closed
Global Id: T0600101511
date9: 2/14/1994

LEHAR SALES ***150 CHESTNUT ST*** ***S 1/4 - 1/2 (0.499 mi.)*** ***AJ155*** ***548***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-1268
Facility Status: Case Closed
Global Id: T0600101165
date9: 5/29/1998

EXECUTIVE SUMMARY

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there are 16 CPS-SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
1125 MANDELA PKWY	***1125 MANDELA PKWY***	***WNW 1/8 - 1/4 (0.155 mi.)***	***J49***	***154***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Open - Inactive Global Id: T10000011421				
1125 MANDELA REUSE	***1125 MANDELA PARKWAY***	***WNW 1/8 - 1/4 (0.155 mi.)***	***J50***	***155***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Completed - Case Closed Global Id: T10000007322				
FORMER ADELINE CLEAN	***979 7TH ST***	***SE 1/4 - 1/2 (0.393 mi.)***	***AA118***	***379***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Open - Site Assessment Global Id: T10000009189				
JB AUTO	***819 12TH***	***ESE 1/4 - 1/2 (0.462 mi.)***	***AH144***	***503***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Open - Inactive Global Id: T06019761004				
OAK VILLAGE APARTMEN	***780 AND 828 13TH STR***	***E 1/4 - 1/2 (0.478 mi.)***	***149***	***533***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Completed - Case Closed Global Id: T10000008207				

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***86***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Completed - Case Closed Global Id: T10000000210 Global Id: T0600100262				
SIGNAL SS/CHEVRON 20	***800 CENTER ST***	***WSW 1/8 - 1/4 (0.228 mi.)***	***P75***	***227***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Open - Active Global Id: T10000011146				
MANDELA GATEWAY REDE	***0 7TH ST & MANDELA***	***WSW 1/8 - 1/4 (0.243 mi.)***	***85***	***272***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Completed - Case Closed Global Id: T06019796839				
5TH ST AND MAGNOLIA	***0 5TH ST & MAGNOLIA***	***S 1/4 - 1/2 (0.254 mi.)***	***N86***	***273***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Open - Site Assessment Global Id: T10000007974				
UNION PACIFIC RAILRO	***CROSS 5TH & UNION***	***SSW 1/4 - 1/2 (0.259 mi.)***	***92***	***293***
Database: SLIC REG 2, Date of Government Version: 09/30/2004 Facility Id: SL20246864				
RED STAR YEAST / 139	***1396 5TH***	***SW 1/4 - 1/2 (0.299 mi.)***	***96***	***307***
Database: CPS-SLIC, Date of Government Version: 09/09/2019				

Facility Status: Completed - Case Closed
Global Id: T06019794669

THE BURKE COMPANY ***310 UNION*** ***S 1/4 - 1/2 (0.376 mi.)*** ***Y113*** ***370***
Database: CPS-SLIC, Date of Government Version: 09/09/2019
Facility Status: Completed - Case Closed
Global Id: T06019739692

HALL PROPERTY ***1455 5TH*** ***SW 1/4 - 1/2 (0.381 mi.)*** ***116*** ***377***
Database: CPS-SLIC, Date of Government Version: 09/09/2019
Facility Status: Completed - Case Closed
Global Id: T06019778849

ACME GALVANIZING ***1655 17TH*** ***NNW 1/4 - 1/2 (0.457 mi.)*** ***AG139*** ***469***
Database: CPS-SLIC, Date of Government Version: 09/09/2019
Facility Status: Open - Assessment & Interim Remedial Action
Global Id: T10000001503

EAST BAY FORD TRUCK ***333 FIBERT ST*** ***SSE 1/4 - 1/2 (0.460 mi.)*** ***142*** ***486***
Database: CPS-SLIC, Date of Government Version: 09/09/2019
Facility Status: Open - Assessment & Interim Remedial Action
Global Id: T10000005774

ROADWAY EXPRESS INC ***1708 WOOD ST*** ***NNW 1/4 - 1/2 (0.477 mi.)*** ***AG147*** ***518***
Database: CPS-SLIC, Date of Government Version: 09/09/2019
Facility Status: Open - Active
Global Id: T10000009064

Alameda County CS: A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

A review of the Alameda County CS list, as provided by EDR, and dated 01/09/2019 has revealed that there are 47 Alameda County CS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NABISCO BRANDS INC	***1267 14TH ST***	***NNE 0 - 1/8 (0.067 mi.)***	***D12***	***36***
Record Id: RO0001166				
Status: Case Closed				
1125 MANDELA PKWY	***1125 MANDELA PKWY***	***WNW 1/8 - 1/4 (0.155 mi.)***	***J49***	***154***
Record Id: RO0003298				
Status: Leak Confirmation				
1125 MANDELA REUSE	***1125 MANDELA PARKWAY***	***WNW 1/8 - 1/4 (0.155 mi.)***	***J50***	***155***
Record Id: RO0003184				
Status: Pollution Characterization				
MANDELA TRUCKING	***1225 MANDELA PKWY***	***NW 1/8 - 1/4 (0.156 mi.)***	***51***	***156***
Record Id: RO0000041				
Status: Leak Confirmation				
Status: Pollution Characterization				
THOMPSON PROPERTY	***1409-1417 12TH STREE***	***WNW 1/8 - 1/4 (0.157 mi.)***	***J52***	***169***
Record Id: RO0002933				
Status: Leak Confirmation				
Status: Preliminary Site Assessment Underway				
Status: Pollution Characterization				
Status: Case Closed				
VEND MART PROPERTY	***1035 7TH ST***	***SSE 1/4 - 1/2 (0.348 mi.)***	***W106***	***344***

Record Id: RO0000036
Status: Leak Confirmation
Status: Pollution Characterization

FORMER ADELINE CLEAN	***979 7TH ST***	***SE 1/4 - 1/2 (0.393 mi.)***	***AA118***	***379***

Record Id: RO0003227
Status: Leak Confirmation

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***86***

Record Id: RO0002978
Record Id: RO0000018
Status: Leak Confirmation
Status: Preliminary Site Assessment Underway
Status: Pollution Characterization
Status: Remedial Action Underway
Status: Case Closed

COMM AIR	***1266 14TH ST***	***NNE 1/8 - 1/4 (0.127 mi.)***	***G31***	***101***

Record Id: RO0001053
Status: Case Closed

COCA COLA	***1340 MANDELA PARKWAY***	***NNW 1/8 - 1/4 (0.127 mi.)***	***H35***	***108***

Record Id: RO0001205
Status: Case Closed

VACANT LOT SABEK INC	***1230 14TH ST***	***NNE 1/8 - 1/4 (0.130 mi.)***	***G40***	***130***

Record Id: RO0000433
Status: Leak Confirmation
Status: Preliminary Site Assessment Underway
Status: Pollution Characterization
Status: Remediation Plan
Status: Remedial Action Underway

ARMORED TRANSPORT	***1333 8TH ST***	***SW 1/8 - 1/4 (0.168 mi.)***	***L56***	***180***

Record Id: RO0000627
Status: Case Closed

ALL MERCEDES DISMANT	***1255 7TH ST***	***S 1/8 - 1/4 (0.225 mi.)***	***N68***	***213***

Record Id: RO0000937
Status: Case Closed

SIGNAL SS/CHEVRON 20	***800 CENTER ST***	***WSW 1/8 - 1/4 (0.228 mi.)***	***P75***	***227***

Record Id: RO0000454
Record Id: RO0003272
Status: Leak Confirmation
Status: Pollution Characterization

EVERIDGE SERVICE COM	***1211 7TH ST***	***S 1/8 - 1/4 (0.229 mi.)***	***N78***	***260***

Record Id: RO0000235
Status: Leak Confirmation
Status: Pollution Characterization

CONTAINER CARE LIMIT	***1350 16TH ST***	***N 1/8 - 1/4 (0.231 mi.)***	***80***	***264***

Record Id: RO0000620
Status: Case Closed

KELLY'S TRUCK REPAIR	***1390 7TH ST***	***SW 1/8 - 1/4 (0.235 mi.)***	***Q81***	***266***

Record Id: RO0001071
Status: Case Closed

MANDELA GATEWAY REDE	***0 7TH ST & MANDELA***	***WSW 1/8 - 1/4 (0.243 mi.)***	***85***	***272***

Record Id: RO0002517
Status: Preliminary Site Assessment Underway
Status: Pollution Characterization
Status: Remediation Plan
Status: Remedial Action Underway
Status: Case Closed

J & A TRUCK REPAIR ***500 KIRKHAM ST*** ***SSW 1/4 - 1/2 (0.256 mi.)*** ***S88*** ***275***
Record Id: RO0000421
Status: Leak Confirmation
Status: Pollution Characterization

TRUCKER'S FRIEND ***1395 7TH*** ***SW 1/4 - 1/2 (0.258 mi.)*** ***Q91*** ***284***
Record Id: RO0000053
Status: Preliminary Site Assessment Workplan Submitted

CONDOR FREIGHT LINES ***324 UNION ST*** ***SSW 1/4 - 1/2 (0.265 mi.)*** ***N93*** ***294***
Record Id: RO0000989
Status: Case Closed

CONTAINER FREIGHT ***1285 5TH ST*** ***SSW 1/4 - 1/2 (0.289 mi.)*** ***S94*** ***301***
Record Id: RO0000420
Status: Leak Confirmation
Status: Pollution Characterization
Status: Remedial Action Underway

RED STAR YEAST / 139 ***1396 5TH*** ***SW 1/4 - 1/2 (0.299 mi.)*** ***96*** ***307***
Record Id: RO0002896
Status: Pollution Characterization
Status: Case Closed

SOUTHERN PACIFIC TRA ***0 5TH AVE & KIRKHAM*** ***SSW 1/4 - 1/2 (0.301 mi.)*** ***S97*** ***311***
Record Id: RO0000122
Status: Leak Confirmation
Status: Pollution Characterization

CALTRANS CYPRESS PRO ***0 5TH ST AND ADELINE*** ***S 1/4 - 1/2 (0.301 mi.)*** ***T98*** ***313***
Record Id: RO0000178
Status: Leak Confirmation

RINO PACIFIC OAKLAND ***1107 5TH ST*** ***S 1/4 - 1/2 (0.303 mi.)*** ***T99*** ***319***
Record Id: RO0000234
Status: Leak Confirmation
Status: Preliminary Site Assessment Underway
Status: Pollution Characterization
Status: Remediation Plan
Status: Remedial Action Underway
**Additional key fields are available in the Map Findings section*

PACIFIC BELL ***1075 7TH*** ***SSE 1/4 - 1/2 (0.306 mi.)*** ***100*** ***327***
Record Id: RO0000628
Status: Leak Confirmation
Status: Case Closed

OSAGIE PROPERTY ***1532 PERALTA STREET*** ***NNW 1/4 - 1/2 (0.306 mi.)*** ***U101*** ***328***
Record Id: RO0000117
Status: Leak Confirmation
Status: Preliminary Site Assessment Workplan Submitted
Status: Preliminary Site Assessment Underway

RELIABLE HANDI CAB ***1520 7TH ST*** ***WSW 1/4 - 1/2 (0.350 mi.)*** ***107*** ***354***
Record Id: RO0001137

Status: Case Closed

THE BURKE COMPANY	***310 UNION***	***S 1/4 - 1/2 (0.376 mi.)***	***Y113***	***370***
Record Id: RO0002828				
Status: Leak Confirmation				
Status: Pollution Characterization				
Status: Case Closed				
PACIFIC PIPE COMPANY	***1901 POPLAR ST***	***N 1/4 - 1/2 (0.377 mi.)***	***114***	***371***
Record Id: RO0000677				
Status: Case Closed				
HALL PROPERTY	***1455 5TH***	***SW 1/4 - 1/2 (0.381 mi.)***	***116***	***377***
Record Id: RO0002537				
Status: Preliminary Site Assessment Underway				
Status: Pollution Characterization				
Status: Remedial Action Underway				
Status: Case Closed				
GARDINER MFG COMPANY	***1920 UNION ST***	***NNE 1/4 - 1/2 (0.400 mi.)***	***119***	***381***
Record Id: RO0001185				
Status: Case Closed				
RELIANCE UPHOLSTERY	***1614 CAMPBELL ST***	***NNW 1/4 - 1/2 (0.402 mi.)***	***AB120***	***383***
Record Id: RO0002613				
Status: Preliminary Site Assessment Underway				
ARATEX SERVICES, INC	***330 CHESTNUT ST***	***SSE 1/4 - 1/2 (0.405 mi.)***	***122***	***395***
Record Id: RO0000446				
Status: Leak Confirmation				
Status: Preliminary Site Assessment Underway				
Status: Pollution Characterization				
Status: Remedial Action Underway				
Status: Case Closed				
OAKLAND WAREHOUSE	***1221 3RD ST***	***S 1/4 - 1/2 (0.417 mi.)***	***127***	***417***
Record Id: RO0000673				
Status: Case Closed				
CADEMARTORI TRUCKING	***1833 PERALTA ST***	***NNW 1/4 - 1/2 (0.420 mi.)***	***Z128***	***428***
Record Id: RO0000015				
Status: Preliminary Site Assessment Workplan Submitted				
DC METALS	***1414 3RD ST***	***SW 1/4 - 1/2 (0.431 mi.)***	***AC131***	***438***
Record Id: RO0000444				
Status: Leak Confirmation				
ACME GALVANIZING	***1655 17TH***	***NNW 1/4 - 1/2 (0.457 mi.)***	***AG139***	***469***
Record Id: RO0002777				
Status: Leak Confirmation				
EAST BAY FORD TRUCK	***333 FIBERT ST***	***SSE 1/4 - 1/2 (0.460 mi.)***	***142***	***486***
Record Id: RO0001091				
Status: Case Closed				
EAST BAY MUNICIPAL U	***1200 21ST STREET***	***NNE 1/4 - 1/2 (0.468 mi.)***	***145***	***503***
Record Id: RO0000030				
Status: Preliminary Site Assessment Underway				
SUNSET WHOLESALE COM	***105 EMBARCADERO AVE***	***S 1/4 - 1/2 (0.472 mi.)***	***146***	***516***
Record Id: RO0000735				
Status: Case Closed				
ROADWAY EXPRESS INC	***1708 WOOD ST***	***NNW 1/4 - 1/2 (0.477 mi.)***	***AG147***	***518***

Record Id: RO0000039
Record Id: RO0003206
Status: Preliminary Site Assessment Workplan Submitted
Status: Preliminary Site Assessment Underway
Status: Pollution Characterization

FRANK'S TIRE SERVICE	***1115 21ST ST***	***NE 1/4 - 1/2 (0.478 mi.)***	***148***	***531***
Record Id: RO0000301				
Status: Case Closed				
INMONT CORPORATION	***1545 WILLOW STREET***	***NW 1/4 - 1/2 (0.485 mi.)***	***AI153***	***542***
Record Id: RO0002956				
Status: Case Closed				
NORCAL METAL FABRICA	***114 ADELINE ST***	***S 1/4 - 1/2 (0.498 mi.)***	***AJ154***	***546***
Record Id: RO0000570				
Status: Case Closed				
LEHAR SALES	***150 CHESTNUT ST***	***S 1/4 - 1/2 (0.499 mi.)***	***AJ155***	***548***
Record Id: RO0001138				
Status: Case Closed				

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL SUPPLY CENTER,	1200 12TH STREET	ENE 0 - 1/8 (0.065 mi.)	C10	34
Database: MILITARY UST SITES, Date of Government Version: 09/09/2019				

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there are 4 AST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AT SYTEMS INTERNATIO	1333 8TH STREET	SW 1/8 - 1/4 (0.168 mi.)	L55	179
Database: AST, Date of Government Version: 07/06/2016				
ZENTRUM MOTORS	1225 7TH ST	S 1/8 - 1/4 (0.224 mi.)	N65	210
Database: AST, Date of Government Version: 07/06/2016				
FIRE STATION #03	1445 14TH ST	NW 1/8 - 1/4 (0.227 mi.)	O70	218
Database: AST, Date of Government Version: 07/06/2016				
CITY OF OAKLAND FIRE	1445 14TH ST.	NW 1/8 - 1/4 (0.227 mi.)	O72	224
Database: AST, Date of Government Version: 07/06/2016				

State and tribal voluntary cleanup sites

VCP: Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

A review of the VCP list, as provided by EDR, and dated 07/29/2019 has revealed that there are 16 VCP sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PALM COURT Status: No Further Action Facility Id: 1990027	***902 UNION STREET***	***S 0 - 1/8 (0.094 mi.)***	***F24***	***82***
VEND MART PROPERTY Status: Certified Facility Id: 1990012	***1035 7TH ST***	***SSE 1/4 - 1/2 (0.348 mi.)***	***W106***	***344***
CHANG'S AUTOMOTIVE Status: Certified Facility Id: 1750019	***1009 7TH STREET***	***SSE 1/4 - 1/2 (0.367 mi.)***	***W111***	***362***
MICRONESIAN CARGO IN Status: No Further Action Facility Id: 1420129	***955 7TH STREET***	***SE 1/4 - 1/2 (0.412 mi.)***	***AA123***	***405***

Lower Elevation	Address	Direction / Distance	Map ID	Page
NEW OAKLAND FIRE STA Status: Certified Facility Id: 1920063	***CENTER AND 14TH STRE***	***NW 1/8 - 1/4 (0.238 mi.)***	***O82***	***268***
J & A TRUCK REPAIR Status: Active Facility Id: 1510022	***500 KIRKHAM ST***	***SSW 1/4 - 1/2 (0.256 mi.)***	***S88***	***275***
CONDOR FREIGHT LINES Status: No Further Action Facility Id: 1420126	***324 UNION ST***	***SSW 1/4 - 1/2 (0.265 mi.)***	***N93***	***294***
CONTAINER FREIGHT Status: Inactive - Needs Evaluation Facility Id: 1420128	***1285 5TH ST***	***SSW 1/4 - 1/2 (0.289 mi.)***	***S94***	***301***
WEST OAKLAND BART ST Status: Active Facility Id: 70000133	***1451 7TH STREET***	***WSW 1/4 - 1/2 (0.309 mi.)***	***V102***	***336***
WESTERN PACIFIC RAIL Status: Certified / Operation & Maintenance Facility Id: 1400008	***UNION STREET***	***S 1/4 - 1/2 (0.366 mi.)***	***Y110***	***360***
AMTRAK MAINTENANCE F Status: Certified / Operation & Maintenance Facility Id: 1400014	***3RD & UNION STREETS***	***SSW 1/4 - 1/2 (0.378 mi.)***	***115***	***375***
RELIANCE UPHOLSTERY Status: Certified Facility Id: 70000082	***1614 CAMPBELL ST***	***NNW 1/4 - 1/2 (0.402 mi.)***	***AB120***	***383***
MARK ABOUDI PROPERTY	***1639 18TH STREET***	***NNW 1/4 - 1/2 (0.412 mi.)***	***Z124***	***407***

Status: Certified O&M - Land Use Restrictions Only
Facility Id: 1420131

BOBO'S JUNKYARD	***1401 THIRD STREET***	***SW 1/4 - 1/2 (0.445 mi.)***	***AC132***	***441***
Status: Certified / Operation & Maintenance Facility Id: 1400003				
CITY OF OAKLAND (PUB	***1368 WILLOW ST***	***NW 1/4 - 1/2 (0.446 mi.)***	***AD133***	***443***
Status: No Further Action Facility Id: 1990028				
SOUTHERN PACIFIC 3RD	***1509/1513 THIRD STRE***	***SW 1/4 - 1/2 (0.500 mi.)***	***AK156***	***551***
Status: Certified Facility Id: 1400013				

State and tribal Brownfields sites

BROWNFIELDS: A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

A review of the BROWNFIELDS list, as provided by EDR, and dated 09/23/2019 has revealed that there are 2 BROWNFIELDS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FORMER ADELINE CLEAN	***979 7TH ST***	***SE 1/4 - 1/2 (0.393 mi.)***	***AA118***	***379***

Lower Elevation	Address	Direction / Distance	Map ID	Page
EAST BAY FORD TRUCK	***333 FIBERT ST***	***SSE 1/4 - 1/2 (0.460 mi.)***	***142***	***486***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 06/03/2019 has revealed that there are 5 US BROWNFIELDS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WEST OAKLAND AREA I	***7TH STREET BETWEEN P***	***W 1/8 - 1/4 (0.209 mi.)***	***61***	***200***
ACRES property ID: 131530				

Lower Elevation	Address	Direction / Distance	Map ID	Page
WEST OAKLAND BART ST	***1451 7TH STREET***	***WSW 1/4 - 1/2 (0.309 mi.)***	***V103***	***339***
ACRES property ID: 133801				
WILLOW PARK	***14TH AND WILLOW ST W***	***NW 1/4 - 1/2 (0.460 mi.)***	***AD141***	***478***

Cleanup Completion Date: 12/01/2004 00:00:00
ACRES property ID: 16501

WEST OAKLAND III	***WOOD, 9TH, 12TH AND***	***NNW 1/4 - 1/2 (0.482 mi.)***	***AG150***	***533***
ACRES property ID: 131561				
WEST OAKLAND AREA II	***WOOD AND PERALTA STR***	***NNW 1/4 - 1/2 (0.482 mi.)***	***AG151***	***536***
ACRES property ID: 131541				

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 09/09/2019 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NATIONAL RECYCLING C	***1312 KIRKHAM ST***	***NNW 0 - 1/8 (0.090 mi.)***	***E21***	***71***
Cert Id: RC3530				

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there are 12 HIST Cal-Sites sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMCO CHEMICAL	***1414 THIRD STREET***	***SW 1/4 - 1/2 (0.357 mi.)***	***0***	***13***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SF BAY AREA RAPID TR	***349 MANDELA PKWY***	***SW 1/4 - 1/2 (0.369 mi.)***	***X112***	***365***
528 LEWIS STREET	***528 LEWIS STREET***	***WSW 1/4 - 1/2 (0.455 mi.)***	***AF137***	***463***
COMMERCIAL BUILDINGS	***1250-1276, 1284 W. G***	***NNE 1/2 - 1 (0.568 mi.)***	***169***	***717***
SOUTHERN PACIFIC -WE	***CYPRESS CORRIDOR***	***WSW 1/2 - 1 (0.584 mi.)***	***AM172***	***728***
GAINES PROPERTY	***1795 11TH STREET***	***WNW 1/2 - 1 (0.630 mi.)***	***AQ183***	***752***
NORTHWESTERN VENETIA	1218 24TH STREET	NNE 1/2 - 1 (0.670 mi.)	AR186	768
BNSF WOOD STREET YAR	***WOOD STREET & WEST G***	***NNW 1/2 - 1 (0.758 mi.)***	***AT202***	***820***
HOWARD MARINE TERMIN	***EMBARCADERO WEST AND***	***SSE 1/2 - 1 (0.787 mi.)***	***206***	***829***
ALAMEDA CHEMICAL AND	***2668 HANNAH STREET***	***NNE 1/2 - 1 (0.879 mi.)***	***BA220***	***885***
OAKLAND ARMY BASE-EA	***700 MURMANSK STREET,***	***WNW 1/2 - 1 (0.895 mi.)***	***221***	***888***
SOUTHERN PACIFIC - D	***CYPRESS CORRIDOR***	***N 1/2 - 1 (0.912 mi.)***	***222***	***900***

Toxic Pits: The Toxic Pits Cleanup Act Sites database identifies sites suspected of containing hazardous substances where cleanup has not yet been completed. The data come from the State Water Resources Control Board.

A review of the Toxic Pits list, as provided by EDR, and dated 07/01/1995 has revealed that there are 2 Toxic Pits sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SP, W.OAKLAND YD.-(O Closure Date: 04/21/93 Task #: 82010 Status: CLOSED	1707 WOOD STREET	NNW 1/2 - 1 (0.613 mi.)	AP176	740
SP, W.OAKLAND YARD-(Closure Date: 06/30/92 Task #: 82034 Status: CLOSED	1707 WOOD STREET	NNW 1/2 - 1 (0.613 mi.)	AP177	741

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 08/14/2019 has revealed that there are 6 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CALIFORNIA CEREAL PR	***1267 14TH ST***	***NNE 0 - 1/8 (0.067 mi.)***	***D13***	***39***

Lower Elevation	Address	Direction / Distance	Map ID	Page
NATIONAL RECYCLING C	***1312 KIRKHAM ST***	***NNW 0 - 1/8 (0.090 mi.)***	***E19***	***52***
AUTO-CHLOR SYSTEM	***1350 14TH STREET***	***N 1/8 - 1/4 (0.128 mi.)***	***E37***	***111***
OTIS ELEVATOR COMPAN	***1358 14TH ST***	***N 1/8 - 1/4 (0.128 mi.)***	***E39***	***127***
THE CRUCIBLE	***1260 7TH ST***	***SSW 1/8 - 1/4 (0.199 mi.)***	***M60***	***193***
ZENTRUM MOTORS	***1225 7TH ST***	***S 1/8 - 1/4 (0.224 mi.)***	***N64***	***204***

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 9 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAKLAND CITY OF HOUS Comp Number: 64509	***935 UNION ST***	***S 0 - 1/8 (0.002 mi.)***	***B7***	***30***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***86***

Comp Number: 65866				
COMM AIR Status: A Tank Status: A Comp Number: 46625	***1266 14TH ST***	***NNE 1/8 - 1/4 (0.127 mi.)***	***G31***	***101***
OAKLAND PRODUCTION A Status: A Tank Status: A Comp Number: 7065	***1340 CYPRESS ST***	***NNW 1/8 - 1/4 (0.145 mi.)***	***H44***	***146***
NABISCO BRANDS Comp Number: 53463	***1267 014TH ST***	***N 1/8 - 1/4 (0.162 mi.)***	***K54***	***178***
SABEK, INC. Comp Number: 1546	***1230 014TH ST***	***N 1/8 - 1/4 (0.174 mi.)***	***K58***	***189***
ALL MERCEDES DISMANT Comp Number: 51603	***1225 7TH ST***	***S 1/8 - 1/4 (0.224 mi.)***	***N63***	***203***
EVERIDGE SERVICE COM Comp Number: 42543	***1211 7TH ST***	***S 1/8 - 1/4 (0.229 mi.)***	***N78***	***260***
ARMORED TRANSPORT IN Status: A Tank Status: A Comp Number: 209	1333 7TH ST	SW 1/8 - 1/4 (0.231 mi.)	Q79	263

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 11 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAKLAND CITY OF HOUS	***935 UNION ST***	***S 0 - 1/8 (0.002 mi.)***	***B7***	***30***
WEST DISTRICT OFFICE Facility Id: 00000064509	935 UNION ST	S 0 - 1/8 (0.002 mi.)	B8	33
NABISCO BRANDS Facility Id: 00000053463	1267 14TH ST	NNE 0 - 1/8 (0.067 mi.)	D14	49
STEPHEN R BELL	***1267 14TH ST***	***NNE 0 - 1/8 (0.067 mi.)***	***D15***	***50***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES Facility Id: 00000065866	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***86***
FORMER OAKLAND CARNA	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E30***	***99***
CARRON AIR Facility Id: 00000046625	1266 14TH ST	NNE 1/8 - 1/4 (0.127 mi.)	G32	104
VACANT LOT SABEK INC	***1230 14TH ST***	***NNE 1/8 - 1/4 (0.130 mi.)***	***G40***	***130***
SABEK, INC. Facility Id: 00000001546	1230 14TH ST	NNE 1/8 - 1/4 (0.130 mi.)	G41	143
OAKLAND PRODUCTION A Facility Id: 00000007065	1340 CYPRESS ST	NNW 1/8 - 1/4 (0.145 mi.)	H47	151
WILLIE EVERIDGE	1211 7TH ST	S 1/8 - 1/4 (0.229 mi.)	N76	252

EXECUTIVE SUMMARY

Facility Id: 00000042543

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 08/14/2019 has revealed that there are 2 CERS TANKS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL SUPPLY CENTER,	1200 12TH STREET	ENE 0 - 1/8 (0.065 mi.)	C9	33

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRE STATION #03	***1445 14TH ST***	***NW 1/8 - 1/4 (0.227 mi.)***	***O71***	***219***

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 7 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAKLAND CITY OF HOUS Facility Id: 01000546 Status: I	***935 UNION ST***	***S 0 - 1/8 (0.002 mi.)***	***B7***	***30***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES Facility Id: 01002256 Status: I	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***86***
OAKLAND PRODUCTION A Facility Id: 01000569 Status: A	***1340 CYPRESS ST***	***NNW 1/8 - 1/4 (0.145 mi.)***	***H44***	***146***
NABISCO BRANDS Facility Id: 01002226 Status: I	***1267 014TH ST***	***N 1/8 - 1/4 (0.162 mi.)***	***K54***	***178***
SABEK, INC. Facility Id: 01002523 Status: A	***1230 014TH ST***	***N 1/8 - 1/4 (0.174 mi.)***	***K58***	***189***
WILLIE EVERIDGE Facility Id: 01002696 Status: A	1211 007TH ST	SSW 1/8 - 1/4 (0.215 mi.)	M62	202
ALL MERCEDES DISMANT Facility Id: 01000177 Status: I	***1225 7TH ST***	***S 1/8 - 1/4 (0.224 mi.)***	***N63***	***203***

EXECUTIVE SUMMARY

Local Land Records

DEED: The use of recorded land use restrictions is one of the methods the DTSC uses to protect the public from unsafe exposures to hazardous substances and wastes .

A review of the DEED list, as provided by EDR, and dated 09/03/2019 has revealed that there are 5 DEED sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***86***
Status: COMPLETED - CASE CLOSED Envirostor ID: T0600100262				
WESTERN PACIFIC RAIL	***UNION STREET***	***S 1/4 - 1/2 (0.366 mi.)***	***Y110***	***360***
Status: CERTIFIED / OPERATION & MAINTENANCE Envirostor ID: 1400008				
AMTRAK MAINTENANCE F	***3RD & UNION STREETS***	***SSW 1/4 - 1/2 (0.378 mi.)***	***115***	***375***
Status: CERTIFIED / OPERATION & MAINTENANCE Envirostor ID: 1400014				
MARK ABOUDI PROPERTY	***1639 18TH STREET***	***NNW 1/4 - 1/2 (0.412 mi.)***	***Z124***	***407***
Status: CERTIFIED O&M - LAND USE RESTRICTIONS ONLY Envirostor ID: 1420131				
BOBO'S JUNKYARD	***1401 THIRD STREET***	***SW 1/4 - 1/2 (0.445 mi.)***	***AC132***	***441***
Status: CERTIFIED / OPERATION & MAINTENANCE Envirostor ID: 1400003				

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/24/2019 has revealed that there are 15 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CALIFORNIA CEREAL PR EPA ID:: CAL000142005	1267 14TH ST	NNE 0 - 1/8 (0.067 mi.)	D11	34
ACORN TOWERS EPA ID:: CAC002981481	914 UNION ST	S 0 - 1/8 (0.091 mi.)	F22	79
ACORN TOWERS / 910 U EPA ID:: CAC002969756	910 UNION ST	S 0 - 1/8 (0.092 mi.)	F23	81
BERG, ANNA EPA ID:: CAC002989036	1015 ADELINE STREET	ESE 0 - 1/8 (0.118 mi.)	25	84
DARRYL BRICE EPA ID:: CAC002973104	808 UNION ST	S 0 - 1/8 (0.119 mi.)	F27	85
ACORN TOWERS	1174 8TH STREET	SSE 1/8 - 1/4 (0.155 mi.)	I48	152

EPA ID:: CAC002995296				
ACORN EPA ID:: CAC002994712	1162 8TH ST	SSE 1/8 - 1/4 (0.162 mi.)	I53	177
ACORN EPA ID:: CAC003000608	831 ADELINE STREET	SSE 1/8 - 1/4 (0.170 mi.)	I57	188
ARNICE RODGERS EPA ID:: CAC002984669	1109 LINDEN STREET	ESE 1/8 - 1/4 (0.240 mi.)	R83	269
DOROTHY WHITEHEAD EPA ID:: CAC002995709	1127 LINDEN STREET	E 1/8 - 1/4 (0.240 mi.)	R84	271

Lower Elevation	Address	Direction / Distance	Map ID	Page
NATIONAL RECYCLING C EPA ID:: CAL000263916	1312 KIRKHAM ST	NNW 0 - 1/8 (0.090 mi.)	E20	69
COCA COLA BOTTLING O EPA ID:: CAD982475410	1340 CYPRESS STREET	NNW 1/8 - 1/4 (0.145 mi.)	H46	150
THE CRUCIBLE EPA ID:: CAL000292982	1260 7TH ST	SSW 1/8 - 1/4 (0.199 mi.)	M59	192
ZENTRUM MOTORS EPA ID:: CAL000019582	1225 7TH ST	S 1/8 - 1/4 (0.224 mi.)	N66	211
CHEVRON USA STATION EPA ID:: CAL000213391	800 CENTER ST	WSW 1/8 - 1/4 (0.228 mi.)	P74	226

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 05/15/2019 has revealed that there are 2 FUDS sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARMY-NAVY DISTRIBUTI		N 1/2 - 1 (0.812 mi.)	208	838
PACIFIC OVERSEAS AIR		N 1/2 - 1 (0.933 mi.)	BC227	913

DOD: Consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAKLAND ARMY BASE (C		NW 1/2 - 1 (0.973 mi.)	0	13

CA BOND EXP. PLAN: Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there is 1 CA BOND EXP. PLAN site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SOUTHERN PACIFIC TRA	1707 WOOD STREET	NNW 1/2 - 1 (0.613 mi.)	AP174	736

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 09/23/2019 has revealed that there are 11 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMCO CHEMICAL	***1414 THIRD STREET***	***SW 1/4 - 1/2 (0.357 mi.)***	***0***	***13***
Envirostor Id: 1390001 Cleanup Status: ACTIVE				
MANDELA TRUCKING	***1225 MANDELA PKWY***	***NW 1/8 - 1/4 (0.156 mi.)***	***51***	***156***
Cleanup Status: OPEN - SITE ASSESSMENT				

Lower Elevation	Address	Direction / Distance	Map ID	Page
VACANT LOT SABEK INC	***1230 14TH ST***	***NNE 1/8 - 1/4 (0.130 mi.)***	***G40***	***130***
Cleanup Status: OPEN - ELIGIBLE FOR CLOSURE				
SIGNAL SS/CHEVRON 20	***800 CENTER ST***	***WSW 1/8 - 1/4 (0.228 mi.)***	***P75***	***227***
Cleanup Status: OPEN - VERIFICATION MONITORING				
FORMER EVERIDGE SERV	***1211 7TH***	***S 1/8 - 1/4 (0.229 mi.)***	***N77***	***253***
Cleanup Status: OPEN - SITE ASSESSMENT				
J & A TRUCK REPAIR	***500 KIRKHAM ST***	***SSW 1/4 - 1/2 (0.256 mi.)***	***S88***	***275***
Cleanup Status: OPEN - SITE ASSESSMENT				
TRUCKER'S FRIEND	***1395 7TH***	***SW 1/4 - 1/2 (0.258 mi.)***	***Q91***	***284***
Cleanup Status: OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION				
CONTAINER FREIGHT	***1285 5TH ST***	***SSW 1/4 - 1/2 (0.289 mi.)***	***S94***	***301***
Cleanup Status: OPEN - REMEDIATION				
OSAGIE PROPERTY	***1532 PERALTA STREET***	***NNW 1/4 - 1/2 (0.306 mi.)***	***U101***	***328***
Cleanup Status: OPEN - REMEDIATION				
DC METALS	***1414 3RD ST***	***SW 1/4 - 1/2 (0.431 mi.)***	***AC131***	***438***
Cleanup Status: OPEN - SITE ASSESSMENT				
EAST BAY MUNICIPAL U	***1200 21ST STREET***	***NNE 1/4 - 1/2 (0.468 mi.)***	***145***	***503***
Cleanup Status: OPEN - REMEDIATION				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there

are 37 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAKLAND CITY OF HOUS Reg Id: 01-0414	***935 UNION ST***	***S 0 - 1/8 (0.002 mi.)***	***B7***	***30***
NABISCO BRANDS INC Reg Id: 01-1028	***1267 14TH ST***	***NNE 0 - 1/8 (0.067 mi.)***	***D12***	***36***
MANDELA TRUCKING Reg Id: 01-2437	***1225 MANDELA PKWY***	***NW 1/8 - 1/4 (0.156 mi.)***	***51***	***156***
VEND MART PROPERTY Reg Id: 01-1778	***1035 7TH ST***	***SSE 1/4 - 1/2 (0.348 mi.)***	***W106***	***344***
JR USED AUTO PARTS Reg Id: 01-0806	823 12TH	ESE 1/4 - 1/2 (0.462 mi.)	AH143	502

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES Reg Id: 01-0282	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***86***
COMM AIR Reg Id: 01-2287	***1266 14TH ST***	***NNE 1/8 - 1/4 (0.127 mi.)***	***G31***	***101***
VACANT LOT SABEK INC Reg Id: 01-1825	***1230 14TH ST***	***NNE 1/8 - 1/4 (0.130 mi.)***	***G40***	***130***
COCA COLA Reg Id: 01-0438	1340 CYPRESS	NNW 1/8 - 1/4 (0.145 mi.)	H43	145
ARMORED TRANSPORT Reg Id: 01-2212	***1333 8TH ST***	***SW 1/8 - 1/4 (0.168 mi.)***	***L56***	***180***
ALL MERCEDES DISMANT Reg Id: 01-1266	***1255 7TH ST***	***S 1/8 - 1/4 (0.225 mi.)***	***N68***	***213***
SIGNAL SS/CHEVRON 20 Reg Id: 01-2421	***800 CENTER ST***	***WSW 1/8 - 1/4 (0.228 mi.)***	***P75***	***227***
EVERIDGE SERVICE COM Reg Id: 01-0741	***1211 7TH ST***	***S 1/8 - 1/4 (0.229 mi.)***	***N78***	***260***
CONTAINER CARE LIMIT Reg Id: 01-2221	***1350 16TH ST***	***N 1/8 - 1/4 (0.231 mi.)***	***80***	***264***
KELLY'S TRUCK REPAIR Reg Id: 01-2118	***1390 7TH ST***	***SW 1/8 - 1/4 (0.235 mi.)***	***Q81***	***266***
CHRYSLER AUTO UNLOAD Reg Id: 01-2210	1401 7 MIDDLE HARBOR	SW 1/4 - 1/2 (0.255 mi.)	Q87	274
J & A TRUCK REPAIR Reg Id: 01-2433 Reg Id: 01510022	***500 KIRKHAM ST***	***SSW 1/4 - 1/2 (0.256 mi.)***	***S88***	***275***
TRUCKER'S FRIEND Reg Id: 01-0323	***1395 7TH***	***SW 1/4 - 1/2 (0.258 mi.)***	***Q91***	***284***
CONDOR FREIGHT LINES Reg Id: 01420126 Reg Id: 01-1305	***324 UNION ST***	***SSW 1/4 - 1/2 (0.265 mi.)***	***N93***	***294***
CONTAINER FREIGHT Reg Id: 01-2399	***1285 5TH ST***	***SSW 1/4 - 1/2 (0.289 mi.)***	***S94***	***301***
CALTRANS CYPRESS PRO	***UNKNOWN 5TH & ADELIN***	***S 1/4 - 1/2 (0.297 mi.)***	***T95***	***307***

Reg Id: 01-2398				
RINO PACIFIC OAKLAND Reg Id: 01-2322	***1107 5TH ST***	***S 1/4 - 1/2 (0.303 mi.)***	***T99***	***319***
RELIABLE HANDI CAB Reg Id: 01-1234	***1520 7TH ST***	***WSW 1/4 - 1/2 (0.350 mi.)***	***107***	***354***
PACIFIC PIPE COMPANY Reg Id: 01-2156	***1901 POPLAR ST***	***N 1/4 - 1/2 (0.377 mi.)***	***114***	***371***
GARDINER MFG COMPANY Reg Id: 01-0681	***1920 UNION ST***	***NNE 1/4 - 1/2 (0.400 mi.)***	***119***	***381***
ARATEX SERVICES, INC Reg Id: 01-0086	***330 CHESTNUT ST***	***SSE 1/4 - 1/2 (0.405 mi.)***	***122***	***395***
OAKLAND WAREHOUSE Reg Id: 01-1054	***1221 3RD ST***	***S 1/4 - 1/2 (0.417 mi.)***	***127***	***417***
CADEMARTORI TRUCKING Reg Id: 01-0254	***1833 PERALTA ST***	***NNW 1/4 - 1/2 (0.420 mi.)***	***Z128***	***428***
DC METALS Reg Id: 01-2396	***1414 3RD ST***	***SW 1/4 - 1/2 (0.431 mi.)***	***AC131***	***438***
FACILITY 10201-1 Reg Id: 2650	***1121 3RD***	***S 1/4 - 1/2 (0.446 mi.)***	***AE134***	***446***
EAST BAY FORD TRUCK Reg Id: 01-0531	***333 FIBERT ST***	***SSE 1/4 - 1/2 (0.460 mi.)***	***142***	***486***
EAST BAY MUNICIPAL U Reg Id: 01-2299	***1200 21ST STREET***	***NNE 1/4 - 1/2 (0.468 mi.)***	***145***	***503***
SUNSET WHOLESALE COM Reg Id: 01-1742	***105 EMBARCADERO AVE***	***S 1/4 - 1/2 (0.472 mi.)***	***146***	***516***
ROADWAY EXPRESS INC Reg Id: 01-2291	***1708 WOOD ST***	***NNW 1/4 - 1/2 (0.477 mi.)***	***AG147***	***518***
INMONT CORPORATION Reg Id: 01-0152	***1545 WILLOW STREET***	***NW 1/4 - 1/2 (0.485 mi.)***	***AI153***	***542***
NORCAL METAL FABRICA Reg Id: 01-1636	***114 ADELINE ST***	***S 1/4 - 1/2 (0.498 mi.)***	***AJ154***	***546***
LEHAR SALES Reg Id: 01-1268	***150 CHESTNUT ST***	***S 1/4 - 1/2 (0.499 mi.)***	***AJ155***	***548***

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 08/19/2019 has revealed that there are 3 HWP sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FRANCIS PLATING OF O EPA Id: CAD009206160 Cleanup Status: PROTECTIVE FILER	***785 7TH ST***	***SE 1/2 - 1 (0.542 mi.)***	***160***	***556***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SAFETY-KLEEN CORP.	***404 MARKET ST***	***SE 1/2 - 1 (0.561 mi.)***	***AN166***	***596***

EPA Id: CAD053044053
Cleanup Status: CLOSED

ARTESIAN OIL RECOVER	***2306 MAGNOLIA ST***	***NNE 1/2 - 1 (0.630 mi.)***	***AO180***	***745***

EPA Id: CAL000161741
Cleanup Status: CLOSED

PROC: A listing of certified processors.

A review of the PROC list, as provided by EDR, and dated 09/09/2019 has revealed that there is 1 PROC site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NATIONAL RECYCLING C	***1312 KIRKHAM ST***	***NNW 0 - 1/8 (0.090 mi.)***	***E21***	***71***

Cert Id: PR0313
Reg Id: 19434

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 09/16/2019 has revealed that there are 11 Notify 65 sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NABISCO BRANDS, INC.	1267 14TH STREET	NNE 0 - 1/8 (0.067 mi.)	D16	51
OAKLAND CITY HALL	***#1 CITY HALL PLAZA***	***E 1/2 - 1 (0.963 mi.)***	***231***	***921***

Lower Elevation	Address	Direction / Distance	Map ID	Page
EAST BAY FORD TRUCK	***333 FIBERT ST***	***SSE 1/4 - 1/2 (0.460 mi.)***	***142***	***486***
TAYLOR ROOF STRUCTUR	1769 13TH STREET	WNW 1/2 - 1 (0.525 mi.)	158	554
NED CLYDE CONSTRUCTI	2311 ADELINE STREET	NNE 1/2 - 1 (0.612 mi.)	AO173	736
KANTOR WAREHOUSE	***2525 MANDELA PARKWAY***	***N 1/2 - 1 (0.774 mi.)***	***AW204***	***825***
C. E. TOLAND & SON,	***2635 PERALTA***	***N 1/2 - 1 (0.812 mi.)***	***207***	***836***
MARSHALL STEEL CLEAN	***1229 28TH***	***NNE 1/2 - 1 (0.868 mi.)***	***216***	***877***
LINDFORD AIR & REFRI	2850 POPLAR	NNE 1/2 - 1 (0.914 mi.)	BB223	907
LINDFORD AIR & REFRI	***2850 POPLAR***	***NNE 1/2 - 1 (0.914 mi.)***	***BB224***	***908***
BUILDING 331 EAST	7 MERRITIME	NW 1/2 - 1 (0.931 mi.)	226	913

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste.

EXECUTIVE SUMMARY

Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

A review of the EDR MGP list, as provided by EDR, has revealed that there are 2 EDR MGP sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PG AND E OAKLAND	50 MARKET ST BTWN 1S	SSE 1/2 - 1 (0.725 mi.)	AS192	785
PG AND E GAS PLANT O	FIRST AND WASHINGTON	SE 1/2 - 1 (0.969 mi.)	233	927

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LALLY J L	1308 UNION AVE	NNE 0 - 1/8 (0.076 mi.)	D18	51

Lower Elevation	Address	Direction / Distance	Map ID	Page
TALLARICO PHILIP	1333 14TH ST	N 0 - 1/8 (0.118 mi.)	E26	85

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

Site Name	Database(s)
SOUTHERN PACIFIC TRANS CO	LUST, HIST CORTESE
5TH ST AND MAGNOLIA ST REDEVELOPME	Alameda County CS
UPTOWN THEATER DISTRICT	CPS-SLIC

OVERVIEW MAP - 5871762.2S

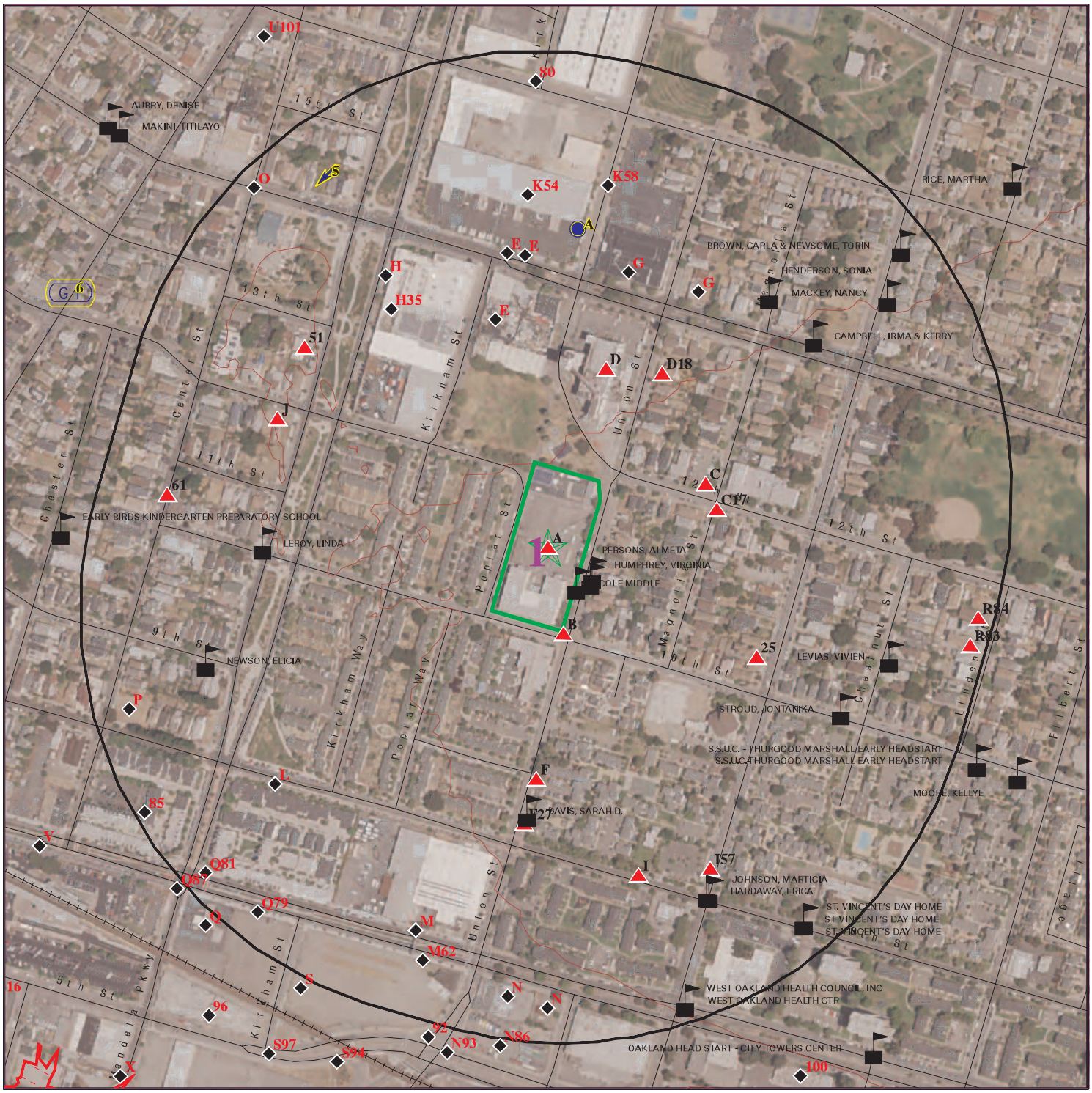


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	OUSD Central Administrative Center	CLIENT:	Ninyo & Moore
ADDRESS:	1011 Union Street Oakland CA 94607	CONTACT:	Luke Swickard
		INQUIRY #:	5871762.2s
LAT/LONG:	37.807958 / 122.289605	DATE:	November 15, 2019 1:44 pm

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DETAIL MAP - 5871762.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	OUSD Central Administrative Center	CLIENT:	Ninyo & Moore
ADDRESS:	1011 Union Street Oakland CA 94607	CONTACT:	Luke Swickard
LAT/LONG:	37.807958 / 122.289605	INQUIRY #:	5871762.2s
		DATE:	November 15, 2019 1:48 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	1	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	4	NR	NR	4
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	5	NR	NR	5
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	2	NR	2
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	1	NR	NR	NR	1
RCRA-SQG	0.250		0	8	NR	NR	NR	8
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	1	2	12	NR	15
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		2	4	23	58	NR	87
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		3	13	30	NR	NR	46

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	5	11	NR	NR	16
Alameda County CS	0.500		1	15	31	NR	NR	47
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	0	NR	NR	NR	1
AST	0.250		0	4	NR	NR	NR	4
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		1	1	14	NR	NR	16
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	2	NR	NR	2
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	1	4	NR	NR	5
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		1	0	0	NR	NR	1
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	3	9	NR	12
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	2	NR	2
CERS HAZ WASTE	0.250		2	4	NR	NR	NR	6
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	8	NR	NR	NR	9
HIST UST	0.250		4	7	NR	NR	NR	11
CERS TANKS	0.250		1	1	NR	NR	NR	2
CA FID UST	0.250		1	6	NR	NR	NR	7
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	1	4	NR	NR	5
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		6	9	NR	NR	NR	15
FUDS	1.000		0	0	0	2	NR	2
DOD	1.000		0	0	0	1	NR	1
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	1	NR	1
Cortese	0.500		0	4	7	NR	NR	11
CUPA Listings	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP	1	NR	NR	NR	NR	NR	1
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP	5	NR	NR	NR	NR	NR	5
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		2	11	24	NR	NR	37
HWP	1.000		0	0	0	3	NR	3
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		1	0	0	NR	NR	1
Notify 65	1.000		1	0	1	9	NR	11
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP	1	NR	NR	NR	NR	NR	1
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	2	NR	2
EDR Hist Auto	0.125		2	NR	NR	NR	NR	2
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		8	30	104	166	101	0	409

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: EPA
Telephone: N/A
Last EDR Contact: 11/07/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: EPA
Telephone: N/A
Last EDR Contact: 11/07/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: EPA
Telephone: N/A
Last EDR Contact: 11/07/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/04/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 11/07/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 11/07/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 113

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/28/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 113

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/28/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 113

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/28/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 113

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/28/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 113

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/28/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/13/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 08/26/2019
Number of Days to Update: 6

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 11/07/2019
Next Scheduled EDR Contact: 02/24/2020
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/19/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 08/26/2019
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/20/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/19/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 08/26/2019
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/20/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 14

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/29/2019
Date Data Arrived at EDR: 07/31/2019
Date Made Active in Reports: 10/08/2019
Number of Days to Update: 69

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/29/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/29/2019
Date Data Arrived at EDR: 07/31/2019
Date Made Active in Reports: 10/08/2019
Number of Days to Update: 69

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/29/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/12/2019
Date Data Arrived at EDR: 08/13/2019
Date Made Active in Reports: 10/09/2019
Number of Days to Update: 57

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 11/12/2019
Next Scheduled EDR Contact: 02/24/2020
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Quarterly

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27
Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/08/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 79
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/12/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 07/02/2019
Date Data Arrived at EDR: 10/16/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 8

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/16/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/02/2019
Date Data Arrived at EDR: 10/22/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 20

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 58

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 08/27/2019
Date Data Arrived at EDR: 08/28/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 75
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/11/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/01/2019
Number of Days to Update: 53
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 09/06/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 09/12/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/02/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/16/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 79

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 79

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/02/2019
Date Data Arrived at EDR: 10/22/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 20

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/08/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/12/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/29/2019
Date Data Arrived at EDR: 07/31/2019
Date Made Active in Reports: 10/08/2019
Number of Days to Update: 69

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/29/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/19/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 09/23/2019
Date Data Arrived at EDR: 09/24/2019
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/24/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/03/2019
Date Data Arrived at EDR: 06/04/2019
Date Made Active in Reports: 08/26/2019
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/19/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/07/2019
Number of Days to Update: 59

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 03/26/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 34

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 11/07/2019
Next Scheduled EDR Contact: 02/24/2020
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/28/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 11/01/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 06/11/2019
Date Data Arrived at EDR: 06/13/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/21/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/29/2019
Date Data Arrived at EDR: 07/31/2019
Date Made Active in Reports: 10/08/2019
Number of Days to Update: 69

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/29/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/16/2019
Date Made Active in Reports: 09/24/2019
Number of Days to Update: 70

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 09/24/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Varies

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 08/14/2019
Date Data Arrived at EDR: 08/14/2019
Date Made Active in Reports: 08/21/2019
Number of Days to Update: 7

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 10/22/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 06/11/2019
Date Data Arrived at EDR: 06/13/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/21/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/05/2019
Number of Days to Update: 57

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 08/20/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/21/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 08/01/2019
Date Data Arrived at EDR: 08/02/2019
Date Made Active in Reports: 10/11/2019
Number of Days to Update: 70

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 10/31/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 08/14/2019
Date Data Arrived at EDR: 08/14/2019
Date Made Active in Reports: 08/21/2019
Number of Days to Update: 7

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/22/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/29/2019
Date Data Arrived at EDR: 08/30/2019
Date Made Active in Reports: 10/29/2019
Number of Days to Update: 60

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/28/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/30/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 11/07/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 09/03/2019
Date Data Arrived at EDR: 09/04/2019
Date Made Active in Reports: 11/05/2019
Number of Days to Update: 62

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 09/04/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 89

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/24/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 05/15/2019
Date Data Arrived at EDR: 06/24/2019
Date Made Active in Reports: 08/21/2019
Number of Days to Update: 58

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/05/2019
Number of Days to Update: 57

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/05/2019
Number of Days to Update: 57

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 113

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/28/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 05/15/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 08/08/2019
Number of Days to Update: 79

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/23/2019
Next Scheduled EDR Contact: 12/02/2019
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/11/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/07/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 11/11/2019
Next Scheduled EDR Contact: 02/24/2020
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/24/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 10/31/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 11/08/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/19/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/23/2019
Next Scheduled EDR Contact: 12/02/2019
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 09/30/2018
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 08/08/2019
Number of Days to Update: 106

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/23/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 11/07/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/25/2019
Date Data Arrived at EDR: 05/02/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/21/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 08/20/2019
Date Data Arrived at EDR: 09/05/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 18

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 11/07/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2019
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 34

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/11/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 10/07/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/20/2019
Date Data Arrived at EDR: 06/20/2019
Date Made Active in Reports: 08/08/2019
Number of Days to Update: 49

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 11/06/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/03/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 11/06/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 11/12/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/31/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 85

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/29/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2019
Date Data Arrived at EDR: 07/16/2019
Date Made Active in Reports: 10/02/2019
Number of Days to Update: 78

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/16/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/06/2019
Next Scheduled EDR Contact: 01/19/2020
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 11/04/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/01/2019
Date Data Arrived at EDR: 08/21/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 82

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/21/2019
Next Scheduled EDR Contact: 12/02/2019
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 11/07/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2019
Date Data Arrived at EDR: 08/27/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 76

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/27/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 06/06/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 140
Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 09/12/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49
Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/30/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97
Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/30/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2019
Date Data Arrived at EDR: 09/10/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 37
Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/10/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 05/03/2019
Date Data Arrived at EDR: 06/05/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 90
Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/04/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74
Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/10/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 07/06/2019
Date Data Arrived at EDR: 07/09/2019
Date Made Active in Reports: 10/02/2019
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 10/08/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/21/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/19/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 83

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/20/2019
Next Scheduled EDR Contact: 12/02/2019
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/23/2019
Date Data Arrived at EDR: 09/24/2019
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 43

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/24/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 08/01/2019
Date Data Arrived at EDR: 08/02/2019
Date Made Active in Reports: 10/09/2019
Number of Days to Update: 68

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 10/31/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Varies

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 08/15/2019
Next Scheduled EDR Contact: 11/25/2019
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 09/27/2019
Date Data Arrived at EDR: 10/01/2019
Date Made Active in Reports: 11/07/2019
Number of Days to Update: 37

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 08/21/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/28/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 55

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 08/28/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Annually

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 08/28/2019
Date Data Arrived at EDR: 08/30/2019
Date Made Active in Reports: 10/29/2019
Number of Days to Update: 60

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 08/28/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/24/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 59

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/18/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/22/2019
Date Made Active in Reports: 09/26/2019
Number of Days to Update: 66

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 10/30/2019
Next Scheduled EDR Contact: 02/02/2020
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/23/2019
Date Made Active in Reports: 09/30/2019
Number of Days to Update: 69

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/16/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/18/2019
Number of Days to Update: 59

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 11/07/2019
Next Scheduled EDR Contact: 02/24/2020
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 05/29/2019
Date Made Active in Reports: 07/22/2019
Number of Days to Update: 54

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/11/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/19/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/18/2019
Number of Days to Update: 59

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 08/20/2019
Next Scheduled EDR Contact: 12/02/2019
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/19/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/18/2019
Number of Days to Update: 59

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/20/2019
Next Scheduled EDR Contact: 12/02/2019
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/07/2019
Date Data Arrived at EDR: 10/08/2019
Date Made Active in Reports: 11/07/2019
Number of Days to Update: 30

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/08/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/05/2019
Number of Days to Update: 57
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 09/04/2019
Date Made Active in Reports: 11/05/2019
Number of Days to Update: 62
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 09/04/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 08/12/2019
Date Data Arrived at EDR: 08/13/2019
Date Made Active in Reports: 10/16/2019
Number of Days to Update: 64
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 11/12/2019
Next Scheduled EDR Contact: 02/24/2020
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 09/03/2019
Date Data Arrived at EDR: 09/04/2019
Date Made Active in Reports: 11/05/2019
Number of Days to Update: 62
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 09/04/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/05/2019
Number of Days to Update: 57
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/16/2019
Date Data Arrived at EDR: 09/18/2019
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 49
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/16/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 04/27/2018
Date Data Arrived at EDR: 06/13/2018
Date Made Active in Reports: 07/17/2018
Number of Days to Update: 34
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 08/20/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/01/2019
Number of Days to Update: 53
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 07/11/2018
Date Made Active in Reports: 09/13/2018
Number of Days to Update: 64
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 10/11/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 03/02/2020
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/19/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/01/2019
Number of Days to Update: 53
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/01/2019
Number of Days to Update: 53

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 58

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 09/03/2019
Date Data Arrived at EDR: 09/04/2019
Date Made Active in Reports: 11/05/2019
Number of Days to Update: 62

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 09/04/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 08/14/2019
Date Data Arrived at EDR: 08/14/2019
Date Made Active in Reports: 08/21/2019
Number of Days to Update: 7

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/22/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/01/2019
Number of Days to Update: 53

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/01/2019
Number of Days to Update: 53

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/01/2019
Number of Days to Update: 53

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/01/2019
Number of Days to Update: 53

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/01/2019
Number of Days to Update: 53

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 08/30/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 10/02/2019
Date Data Arrived at EDR: 10/03/2019
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 34

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 09/06/2019
Date Data Arrived at EDR: 09/10/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 51

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 08/28/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 08/05/2019
Date Data Arrived at EDR: 08/07/2019
Date Made Active in Reports: 10/09/2019
Number of Days to Update: 63

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 09/23/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 08/14/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/18/2019
Number of Days to Update: 59

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 10/31/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/20/2019
Date Data Arrived at EDR: 08/23/2019
Date Made Active in Reports: 10/22/2019
Number of Days to Update: 60

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/28/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 07/30/2019
Date Data Arrived at EDR: 08/02/2019
Date Made Active in Reports: 10/09/2019
Number of Days to Update: 68

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 09/06/2019
Date Data Arrived at EDR: 09/12/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 49

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/28/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/11/2019
Date Data Arrived at EDR: 07/11/2019
Date Made Active in Reports: 09/20/2019
Number of Days to Update: 71

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 10/09/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/08/2019
Date Data Arrived at EDR: 07/10/2019
Date Made Active in Reports: 09/20/2019
Number of Days to Update: 72

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 10/30/2019
Next Scheduled EDR Contact: 03/02/2020
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/23/2019
Date Made Active in Reports: 09/26/2019
Number of Days to Update: 65

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 06/04/2018
Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 08/01/2019
Date Data Arrived at EDR: 08/06/2019
Date Made Active in Reports: 10/08/2019
Number of Days to Update: 63

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 10/31/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/14/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/18/2019
Number of Days to Update: 59

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 03/02/2020
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 08/16/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/18/2019
Number of Days to Update: 59

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/15/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/22/2019
Date Data Arrived at EDR: 07/23/2019
Date Made Active in Reports: 09/26/2019
Number of Days to Update: 65

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 09/12/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 09/26/2019
Date Data Arrived at EDR: 10/04/2019
Date Made Active in Reports: 11/07/2019
Number of Days to Update: 34

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/15/2019
Date Data Arrived at EDR: 07/17/2019
Date Made Active in Reports: 09/26/2019
Number of Days to Update: 71

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/16/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 10/09/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/27/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 42
Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 10/18/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/27/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/27/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 07/15/2019
Date Data Arrived at EDR: 07/17/2019
Date Made Active in Reports: 08/05/2019
Number of Days to Update: 19
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/29/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 10/09/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/02/2019
Number of Days to Update: 64

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/22/2019
Date Data Arrived at EDR: 08/26/2019
Date Made Active in Reports: 10/29/2019
Number of Days to Update: 64

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 03/02/2020
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 09/25/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/29/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 07/22/2019
Number of Days to Update: 53

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 03/02/2020
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 08/21/2019
Date Data Arrived at EDR: 09/03/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 58

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/21/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 07/25/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/30/2019
Number of Days to Update: 62

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 09/30/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/21/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 09/05/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/23/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/02/2019
Number of Days to Update: 64

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 07/10/2019
Date Data Arrived at EDR: 08/07/2019
Date Made Active in Reports: 10/09/2019
Number of Days to Update: 63

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/04/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/10/2019
Date Data Arrived at EDR: 08/09/2019
Date Made Active in Reports: 10/09/2019
Number of Days to Update: 61

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/04/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/10/2019
Date Data Arrived at EDR: 08/06/2019
Date Made Active in Reports: 10/09/2019
Number of Days to Update: 64

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/05/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/03/2019
Date Data Arrived at EDR: 09/05/2019
Date Made Active in Reports: 11/05/2019
Number of Days to Update: 61

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 08/28/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/10/2019
Date Data Arrived at EDR: 07/11/2019
Date Made Active in Reports: 09/20/2019
Number of Days to Update: 71

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/16/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/10/2019
Date Data Arrived at EDR: 07/11/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 74

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/16/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 08/06/2019
Date Data Arrived at EDR: 10/01/2019
Date Made Active in Reports: 11/07/2019
Number of Days to Update: 37

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/01/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/07/2019
Date Data Arrived at EDR: 10/01/2019
Date Made Active in Reports: 11/08/2019
Number of Days to Update: 38

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/01/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 07/16/2019
Date Data Arrived at EDR: 07/16/2019
Date Made Active in Reports: 09/24/2019
Number of Days to Update: 70

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 08/29/2019
Date Data Arrived at EDR: 08/30/2019
Date Made Active in Reports: 10/29/2019
Number of Days to Update: 60

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 11/04/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/03/2019
Date Data Arrived at EDR: 09/04/2019
Date Made Active in Reports: 11/05/2019
Number of Days to Update: 62

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 09/04/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/19/2018
Number of Days to Update: 56

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 10/31/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/16/2019
Date Data Arrived at EDR: 07/23/2019
Date Made Active in Reports: 09/30/2019
Number of Days to Update: 69

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 08/28/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 10/31/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 08/01/2019
Date Data Arrived at EDR: 08/02/2019
Date Made Active in Reports: 10/08/2019
Number of Days to Update: 67

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 10/31/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/11/2019
Next Scheduled EDR Contact: 12/29/2019
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 08/14/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/18/2019
Number of Days to Update: 59

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 03/02/2020
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 09/03/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/05/2019
Number of Days to Update: 57

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/05/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 03/02/2020
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 08/14/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/18/2019
Number of Days to Update: 59

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 03/02/2020
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 08/21/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 07/30/2019
Date Data Arrived at EDR: 08/02/2019
Date Made Active in Reports: 10/08/2019
Number of Days to Update: 67

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 10/31/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 03/02/2020
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 03/02/2020
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/28/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 08/28/2019
Date Data Arrived at EDR: 08/30/2019
Date Made Active in Reports: 10/29/2019
Number of Days to Update: 60

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/28/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 06/18/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 29

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 10/02/2019
Date Made Active in Reports: 11/07/2019
Number of Days to Update: 36

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/19/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 07/18/2019
Date Data Arrived at EDR: 07/18/2019
Date Made Active in Reports: 09/26/2019
Number of Days to Update: 70

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 10/28/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 08/29/2019
Date Data Arrived at EDR: 09/03/2019
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 64

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 08/28/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 58

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/23/2019
Date Made Active in Reports: 09/26/2019
Number of Days to Update: 65

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 08/12/2019
Date Data Arrived at EDR: 08/14/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 64

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 11/04/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 05/29/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 09/30/2019
Number of Days to Update: 63

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/21/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/25/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 11/07/2019
Next Scheduled EDR Contact: 02/24/2020
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 05/29/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 09/30/2019
Number of Days to Update: 63

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/21/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 07/26/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 09/25/2019
Date Data Arrived at EDR: 10/01/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 30

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/25/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 07/26/2019
Date Data Arrived at EDR: 07/31/2019
Date Made Active in Reports: 10/08/2019
Number of Days to Update: 69

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/14/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 08/05/2019
Number of Days to Update: 83

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/11/2019
Next Scheduled EDR Contact: 02/24/2020
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 06/21/2019
Number of Days to Update: 51

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 10/29/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/09/2019
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 03/02/2020
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/06/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

OUSD CENTRAL ADMINISTRATIVE CENTER
1011 UNION STREET
OAKLAND, CA 94607

TARGET PROPERTY COORDINATES

Latitude (North):	37.807958 - 37° 48' 28.65''
Longitude (West):	122.289605 - 122° 17' 22.58''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	562535.1
UTM Y (Meters):	4184540.2
Elevation:	20 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5641112 OAKLAND WEST, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

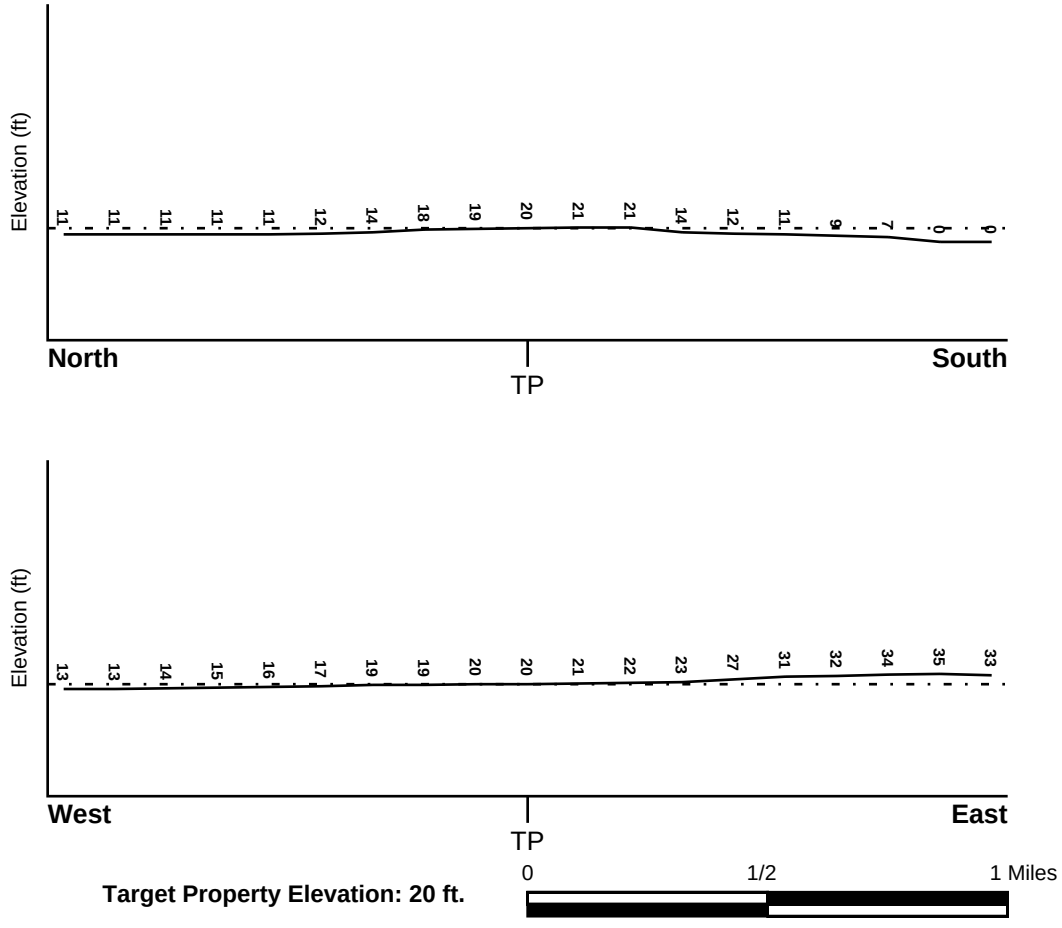
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06001C0066G	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06001C0058G	FEMA FIRM Flood data
06001C0059G	FEMA FIRM Flood data
06001C0067G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
OAKLAND WEST	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
A1	1/8 - 1/4 Mile NNE	Not Reported
A2	1/8 - 1/4 Mile NNE	Not Reported
A3	1/8 - 1/4 Mile North	N, S
A4	1/8 - 1/4 Mile North	NE
5	1/4 - 1/2 Mile NNW	SW
6	1/4 - 1/2 Mile WNW	NE, SE, S

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
B7	1/4 - 1/2 Mile SSE	S
B8	1/4 - 1/2 Mile SSE	SE,S,Varies
B9	1/4 - 1/2 Mile SSE	SE,S,Varies
C10	1/4 - 1/2 Mile North	W
C11	1/4 - 1/2 Mile North	W
C12	1/4 - 1/2 Mile North	W
D13	1/4 - 1/2 Mile North	SSW
D14	1/4 - 1/2 Mile North	N
15	1/4 - 1/2 Mile South	N
D16	1/4 - 1/2 Mile North	NW
D17	1/4 - 1/2 Mile North	NW
D18	1/4 - 1/2 Mile North	NW
19	1/2 - 1 Mile West	N, E, S, W
E20	1/2 - 1 Mile NNE	S
E21	1/2 - 1 Mile NNE	S
E22	1/2 - 1 Mile NNE	S
23	1/2 - 1 Mile NW	Not Reported
24	1/2 - 1 Mile SW	SW
F25	1/2 - 1 Mile South	SW
F26	1/2 - 1 Mile South	SW
27	1/2 - 1 Mile NNE	W
28	1/2 - 1 Mile North	SE
29	1/2 - 1 Mile NNE	NE
G30	1/2 - 1 Mile ENE	Varies
31	1/2 - 1 Mile North	E, W
32	1/2 - 1 Mile ESE	S
G33	1/2 - 1 Mile ENE	NE
34	1/2 - 1 Mile East	E
H35	1/2 - 1 Mile ENE	SW
H36	1/2 - 1 Mile ENE	SW
H37	1/2 - 1 Mile ENE	SW
I38	1/2 - 1 Mile North	SW
I39	1/2 - 1 Mile North	SE
40	1/2 - 1 Mile NNE	SW
41	1/2 - 1 Mile West	E
42	1/2 - 1 Mile North	S
1G	1/2 - 1 Mile North	S
2G	1/2 - 1 Mile North	SE
3G	1/2 - 1 Mile North	SW
4G	1/2 - 1 Mile NNE	SW
5G	1/2 - 1 Mile North	E, W
6G	1/2 - 1 Mile NNE	NE
7G	1/2 - 1 Mile North	SE
8G	1/2 - 1 Mile NNE	W
9G	1/2 - 1 Mile ENE	SW
10G	1/2 - 1 Mile ENE	SW
11G	1/2 - 1 Mile ENE	SW
12G	1/2 - 1 Mile NNE	S
13G	1/2 - 1 Mile NNE	S
14G	1/2 - 1 Mile NNE	S
15G	1/4 - 1/2 Mile North	NW
16G	1/4 - 1/2 Mile North	NW
17G	1/4 - 1/2 Mile North	NW
18G	1/4 - 1/2 Mile North	SSW
19G	1/4 - 1/2 Mile North	N
20G	1/4 - 1/2 Mile North	W

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
21G	1/4 - 1/2 Mile North	W
22G	1/4 - 1/2 Mile North	W
23G	1/2 - 1 Mile NW	Not Reported
24G	1/2 - 1 Mile ENE	NE
25G	1/2 - 1 Mile ENE	Varies
26G	1/4 - 1/2 Mile NNW	SW
27G	1/8 - 1/4 Mile North	N, S
28G	1/8 - 1/4 Mile North	NE
29G	1/8 - 1/4 Mile NNE	Not Reported
30G	1/8 - 1/4 Mile NNE	Not Reported
31G	1/4 - 1/2 Mile WNW	NE, SE, S
32G	1/2 - 1 Mile West	N, E, S, W
33G	1/2 - 1 Mile West	E
34G	1/2 - 1 Mile East	E
35G	1/2 - 1 Mile ESE	S
36G	1/2 - 1 Mile SW	SW
37G	1/4 - 1/2 Mile SSE	S
38G	1/4 - 1/2 Mile SSE	SE,S,Varies
39G	1/4 - 1/2 Mile SSE	SE,S,Varies
40G	1/4 - 1/2 Mile South	N
41G	1/2 - 1 Mile South	SW
42G	1/2 - 1 Mile South	SW

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

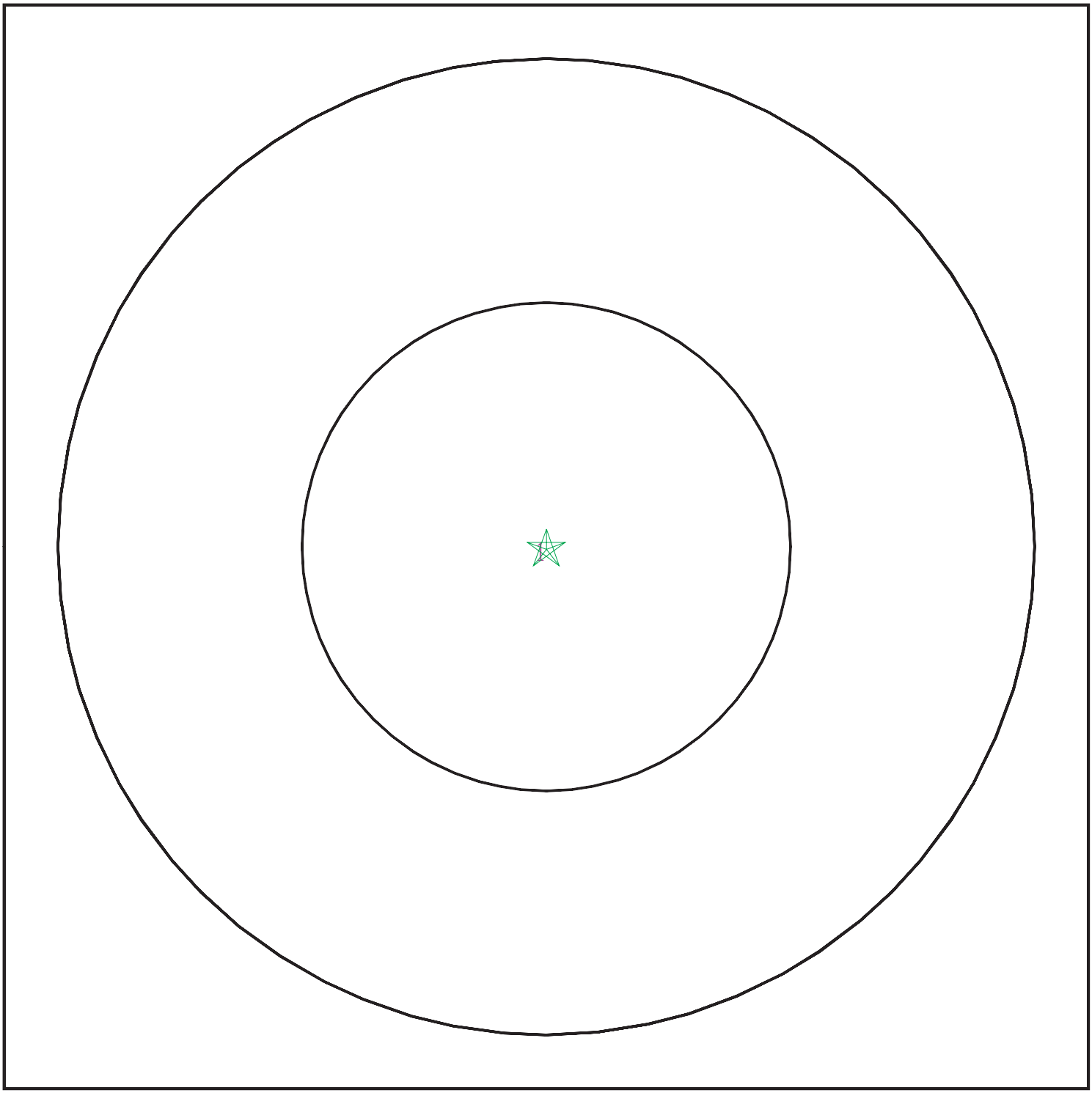
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5871762.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	OUSD Central Administrative Center	CLIENT:	Ninyo & Moore
ADDRESS:	1011 Union Street Oakland CA 94607	CONTACT:	Luke Swickard
LAT/LONG:	37.807958 / 122.289605	INQUIRY #:	5871762.2s
		DATE:	November 15, 2019 1:50 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Urban land

Soil Surface Texture:
Hydrologic Group: Not reported

Soil Drainage Class:
Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

No PWS System Found

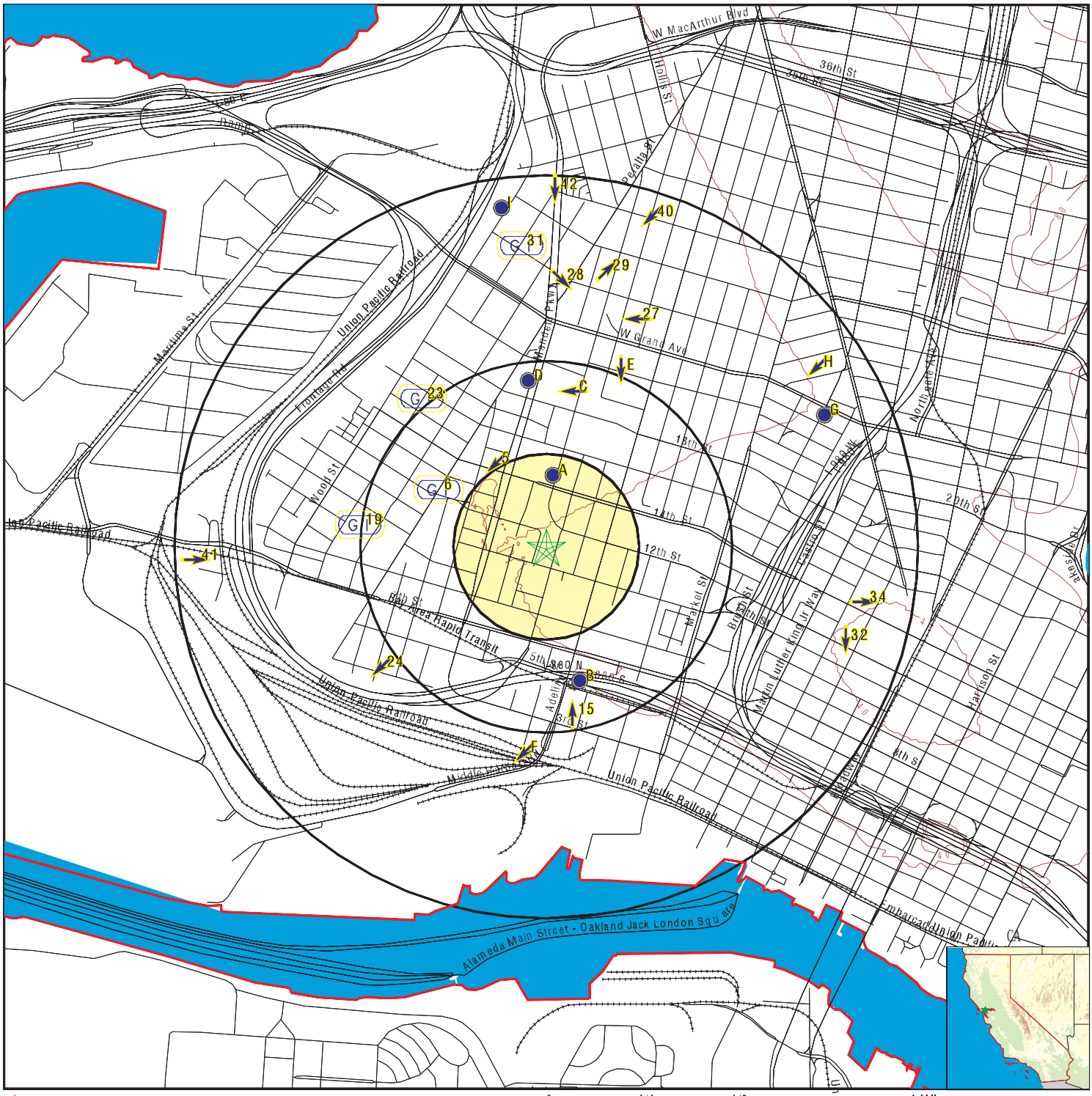
Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

No Wells Found

PHYSICAL SETTING SOURCE MAP - 5871762.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	OUSD Central Administrative Center	CLIENT:	Ninyo & Moore
ADDRESS:	1011 Union Street Oakland CA 94607	CONTACT:	Luke Swickard
		INQUIRY #:	5871762.2s
LAT/LONG:	37.807958 / 122.289605	DATE:	November 15, 2019 1:49 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
A1 **NNE** **1/8 - 1/4 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-3911 Not Reported Not Reported Not Reported 10 03/24/1992	**AQUIFLOW**	**55972**
A2 **NNE** **1/8 - 1/4 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-3911 Not Reported Not Reported Not Reported 10 11/08/1988	**AQUIFLOW**	**55973**
A3 **North** **1/8 - 1/4 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0282 N, S Not Reported Not Reported 5 06/05/1989	**AQUIFLOW**	**55976**
A4 **North** **1/8 - 1/4 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0282 NE Not Reported Not Reported Not Reported 03/27/1989	**AQUIFLOW**	**55977**
5 **NNW** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0933 SW 6.5 7.5 Not Reported 04/08/1986	**AQUIFLOW**	**55988**
6 **WNW** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0506 NE, SE, S Not Reported Not Reported Not Reported 11/17/1994	**AQUIFLOW**	**55880**
B7 **SSE** **1/4 - 1/2 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2322 S Not Reported Not Reported 15 03/05/1997	**AQUIFLOW**	**55794**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
B8 **SSE** **1/4 - 1/2 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2322 SE,S,Varies Not Reported Not Reported 5 09/26/1992	**AQUIFLOW**	**55795**
B9 **SSE** **1/4 - 1/2 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2322 SE,S,Varies Not Reported Not Reported 8 01/17/1997	**AQUIFLOW**	**55793**
C10 **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2048 W Not Reported Not Reported Not Reported 08/03/1993	**AQUIFLOW**	**55823**
C11 **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2048 W Not Reported Not Reported 73 11/21/1988	**AQUIFLOW**	**55821**
C12 **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2048 W Not Reported Not Reported 74 09/24/1992	**AQUIFLOW**	**55822**
D13 **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-5284 SSW Not Reported Not Reported 12 02/18/1992	**AQUIFLOW**	**55941**
D14 **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-5284 N 3.0 4.0 Not Reported 02/18/1992	**AQUIFLOW**	**55940**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
15 **South** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0086 N Not Reported Not Reported 10 03/09/1990	**AQUIFLOW**	**63819**
D16 **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0438 NW Not Reported Not Reported 7.6 09/12/1997	**AQUIFLOW**	**55981**
D17 **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0438 NW Not Reported Not Reported 4 05/06/1998	**AQUIFLOW**	**55982**
D18 **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0438 NW Not Reported Not Reported 5 07/01/1998	**AQUIFLOW**	**55983**
19 **West** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0487 N, E, S, W Not Reported Not Reported 12 12/31/1992	**AQUIFLOW**	**55917**
E20 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2299 S 12 15 Not Reported 06/24/1996	**AQUIFLOW**	**55953**
E21 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2299 S Not Reported Not Reported 15 04/27/1993	**AQUIFLOW**	**55954**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
E22 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2299 S Not Reported Not Reported 12-15 04/27/1993	**AQUIFLOW**	**55955**
23 **NW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0152 Not Reported Not Reported Not Reported 15 04/22/1993	**AQUIFLOW**	**55883**
24 **SW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0933 SW Not Reported Not Reported 20 08/05/1992	**AQUIFLOW**	**55989**
F25 **South** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2143 SW Not Reported Not Reported 8 06/20/1990	**AQUIFLOW**	**55984**
F26 **South** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2143 SW Not Reported Not Reported 10 05/21/1990	**AQUIFLOW**	**55985**
27 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0833 W Not Reported Not Reported 3 03/23/1994	**AQUIFLOW**	**63895**
28 **North** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2218 SE 8.15 9.04 Not Reported 07/14/1995	**AQUIFLOW**	**63941**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
29 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2288 NE Not Reported Not Reported Not Reported 10/29/1997	**AQUIFLOW**	**64082**
G30 **ENE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-3919 Varies Not Reported Not Reported 14 ft 08/29/1997	**AQUIFLOW**	**51332**
31 **North** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-3995 E, W Not Reported Not Reported 55 11/1995	**AQUIFLOW**	**55923**
32 **ESE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0233 S Not Reported Not Reported 10 09/02/1987	**AQUIFLOW**	**55975**
G33 **ENE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0674 NE 12.6 22.0 Not Reported 05/26/1988	**AQUIFLOW**	**51546**
34 **East** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2232 E Not Reported Not Reported 120 01/07/1987	**AQUIFLOW**	**51544**
H35 **ENE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2295 SW Not Reported Not Reported 100 07/09/1997	**AQUIFLOW**	**51336**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
H36 **ENE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2295 SW Not Reported Not Reported 20 03/12/1997	**AQUIFLOW**	**51337**
H37 **ENE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2295 SW Not Reported Not Reported 8-15 08/19/1996	**AQUIFLOW**	**51338**
I38 **North** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-4835 SW Not Reported Not Reported 5.0 07/10/1995	**AQUIFLOW**	**63936**
I39 **North** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2294 SE Not Reported Not Reported 55 12/03/1997	**AQUIFLOW**	**64099**
40 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0053 SW Not Reported Not Reported 10.5 03/18/1998	**AQUIFLOW**	**55970**
41 **West** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1414 E Not Reported Not Reported 11.5 06/20/1988	**AQUIFLOW**	**67911**
42 **North** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0847 S Not Reported Not Reported Not Reported 08/17/1992	**AQUIFLOW**	**63624**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
1G **North** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0847 S Not Reported Not Reported Not Reported 08/17/1992	**AQUIFLOW**	**63624**
2G **North** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2294 SE Not Reported Not Reported 55 12/03/1997	**AQUIFLOW**	**64099**
3G **North** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-4835 SW Not Reported Not Reported 5.0 07/10/1995	**AQUIFLOW**	**63936**
4G **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0053 SW Not Reported Not Reported 10.5 03/18/1998	**AQUIFLOW**	**55970**
5G **North** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-3995 E, W Not Reported Not Reported 55 11/1995	**AQUIFLOW**	**55923**
6G **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2288 NE Not Reported Not Reported Not Reported 10/29/1997	**AQUIFLOW**	**64082**
7G **North** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2218 SE 8.15 9.04 Not Reported 07/14/1995	**AQUIFLOW**	**63941**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
8G **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0833 W Not Reported Not Reported 3 03/23/1994	**AQUIFLOW**	**63895**
9G **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2295 SW Not Reported Not Reported 100 07/09/1997	**AQUIFLOW**	**51336**
10G **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2295 SW Not Reported Not Reported 20 03/12/1997	**AQUIFLOW**	**51337**
11G **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2295 SW Not Reported Not Reported 8-15 08/19/1996	**AQUIFLOW**	**51338**
12G **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2299 S 12 15 Not Reported 06/24/1996	**AQUIFLOW**	**55953**
13G **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2299 S Not Reported Not Reported 15 04/27/1993	**AQUIFLOW**	**55954**
14G **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2299 S Not Reported Not Reported 12-15 04/27/1993	**AQUIFLOW**	**55955**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

			Database	EDR ID Number
15G **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0438 NW Not Reported Not Reported 7.6 09/12/1997	**AQUIFLOW**	**55981**
16G **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0438 NW Not Reported Not Reported 4 05/06/1998	**AQUIFLOW**	**55982**
17G **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0438 NW Not Reported Not Reported 5 07/01/1998	**AQUIFLOW**	**55983**
18G **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-5284 SSW Not Reported Not Reported 12 02/18/1992	**AQUIFLOW**	**55941**
19G **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-5284 N 3.0 4.0 Not Reported 02/18/1992	**AQUIFLOW**	**55940**
20G **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2048 W Not Reported Not Reported Not Reported 08/03/1993	**AQUIFLOW**	**55823**
21G **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2048 W Not Reported Not Reported 73 11/21/1988	**AQUIFLOW**	**55821**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
22G **North** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2048 W Not Reported Not Reported 74 09/24/1992	**AQUIFLOW**	**55822**
23G **NW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0152 Not Reported Not Reported Not Reported 15 04/22/1993	**AQUIFLOW**	**55883**
24G **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0674 NE 12.6 22.0 Not Reported 05/26/1988	**AQUIFLOW**	**51546**
25G **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-3919 Varies Not Reported Not Reported 14 ft 08/29/1997	**AQUIFLOW**	**51332**
26G **NNW** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0933 SW 6.5 7.5 Not Reported 04/08/1986	**AQUIFLOW**	**55988**
27G **North** **1/8 - 1/4 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0282 N, S Not Reported Not Reported 5 06/05/1989	**AQUIFLOW**	**55976**
28G **North** **1/8 - 1/4 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0282 NE Not Reported Not Reported Not Reported 03/27/1989	**AQUIFLOW**	**55977**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
29G **NNE** **1/8 - 1/4 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-3911 Not Reported Not Reported Not Reported 10 03/24/1992	**AQUIFLOW**	**55972**
30G **NNE** **1/8 - 1/4 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-3911 Not Reported Not Reported Not Reported 10 11/08/1988	**AQUIFLOW**	**55973**
31G **WNW** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0506 NE, SE, S Not Reported Not Reported Not Reported 11/17/1994	**AQUIFLOW**	**55880**
32G **West** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0487 N, E, S, W Not Reported Not Reported 12 12/31/1992	**AQUIFLOW**	**55917**
33G **West** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1414 E Not Reported Not Reported 11.5 06/20/1988	**AQUIFLOW**	**67911**
34G **East** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2232 E Not Reported Not Reported 120 01/07/1987	**AQUIFLOW**	**51544**
35G **ESE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0233 S Not Reported Not Reported 10 09/02/1987	**AQUIFLOW**	**55975**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
36G **SW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0933 SW Not Reported Not Reported 20 08/05/1992	**AQUIFLOW**	**55989**
37G **SSE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2322 S Not Reported Not Reported 15 03/05/1997	**AQUIFLOW**	**55794**
38G **SSE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2322 SE,S,Varies Not Reported Not Reported 5 09/26/1992	**AQUIFLOW**	**55795**
39G **SSE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2322 SE,S,Varies Not Reported Not Reported 8 01/17/1997	**AQUIFLOW**	**55793**
40G **South** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0086 N Not Reported Not Reported 10 03/09/1990	**AQUIFLOW**	**63819**
41G **South** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2143 SW Not Reported Not Reported 8 06/20/1990	**AQUIFLOW**	**55984**
42G **South** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2143 SW Not Reported Not Reported 10 05/21/1990	**AQUIFLOW**	**55985**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94607	3	0

Federal EPA Radon Zone for ALAMEDA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for ALAMEDA COUNTY, CA

Number of sites tested: 49

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.776 pCi/L	100%	0%	0%
Living Area - 2nd Floor	-0.400 pCi/L	100%	0%	0%
Basement	1.338 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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OUSD Central Administrative Center
1011 Union Street
Oakland, CA 94607

Inquiry Number: 5871762.2s
November 15, 2019

EDR Summary Radius Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1011 UNION STREET
OAKLAND, CA 94607

COORDINATES

Latitude (North):	37.8079580 - 37° 48' 28.64''
Longitude (West):	122.2896050 - 122° 17' 22.57''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	562535.1
UTM Y (Meters):	4184540.2
Elevation:	20 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	U.S. Geological Survey

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140608
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
1011 UNION STREET
OAKLAND, CA 94607

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	OAKLAND UNIFIED SCHO	1011 UNION STREET	EMI, HAZNET, CERS		TP
A2	COLE MIDDLE SCHOOL	1011 UNION ST	HAZNET		TP
A3	OUSD - COLE ELEMENTA	1011 UNION ST	HAZNET		TP
A4	OAKLAND UNIFIED SCHO	1011 UNION STREET	FINDS		TP
A5	OAKLAND UNIFIED SCHO	1011 UNION ST	HAZNET		TP
A6	1X COLE ELEMENTARY	1011 UNION ST	HAZNET		TP
Reg	OAKLAND ARMY BASE (C		DOD	Same	5135, 0.973, NW
Reg	AMCO CHEMICAL	1414 THIRD STREET	NPL, SEMS, RCRA-VSQG, ENVIROSTOR, HIST Cal-Sites,...	Same	1887, 0.357, SW
B7	OAKLAND CITY OF HOUS	935 UNION ST	LUST, SWEEPS UST, HIST UST, CA FID UST, HIST...	Higher	9, 0.002, South
B8	WEST DISTRICT OFFICE	935 UNION ST	HIST UST	Higher	9, 0.002, South
C9	NAVAL SUPPLY CENTER,	1200 12TH STREET	CERS TANKS	Higher	342, 0.065, ENE
C10	NAVAL SUPPLY CENTER,	1200 12TH STREET	UST	Higher	342, 0.065, ENE
D11	CALIFORNIA CEREAL PR	1267 14TH ST	RCRA NonGen / NLR	Higher	352, 0.067, NNE
D12	NABISCO BRANDS INC	1267 14TH ST	ENVIROSTOR, LUST, Alameda County CS, HIST CORTESE,...	Higher	352, 0.067, NNE
D13	CALIFORNIA CEREAL PR	1267 14TH ST	CERS HAZ WASTE, HAZNET, CERS	Higher	352, 0.067, NNE
D14	NABISCO BRANDS	1267 14TH ST	HIST UST	Higher	352, 0.067, NNE
D15	STEPHEN R BELL	1267 14TH ST	HIST UST, PEST LIC	Higher	352, 0.067, NNE
D16	NABISCO BRANDS, INC.	1267 14TH STREET	Notify 65	Higher	352, 0.067, NNE
C17	GIBSON PAINT COMPANY	1199 12TH ST E	LUST	Higher	375, 0.071, ENE
D18	LALLY J L	1308 UNION AVE	EDR Hist Auto	Higher	401, 0.076, NNE
E19	NATIONAL RECYCLING C	1312 KIRKHAM ST	CERS HAZ WASTE, CERS	Lower	475, 0.090, NNW
E20	NATIONAL RECYCLING C	1312 KIRKHAM ST	RCRA NonGen / NLR	Lower	475, 0.090, NNW
E21	NATIONAL RECYCLING C	1312 KIRKHAM ST	SWRCY, NPDES, PROC, WDS, CIWQS	Lower	475, 0.090, NNW
F22	ACORN TOWERS	914 UNION ST	RCRA NonGen / NLR	Higher	479, 0.091, South
F23	ACORN TOWERS / 910 U	910 UNION ST	RCRA NonGen / NLR	Higher	484, 0.092, South
F24	PALM COURT	902 UNION STREET	ENVIROSTOR, VCP	Higher	495, 0.094, South
25	BERG, ANNA	1015 ADELINE STREET	RCRA NonGen / NLR	Higher	621, 0.118, ESE
E26	TALLARICO PHILIP	1333 14TH ST	EDR Hist Auto	Lower	622, 0.118, North
F27	DARRYL BRICE	808 UNION ST	RCRA NonGen / NLR	Higher	627, 0.119, South
E28	CARNATION DIARIES	1310 14TH ST	RCRA-SQG, LUST, CPS-SLIC, Alameda County CS,...	Lower	664, 0.126, North
E29	CARNATION DAIRIES	1310 14TH STREET/131	RESPONSE, ENVIROSTOR, CERS	Lower	664, 0.126, North
E30	FORMER OAKLAND CARNA	1310 14TH ST	HIST UST, HAZNET	Lower	664, 0.126, North
G31	COMM AIR	1266 14TH ST	LUST, Alameda County CS, SWEEPS UST, HIST CORTESE,...	Lower	669, 0.127, NNE
G32	CARRON AIR	1266 14TH ST	HIST UST	Lower	669, 0.127, NNE
G33	COMMAIR MECHANICAL S	1266 14TH STREET	ENVIROSTOR	Lower	669, 0.127, NNE
G34	COMMAIR OAKLAND	1266 14TH ST	RCRA-SQG	Lower	669, 0.127, NNE
H35	COCA COLA	1340 MANDELA PARKWAY	LUST, Alameda County CS, CERS	Lower	672, 0.127, NNW
E36	AUTO CHLOR PROJ	1350 14TH ST	ENVIROSTOR, CIWQS	Lower	676, 0.128, North
E37	AUTO-CHLOR SYSTEM	1350 14TH STREET	CERS HAZ WASTE, CERS	Lower	676, 0.128, North

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MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
E38	UNITED TECHNOLOGIES	1358 14TH ST	RCRA-SQG, HAZNET	Lower	676, 0.128, North
E39	OTIS ELEVATOR COMPAN	1358 14TH ST	CERS HAZ WASTE, CERS	Lower	676, 0.128, North
G40	VACANT LOT SABEK INC	1230 14TH ST	LUST, Alameda County CS, HIST UST, Cortese, EMI,...	Lower	684, 0.130, NNE
G41	SABEK, INC.	1230 14TH ST	HIST UST	Lower	684, 0.130, NNE
H42	PACIFIC RIM	1338 CYPRESS AVE AT	RCRA-SQG, FINDS, ECHO	Lower	761, 0.144, NNW
H43	COCA COLA	1340 CYPRESS	HIST CORTESE	Lower	764, 0.145, NNW
H44	OAKLAND PRODUCTION A	1340 CYPRESS ST	SWEEPS UST, CA FID UST	Lower	764, 0.145, NNW
H45	COCA-COLA BOTTLING C	1340 CYPRESS ST	RCRA-SQG	Lower	764, 0.145, NNW
H46	COCA COLA BOTTLING O	1340 CYPRESS STREET	RCRA NonGen / NLR	Lower	764, 0.145, NNW
H47	OAKLAND PRODUCTION A	1340 CYPRESS ST	HIST UST	Lower	764, 0.145, NNW
I48	ACORN TOWERS	1174 8TH STREET	RCRA NonGen / NLR	Higher	818, 0.155, SSE
J49	1125 MANDELA PKWY	1125 MANDELA PKWY	CPS-SLIC, Alameda County CS, CERS	Higher	821, 0.155, WNW
J50	1125 MANDELA REUSE	1125 MANDELA PARKWAY	CPS-SLIC, Alameda County CS, CERS	Higher	821, 0.155, WNW
51	MANDELA TRUCKING	1225 MANDELA PKWY	LUST, Alameda County CS, Cortese, HIST CORTESE	Higher	823, 0.156, NW
J52	THOMPSON PROPERTY	1409-1417 12TH STREE	LUST, Alameda County CS, CERS	Higher	829, 0.157, WNW
I53	ACORN	1162 8TH ST	RCRA NonGen / NLR	Higher	856, 0.162, SSE
K54	NABISCO BRANDS	1267 014TH ST	SWEEPS UST, CA FID UST	Lower	858, 0.162, North
L55	AT SYTEMS INTERNATIO	1333 8TH STREET	AST	Lower	888, 0.168, SW
L56	ARMORED TRANSPORT	1333 8TH ST	RCRA-SQG, LUST, Alameda County CS, FINDS, ECHO,...	Lower	888, 0.168, SW
I57	ACORN	831 ADELINE STREET	RCRA NonGen / NLR	Higher	896, 0.170, SSE
K58	SABEK, INC.	1230 014TH ST	SWEEPS UST, CA FID UST	Lower	918, 0.174, North
M59	THE CRUCIBLE	1260 7TH ST	RCRA NonGen / NLR	Lower	1050, 0.199, SSW
M60	THE CRUCIBLE	1260 7TH ST	CERS HAZ WASTE, CERS	Lower	1050, 0.199, SSW
61	WEST OAKLAND AREA I	7TH STREET BETWEEN P	US BROWNFIELDS, FINDS	Higher	1101, 0.209, West
M62	WILLIE EVERIDGE	1211 007TH ST	CA FID UST	Lower	1137, 0.215, SSW
N63	ALL MERCEDES DISMANT	1225 7TH ST	SWEEPS UST, CA FID UST	Lower	1182, 0.224, South
N64	ZENTRUM MOTORS	1225 7TH ST	CERS HAZ WASTE, CERS	Lower	1182, 0.224, South
N65	ZENTRUM MOTORS	1225 7TH ST	AST	Lower	1182, 0.224, South
N66	ZENTRUM MOTORS	1225 7TH ST	RCRA NonGen / NLR	Lower	1182, 0.224, South
N67	ALL MERCEDES DISMANT	1225 SEVENTH ST	RCRA-SQG	Lower	1182, 0.224, South
N68	ALL MERCEDES DISMANT	1255 7TH ST	LUST, Alameda County CS, HIST CORTESE, CERS	Lower	1190, 0.225, South
O69	OAKLAND FIRE SERVICE	1445 14TH ST	RCRA-SQG, FINDS, ECHO, HAZNET	Lower	1197, 0.227, NW
O70	FIRE STATION #03	1445 14TH ST	AST	Lower	1197, 0.227, NW
O71	FIRE STATION #03	1445 14TH ST	CERS TANKS, CERS	Lower	1197, 0.227, NW
O72	CITY OF OAKLAND FIRE	1445 14TH ST.	AST	Lower	1197, 0.227, NW
P73		800 CENTER ST.	RCRA-LQG	Lower	1204, 0.228, WSW
P74	CHEVRON USA STATION	800 CENTER ST	RCRA NonGen / NLR	Lower	1204, 0.228, WSW
P75	SIGNAL SS/CHEVRON 20	800 CENTER ST	LUST, CPS-SLIC, Alameda County CS, Cortese, HIST...	Lower	1204, 0.228, WSW
N76	WILLIE EVERIDGE	1211 7TH ST	HIST UST	Lower	1208, 0.229, South

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N77	FORMER EVERIDGE SERV	1211 7TH	LUST, Cortese, CERS	Lower	1208, 0.229, South
N78	EVERIDGE SERVICE COM	1211 7TH ST	LUST, Alameda County CS, SWEEPS UST, HIST CORTESE	Lower	1208, 0.229, South
Q79	ARMORED TRANSPORT IN	1333 7TH ST	SWEEPS UST	Lower	1221, 0.231, SW
80	CONTAINER CARE LIMIT	1350 16TH ST	LUST, Alameda County CS, HIST CORTESE, CERS	Lower	1221, 0.231, North
Q81	KELLY'S TRUCK REPAIR	1390 7TH ST	LUST, Alameda County CS, HIST CORTESE	Lower	1242, 0.235, SW
O82	NEW OAKLAND FIRE STA	CENTER AND 14TH STRE	ENVIROSTOR, VCP	Lower	1257, 0.238, NW
R83	ARNICE RODGERS	1109 LINDEN STREET	RCRA NonGen / NLR	Higher	1268, 0.240, ESE
R84	DOROTHY WHITEHEAD	1127 LINDEN STREET	RCRA NonGen / NLR	Higher	1269, 0.240, East
85	MANDELA GATEWAY REDE	0 7TH ST & MANDELA	CPS-SLIC, Alameda County CS, CERS	Lower	1285, 0.243, WSW
N86	5TH ST AND MAGNOLIA	0 5TH ST & MAGNOLIA	CPS-SLIC, CERS	Lower	1342, 0.254, South
Q87	CHRYSLER AUTO UNLOAD	1401 7 MIDDLE HARBOR	HIST CORTESE	Lower	1345, 0.255, SW
S88	J & A TRUCK REPAIR	500 KIRKHAM ST	ENVIROSTOR, LUST, Alameda County CS, VCP, Cortese,...	Lower	1354, 0.256, SSW
S89	SMILO CHEMICAL COMPA	500 KIRKHAM ST	SEMS-ARCHIVE, RCRA-SQG, FINDS, ECHO	Lower	1354, 0.256, SSW
Q90	CHEVRON	1395 7TH ST	LUST	Lower	1362, 0.258, SW
Q91	TRUCKER'S FRIEND	1395 7TH	LUST, Alameda County CS, Cortese, HIST CORTESE	Lower	1362, 0.258, SW
92	UNION PACIFIC RAILRO	CROSS 5TH & UNION	CPS-SLIC, NON-CASE INFO	Lower	1367, 0.259, SSW
N93	CONDOR FREIGHT LINES	324 UNION ST	ENVIROSTOR, LUST, Alameda County CS, VCP, SWEEPS...	Lower	1397, 0.265, SSW
S94	CONTAINER FREIGHT	1285 5TH ST	ENVIROSTOR, LUST, Alameda County CS, VCP, Cortese,...	Lower	1526, 0.289, SSW
T95	CALTRANS CYPRESS PRO	UNKNOWN 5TH & ADELIN	LUST, HIST CORTESE	Lower	1568, 0.297, South
96	RED STAR YEAST / 139	1396 5TH	CPS-SLIC, Alameda County CS, CERS	Lower	1581, 0.299, SW
S97	SOUTHERN PACIFIC TRA	0 5TH AVE & KIRKHAM	LUST, Alameda County CS, CERS	Lower	1588, 0.301, SSW
T98	CALTRANS CYPRESS PRO	0 5TH ST AND ADELINE	LUST, Alameda County CS, CERS	Lower	1589, 0.301, South
T99	RINO PACIFIC OAKLAND	1107 5TH ST	LUST, Alameda County CS, HIST UST, HIST CORTESE,...	Lower	1602, 0.303, South
100	PACIFIC BELL	1075 7TH	LUST, Alameda County CS, CERS	Lower	1616, 0.306, SSE
U101	OSAGIE PROPERTY	1532 PERALTA STREET	LUST, Alameda County CS, Cortese, CERS	Lower	1617, 0.306, NNW
V102	WEST OAKLAND BART ST	1451 7TH STREET	ENVIROSTOR, VCP	Lower	1633, 0.309, WSW
V103	WEST OAKLAND BART ST	1451 7TH STREET	US BROWNFIELDS, FINDS	Lower	1633, 0.309, WSW
U104	MANNY SERVICES	1600 PERALTA STREET	SEMS-ARCHIVE	Lower	1698, 0.322, NNW
U105	MANNYSERVICES/MCKINN	1600 PERALTA	ENVIROSTOR	Lower	1698, 0.322, NNW
W106	VEND MART PROPERTY	1035 7TH ST	ENVIROSTOR, LUST, Alameda County CS, VCP, HIST...	Higher	1838, 0.348, SSE
107	RELIABLE HANDI CAB	1520 7TH ST	LUST, Alameda County CS, HIST CORTESE, CERS	Lower	1847, 0.350, WSW
X108	CALIFORNIA SODA COMP	355 MANDELA PARKWAY	ENVIROSTOR, HAZNET	Lower	1907, 0.361, SW
X109	CALIFORNIA SODA COMP	355 MANDELA PARKWAY	SEMS-ARCHIVE	Lower	1907, 0.361, SW
Y110	WESTERN PACIFIC RAIL	UNION STREET	ENVIROSTOR, VCP, DEED	Lower	1933, 0.366, South
W111	CHANG'S AUTOMOTIVE	1009 7TH STREET	ENVIROSTOR, VCP, HAZNET	Higher	1940, 0.367, SSE
X112	SF BAY AREA RAPID TR	349 MANDELA PKWY	RESPONSE, ENVIROSTOR, HIST Cal-Sites	Lower	1947, 0.369, SW
Y113	THE BURKE COMPANY	310 UNION	CPS-SLIC, Alameda County CS, CERS	Lower	1984, 0.376, South
114	PACIFIC PIPE COMPANY	1901 POPLAR ST	LUST, Alameda County CS, SWEEPS UST, CA FID UST,...	Lower	1993, 0.377, North
115	AMTRAK MAINTENANCE F	3RD & UNION STREETS	ENVIROSTOR, VCP, DEED	Lower	1995, 0.378, SSW

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116	HALL PROPERTY	1455 5TH	CPS-SLIC, Alameda County CS, CERS	Lower	2014, 0.381, SW
Z117	ALTA PLATING & CHEMI	1433 18TH STREET	ENVIROSTOR	Lower	2028, 0.384, NNW
AA118	FORMER ADELINE CLEAN	979 7TH ST	CPS-SLIC, Alameda County CS, BROWNFIELDS, CERS	Higher	2073, 0.393, SE
119	GARDINER MFG COMPANY	1920 UNION ST	LUST, Alameda County CS, HIST CORTESE, CERS	Lower	2111, 0.400, NNE
AB120	RELIANCE UPHOLSTERY	1614 CAMPBELL ST	RCRA-LQG, ENVIROSTOR, Alameda County CS, VCP,...	Lower	2122, 0.402, NNW
AB121	GREITZER PROPERTY	1614 CAMPBELL ST	LUST, CERS	Lower	2122, 0.402, NNW
122	ARATEX SERVICES, INC	330 CHESTNUT ST	RCRA-SQG, LUST, Alameda County CS, SWEEPS UST,...	Lower	2138, 0.405, SSE
AA123	MICRONESIAN CARGO IN	955 7TH STREET	ENVIROSTOR, VCP, HAZNET	Higher	2175, 0.412, SE
Z124	MARK ABOUDI PROPERTY	1639 18TH STREET	ENVIROSTOR, VCP, DEED, HAZNET	Lower	2176, 0.412, NNW
Z125	BERCOVICH, A., CO. A	1639 18TH	SEMS, LEAD SMELTERS	Lower	2176, 0.412, NNW
Z126	FOOD EXPRESS INC	1639 18TH ST	ENVIROSTOR, NPDES, CIWQS	Lower	2176, 0.412, NNW
127	OAKLAND WAREHOUSE	1221 3RD ST	LUST, Alameda County CS, SWEEPS UST, CA FID UST,...	Lower	2202, 0.417, South
Z128	CADEMARTORI TRUCKING	1833 PERALTA ST	LUST, Alameda County CS, SWEEPS UST, HIST UST, CA...	Lower	2216, 0.420, NNW
Z129	CADOMARTORI TRUCKING	1833 PERALTA ST	LUST	Lower	2216, 0.420, NNW
AC130	WEST OAKLAND LEAD	1414 3RD STREET	SEMS	Lower	2278, 0.431, SW
AC131	DC METALS	1414 3RD ST	LUST, Alameda County CS, HIST UST, Cortese, HIST...	Lower	2278, 0.431, SW
AC132	BOBO'S JUNKYARD	1401 THIRD STREET	ENVIROSTOR, VCP, DEED	Lower	2347, 0.445, SW
AD133	CITY OF OAKLAND (PUB	1368 WILLOW ST	ENVIROSTOR, VCP, HAZNET	Lower	2356, 0.446, NW
AE134	FACILITY 10201-1	1121 3RD	HIST CORTESE, NPDES, CIWQS, CERS	Lower	2356, 0.446, South
AE135	NOR CAL METAL FABRIC	1121 3RD ST	SEMS-ARCHIVE, RCRA-SQG, FINDS, ECHO	Lower	2356, 0.446, South
AF136	DTSC AT 528 LEWIS ST	528 LEWIS ST	RESPONSE, ENVIROSTOR, HAZNET	Lower	2403, 0.455, WSW
AF137	528 LEWIS STREET	528 LEWIS STREET	HIST Cal-Sites, CERS	Lower	2403, 0.455, WSW
AF138	LOT AT 530-542 LEWIS	530-542 LEWIS STREET	SEMS-ARCHIVE	Lower	2413, 0.457, WSW
AG139	ACME GALVANIZING	1655 17TH	ENVIROSTOR, CPS-SLIC, Alameda County CS, CERS	Lower	2414, 0.457, NNW
AG140	ACME GALVANIZING CO	1655 17TH ST	SEMS, RCRA-SQG	Lower	2414, 0.457, NNW
AD141	WILLOW PARK	14TH AND WILLOW ST W	US BROWNFIELDS, FINDS	Lower	2427, 0.460, NW
142	EAST BAY FORD TRUCK	333 FIBERT ST	RCRA-SQG, LUST, CPS-SLIC, Alameda County CS,...	Lower	2429, 0.460, SSE
AH143	JR USED AUTO PARTS	823 12TH	HIST CORTESE	Higher	2440, 0.462, ESE
AH144	JB AUTO	819 12TH	CPS-SLIC, CERS	Higher	2440, 0.462, ESE
145	EAST BAY MUNICIPAL U	1200 21ST STREET	RCRA-LQG, LUST, Alameda County CS, FINDS, ECHO,...	Lower	2471, 0.468, NNE
146	SUNSET WHOLESALE COM	105 EMBARCADERO AVE	LUST, Alameda County CS, HIST CORTESE, CERS	Lower	2490, 0.472, South
AG147	ROADWAY EXPRESS INC	1708 WOOD ST	LUST, CPS-SLIC, Alameda County CS, SWEEPS UST, CA...	Lower	2521, 0.477, NNW
148	FRANK'S TIRE SERVICE	1115 21ST ST	LUST, Alameda County CS	Lower	2525, 0.478, NE
149	OAK VILLAGE APARTMEN	780 AND 828 13TH STR	CPS-SLIC, CERS	Higher	2526, 0.478, East
AG150	WEST OAKLAND III	WOOD, 9TH, 12TH AND	US BROWNFIELDS, FINDS	Lower	2547, 0.482, NNW
AG151	WEST OAKLAND AREA II	WOOD AND PERALTA STR	US BROWNFIELDS, FINDS	Lower	2547, 0.482, NNW
AI152	BASF CORPORATION	1545 WILLOW ST	LUST, RCRA NonGen / NLR, FINDS, ECHO, CERS	Lower	2562, 0.485, NW
AI153	INMONT CORPORATION	1545 WILLOW STREET	ENVIROSTOR, LUST, Alameda County CS, HIST UST,...	Lower	2562, 0.485, NW
AJ154	NORCAL METAL FABRICA	114 ADELINE ST	LUST, Alameda County CS, HIST CORTESE, CERS	Lower	2627, 0.498, South

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AJ155	LEHAR SALES	150 CHESTNUT ST	LUST, Alameda County CS, CHMIRS, HIST CORTESE,...	Lower	2637, 0.499, South
AK156	SOUTHERN PACIFIC 3RD	1509/1513 THIRD STRE	ENVIROSTOR, VCP	Lower	2640, 0.500, SW
AK157	1536 THIRD STREET	1536 THIRD STREET	ENVIROSTOR	Lower	2758, 0.522, SW
158	TAYLOR ROOF STRUCTUR	1769 13TH STREET	Notify 65	Lower	2770, 0.525, WNW
AK159	SO. PRESCOTT NEIGHBO	3RD STREET	ENVIROSTOR, VCP	Lower	2804, 0.531, SW
160	FRANCIS PLATING OF O	785 7TH ST	SEMS, CORRACTS, RCRA-TSDF, RCRA-SQG, ENVIROSTOR,	Higher	2861, 0.542, SE
AL161	MANDELA PARKWAY CORR	MANDELA PARKWAY BETW	ENVIROSTOR, VCP	Lower	2884, 0.546, North
162	US POSTAL SERVICE	1675 7TH ST	ENVIROSTOR, LUST, CPS-SLIC, Alameda County CS,...	Lower	2890, 0.547, WSW
AL163	MANDELA GRAND	MANDELA PARKWAY AND	ENVIROSTOR, VCP	Lower	2905, 0.550, North
AM164	CYPRESS FREEWAY-3RD	3RD STREET BETWEEN C	ENVIROSTOR, VCP	Lower	2920, 0.553, SW
165	ZUEDELAC APARTMENTS	1600 3RD AVE	ENVIROSTOR, VCP, HAZNET	Lower	2951, 0.559, WSW
AN166	SAFETY-KLEEN CORP.	404 MARKET ST	SWEEPS UST, HIST UST, CA FID UST, HWP, CERS	Lower	2960, 0.561, SE
AN167	SAFETY-KLEEN SYSTEMS	400 MARKET STREET	SEMS, CORRACTS, RCRA-TSDF, RCRA-LQG, US INST...	Lower	2960, 0.561, SE
AN168	SAFETYKLEEN SER CTR	400 MARKET ST	ENVIROSTOR, DEED, CHMIRS, WDS, CERS	Lower	2960, 0.561, SE
169	COMMERCIAL BUILDINGS	1250-1276, 1284 W. G	RESPONSE, ENVIROSTOR, HIST Cal-Sites, Cortese,...	Lower	2997, 0.568, NNE
170	SCHNITZER STEEL	1101 EMBARCADERO WES	ENVIROSTOR, HAZNET	Lower	3076, 0.583, South
171	WEST RECYCLER BIN ST	1405 WOOD STREET	ENVIROSTOR	Lower	3081, 0.584, NW
AM172	SOUTHERN PACIFIC -WE	CYPRESS CORRIDOR	RESPONSE, ENVIROSTOR, HIST Cal-Sites, DEED,...	Lower	3086, 0.584, WSW
AO173	NED CLYDE CONSTRUCTI	2311 ADELINE STREET	Notify 65	Lower	3233, 0.612, NNE
AP174	SOUTHERN PACIFIC TRA	1707 WOOD STREET	CA BOND EXP. PLAN	Lower	3239, 0.613, NNW
AP175	SOUTHERN PACIFIC TRA	1707 WOOD ST	RESPONSE, ENVIROSTOR, CPS-SLIC, FTTS, HIST FTTS,...	Lower	3239, 0.613, NNW
AP176	SP, W.OAKLAND YD.-(O	1707 WOOD STREET	Toxic Pits	Lower	3239, 0.613, NNW
AP177	SP, W.OAKLAND YARD-(	1707 WOOD STREET	Toxic Pits	Lower	3239, 0.613, NNW
178	COLE BROTHERS AUTO W	1797 12TH STREET	ENVIROSTOR	Lower	3261, 0.618, WNW
AQ179	JENKINS AUTO WRECKER	1778 10TH STREET	ENVIROSTOR, ENF	Lower	3269, 0.619, WNW
AO180	ARTESIAN OIL RECOVER	2306 MAGNOLIA ST	ICE, HWP, CERS	Lower	3324, 0.630, NNE
AO181	ARTESIAN OIL RECOVER	2306 MAGNOLIA STREET	ENVIROSTOR	Lower	3324, 0.630, NNE
AQ182	GAINES PROPERTY	1795 11TH STREET	RESPONSE, ENVIROSTOR, HAZNET	Lower	3326, 0.630, WNW
AQ183	GAINES PROPERTY	1795 11TH STREET	SEMS-ARCHIVE, HIST Cal-Sites, CERS	Lower	3326, 0.630, WNW
AQ184	RADOMSKY PROPERTY	930 PINE STREET	ENVIROSTOR	Lower	3446, 0.653, WNW
185	E-D COAT INC	715 4TH STREET	RESPONSE, ENVIROSTOR, CERS	Lower	3455, 0.654, SE
AR186	NORTHWESTERN VENETIA	1218 24TH STREET	HIST Cal-Sites	Lower	3539, 0.670, NNE
AR187	NORTHWESTERN VENETIA	1218 24TH ST	RESPONSE, ENVIROSTOR, CPS-SLIC, LIENS, DEED,...	Lower	3539, 0.670, NNE
188	CHURCH'S FRIED CHICK	1766 7TH STREET	ENVIROSTOR, LUST, Alameda County CS, VCP, HIST...	Lower	3581, 0.678, West
189	CA WASTE SOLUTIONS I	1820 10TH ST	ENVIROSTOR, NPDES, CIWQS	Lower	3662, 0.694, WNW
AR190	LAHER SPRING AND ELE	2419 MAGNOLIA STREET	ENVIROSTOR	Lower	3669, 0.695, NNE
AS191	PG&E OAKLAND-1 MGP	50 MARKET STREET AND	ENVIROSTOR, VCP, DEED	Lower	3827, 0.725, SSE
AS192	PG AND E OAKLAND	50 MARKET ST BTWN 1S	EDR MGP	Lower	3827, 0.725, SSE
193	MERRITT TWO SITE	655 3RD STREET	ENVIROSTOR, VCP, DEED, HAZNET	Lower	3881, 0.735, SE

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MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
194	DEPT OF TRANSPORTATI	800 CEDAR ST	ENVIROSTOR, VCP, HAZNET	Lower	3885, 0.736, West
195	BELL METAL FABRICATO	2500 ADELINE	ENVIROSTOR	Lower	3925, 0.743, NNE
196	BATAVIA PROPERTY	1832 9TH STREET	ENVIROSTOR	Lower	3933, 0.745, WNW
AT197	LDS TRUCKING	2233 WOOD STREET	ENVIROSTOR, VCP	Lower	3952, 0.748, NNW
AU198	VACANT AUTO REPAIR	SHOREY STREET	RESPONSE, ENVIROSTOR, CERS	Lower	3953, 0.749, West
AT199	ARMY-NAVY DISTRIBUTI	2233 WOOD STREET	ENVIROSTOR	Lower	3953, 0.749, NNW
AV200	OLD OAKLAND FIRE HOU	727 PINE STREET	ENVIROSTOR, VCP, HAZNET	Lower	3954, 0.749, West
AW201	TKG CALIFORNIA STORA	2450 MANDELA PARKWAY	ENVIROSTOR, VCP, DEED	Lower	3958, 0.750, North
AT202	BNSF WOOD STREET YAR	WOOD STREET & WEST G	RESPONSE, ENVIROSTOR, HIST Cal-Sites, DEED	Lower	4002, 0.758, NNW
AU203	B & A AUTO DISMANTLE	1823 SHOREY STREET	ENVIROSTOR, VCP	Lower	4066, 0.770, West
AW204	KANTOR WAREHOUSE	2525 MANDELA PARKWAY	LUST, Alameda County CS, HIST CORTESE, Notify 65,...	Lower	4087, 0.774, North
AV205	WILFRED'S AUTO WRECK	1834 7TH STREET	ENVIROSTOR, VCP	Lower	4100, 0.777, West
206	HOWARD MARINE TERMIN	EMBARCADERO WEST AND	RESPONSE, ENVIROSTOR, HIST Cal-Sites, DEED,...	Lower	4156, 0.787, SSE
207	C. E. TOLAND & SON,	2635 PERALTA	LUST, Alameda County CS, HIST CORTESE, Notify 65,...	Lower	4287, 0.812, North
208	ARMY-NAVY DISTRIBUTI		FUDS	Lower	4288, 0.812, North
209	SHEREX CHEMICAL COMP	1401 MIDDLE HARBOR R	SEMS-ARCHIVE, ENVIROSTOR, CPS-SLIC, SWEEPS UST,...	Lower	4315, 0.817, SSW
AX210	PHOENIX 766 PROPERTY	766 CEDAR	ENVIROSTOR, VCP, HIST CORTESE	Lower	4433, 0.840, West
211	PG & E OAKLAND POWER	50 MARTIN LUTHER KIN	ENVIROSTOR, LUST, Alameda County CS, AST, VCP,...	Lower	4449, 0.843, SSE
AY212	PHOENIX 524 PROPERTY	524 CEDAR	ENVIROSTOR, VCP, HIST CORTESE	Lower	4500, 0.852, West
213	ALL WEATHER DOOR	1851 5TH ST	ENVIROSTOR, LUST, Alameda County CS, VCP, CHMIRS,...	Lower	4552, 0.862, West
AY214	CAL EAST FOODS	505 CEDAR ST	ENVIROSTOR, LUST, Alameda County CS, VCP, SWEEPS...	Lower	4557, 0.863, West
AX215	LIPS PROPELLERS	1899 7TH	ENVIROSTOR, VCP, HIST CORTESE	Lower	4566, 0.865, West
216	MARSHALL STEEL CLEAN	1229 28TH	LUST, Alameda County CS, HIST CORTESE, Notify 65,...	Lower	4582, 0.868, NNE
AZ217	B & P DISMANTLERS	2525 WOOD STREET	ENVIROSTOR, VCP, HIST CORTESE	Lower	4596, 0.870, North
AZ218	RUSS ELLIOT, INC.	2526 WOOD STREET	ENVIROSTOR	Lower	4622, 0.875, North
BA219	CUSTOM ALLOY SCRAP S	2730 PERALTA ST	ENVIROSTOR, LUST, WDS	Lower	4624, 0.876, NNE
BA220	ALAMEDA CHEMICAL AND	2668 HANNAH STREET	ENVIROSTOR, HIST Cal-Sites	Lower	4642, 0.879, NNE
221	OAKLAND ARMY BASE-EA	700 MURMANSK STREET,	RESPONSE, ENVIROSTOR, HIST Cal-Sites, DEED	Lower	4726, 0.895, WNW
222	SOUTHERN PACIFIC - D	CYPRESS CORRIDOR	RESPONSE, ENVIROSTOR, HIST Cal-Sites, DEED, HIST...	Lower	4817, 0.912, North
BB223	LINDFORD AIR & REFRI	2850 POPLAR	Notify 65	Lower	4828, 0.914, NNE
BB224	LINDFORD AIR & REFRI	2850 POPLAR	LUST, Alameda County CS, HIST UST, HIST CORTESE,...	Lower	4828, 0.914, NNE
BC225	CALIFORNIA DEPARTMEN	2601 WOOD STREET	ENVIROSTOR, VCP, DEED, HAZNET	Lower	4855, 0.920, North
226	BUILDING 331 EAST	7 MERRITIME	Notify 65	Lower	4914, 0.931, NW
BC227	PACIFIC OVERSEAS AIR		FUDS	Lower	4925, 0.933, North
228	PAC OVERSEA AIR SVCC	2801 MANDELA PKWY	ENVIROSTOR	Lower	4936, 0.935, North
229	PERALTA	2847 PERALTA STREET	ENVIROSTOR, VCP, HAZNET, NPDES	Lower	4973, 0.942, NNE
230	CHRIS AND GEORGE'S A	2520 WEST STREET	ENVIROSTOR	Higher	4999, 0.947, ENE
231	OAKLAND CITY HALL	#1 CITY HALL PLAZA	RCRA-SQG, LUST, Alameda County CS, HIST CORTESE,...	Higher	5084, 0.963, East
232	ABC DRY CLEANERS	2701 SAN PABLO AVENU	ENVIROSTOR, HIST UST, DRYCLEANERS, EMI	Higher	5111, 0.968, NE

MAPPED SITES SUMMARY

Target Property Address:
1011 UNION STREET
OAKLAND, CA 94607

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
233	PG AND E GAS PLANT O	FIRST AND WASHINGTON	EDR MGP	Lower	5117, 0.969, SE
234	CITY OF OAKLAND - SU	WAKE AVENUE AND WEST	RESPONSE, ENVIROSTOR, DEED	Lower	5197, 0.984, NNW
235	AT & SF RAILROAD PRO	ALONG WOOD & 32ND ST	ENVIROSTOR, VCP	Lower	5224, 0.989, North

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
OAKLAND UNIFIED SCHO 1011 UNION STREET OAKLAND, CA 94607	EMI Facility Id: 20527 HAZNET GEPAID: CAC002659716 CERS	N/A
COLE MIDDLE SCHOOL 1011 UNION ST OAKLAND, CA 94607	HAZNET GEPAID: CAC002837988	N/A
OUSD - COLE ELEMENTA 1011 UNION ST OAKLAND, CA 94607	HAZNET GEPAID: CAC001327848	N/A
OAKLAND UNIFIED SCHO 1011 UNION STREET OAKLAND, CA 94607	FINDS Registry ID:: 110070062628	N/A
OAKLAND UNIFIED SCHO 1011 UNION ST OAKLAND, CA 94607	HAZNET GEPAID: CAC000980408	N/A
1X COLE ELEMENTARY 1011 UNION ST OAKLAND, CA 94607	HAZNET GEPAID: CAC000805480	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: A review of the NPL list, as provided by EDR, and dated 07/19/2019 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMCO CHEMICAL Cerclis ID:: 905334 EPA Id: CA0001576081	***1414 THIRD STREET***	***SW 1/4 - 1/2 (0.357 mi.)***	***0***	***9***

Federal CERCLIS list

SEMS: A review of the SEMS list, as provided by EDR, and dated 07/19/2019 has revealed that there are 4 SEMS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMCO CHEMICAL Site ID: 0905334 EPA Id: CA0001576081	***1414 THIRD STREET***	***SW 1/4 - 1/2 (0.357 mi.)***	***0***	***9***

Lower Elevation	Address	Direction / Distance	Map ID	Page
BERCOVICH, A., CO. A WEST OAKLAND LEAD Site ID: 0908776 EPA Id: CAN000908776	***1639 18TH*** 1414 3RD STREET	***NNW 1/4 - 1/2 (0.412 mi.)*** SW 1/4 - 1/2 (0.431 mi.)	***Z125*** AC130	***46*** 48
ACME GALVANIZING CO Site ID: 0905931 EPA Id: CAD009108861	***1655 17TH ST***	***NNW 1/4 - 1/2 (0.457 mi.)***	***AG140***	***52***

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 07/19/2019 has revealed that there are 5 SEMS-ARCHIVE sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SMILO CHEMICAL COMPA Site ID: 0901286 EPA Id: CAD029247319	***500 KIRKHAM ST***	***SSW 1/4 - 1/2 (0.256 mi.)***	***S89***	***32***
MANNY SERVICES	1600 PERALTA STREET	NNW 1/4 - 1/2 (0.322 mi.)	U104	38

Site ID: 0905432 EPA Id: CASFN0905432				
CALIFORNIA SODA COMP Site ID: 0905381 EPA Id: CAD009122409	355 MANDELA PARKWAY	SW 1/4 - 1/2 (0.361 mi.)	X109	40
NOR CAL METAL FABRIC Site ID: 0901171 EPA Id: CAD009148669	***1121 3RD ST***	***S 1/4 - 1/2 (0.446 mi.)***	***AE135***	***50***
LOT AT 530-542 LEWIS Site ID: 0905369 EPA Id: CA0002059467	530-542 LEWIS STREET	WSW 1/4 - 1/2 (0.457 mi.)	AF138	51

Federal RCRA CORRACTS facilities list

CORRACTS: A review of the CORRACTS list, as provided by EDR, and dated 06/24/2019 has revealed that there are 2 CORRACTS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FRANCIS PLATING OF O EPA ID:: CAD009206160	***785 7TH ST***	***SE 1/2 - 1 (0.542 mi.)***	***160***	***60***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SAFETY-KLEEN SYSTEMS EPA ID:: CAD053044053	***400 MARKET STREET***	***SE 1/2 - 1 (0.561 mi.)***	***AN167***	***64***

Federal RCRA generators list

RCRA-LQG: A review of the RCRA-LQG list, as provided by EDR, and dated 06/24/2019 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported EPA ID:: CAP000067231	800 CENTER ST.	WSW 1/8 - 1/4 (0.228 mi.)	P73	27

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 06/24/2019 has revealed that there are 8 RCRA-SQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES EPA ID:: CAD130171283	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***14***
COMMAIR OAKLAND	1266 14TH ST	NNE 1/8 - 1/4 (0.127 mi.)	G34	17

EPA ID:: CAR000162388				
UNITED TECHNOLOGIES	***1358 14TH ST***	***N 1/8 - 1/4 (0.128 mi.)***	***E38***	***18***
EPA ID:: CAR000222323				
PACIFIC RIM	***1338 CYPRESS AVE AT***	***NNW 1/8 - 1/4 (0.144 mi.)***	***H42***	***19***
EPA ID:: CA0001012269				
COCA-COLA BOTTLING C	1340 CYPRESS ST	NNW 1/8 - 1/4 (0.145 mi.)	H45	20
EPA ID:: CAD009103748				
ARMORED TRANSPORT	***1333 8TH ST***	***SW 1/8 - 1/4 (0.168 mi.)***	***L56***	***23***
EPA ID:: CAD981967391				
ALL MERCEDES DISMANT	1225 SEVENTH ST	S 1/8 - 1/4 (0.224 mi.)	N67	26
EPA ID:: CAD983670985				
OAKLAND FIRE SERVICE	***1445 14TH ST***	***NW 1/8 - 1/4 (0.227 mi.)***	***O69***	***26***
EPA ID:: CAR000046425				

State- and tribal - equivalent NPL

RESPONSE: A review of the RESPONSE list, as provided by EDR, has revealed that there are 15 RESPONSE sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DAIRIES	***1310 14TH STREET/131***	***N 1/8 - 1/4 (0.126 mi.)***	***E29***	***15***
Database: RESPONSE, Date of Government Version: 07/29/2019				
Status: Refer: Other Agency				
Facility Id: 60000370				
SF BAY AREA RAPID TR	***349 MANDELA PKWY***	***SW 1/4 - 1/2 (0.369 mi.)***	***X112***	***41***
Database: RESPONSE, Date of Government Version: 07/29/2019				
Status: Certified				
Facility Id: 1750021				
DTSC AT 528 LEWIS ST	***528 LEWIS ST***	***WSW 1/4 - 1/2 (0.455 mi.)***	***AF136***	***51***
Database: RESPONSE, Date of Government Version: 07/29/2019				
Status: Certified				
Facility Id: 1880002				
COMMERCIAL BUILDINGS	***1250-1276, 1284 W. G***	***NNE 1/2 - 1 (0.568 mi.)***	***169***	***65***
Database: RESPONSE, Date of Government Version: 07/29/2019				
AWP Facility Id: 01720110				
Status: Active				
Facility Id: 1720110				
SOUTHERN PACIFIC -WE	***CYPRESS CORRIDOR***	***WSW 1/2 - 1 (0.584 mi.)***	***AM172***	***66***
Database: RESPONSE, Date of Government Version: 07/29/2019				
AWP Facility Id: 01400010				
Status: Certified / Operation & Maintenance				
Facility Id: 1400010				
SOUTHERN PACIFIC TRA	***1707 WOOD ST***	***NNW 1/2 - 1 (0.613 mi.)***	***AP175***	***67***
Database: RESPONSE, Date of Government Version: 07/29/2019				
Status: Refer: RWQCB				
Facility Id: 1400001				
GAINES PROPERTY	***1795 11TH STREET***	***WNW 1/2 - 1 (0.630 mi.)***	***AQ182***	***69***
Database: RESPONSE, Date of Government Version: 07/29/2019				

Status: Certified
Facility Id: 1750030

E-D COAT INC	***715 4TH STREET***	***SE 1/2 - 1 (0.654 mi.)***	***185***	***69***

Database: RESPONSE, Date of Government Version: 07/29/2019
Status: Active
Facility Id: 60002501

NORTHWESTERN VENETIA	***1218 24TH ST***	***NNE 1/2 - 1 (0.670 mi.)***	***AR187***	***70***

Database: RESPONSE, Date of Government Version: 07/29/2019
Status: Active
Facility Id: 1340123

VACANT AUTO REPAIR	***SHOREY STREET***	***W 1/2 - 1 (0.749 mi.)***	***AU198***	***73***

Database: RESPONSE, Date of Government Version: 07/29/2019
Status: No Further Action
Facility Id: 1750020

BNSF WOOD STREET YAR	***WOOD STREET & WEST G***	***NNW 1/2 - 1 (0.758 mi.)***	***AT202***	***75***

Database: RESPONSE, Date of Government Version: 07/29/2019
AWP Facility Id: 01400017
Status: Certified O&M - Land Use Restrictions Only
Facility Id: 1400017

HOWARD MARINE TERMIN	***EMBARCADERO WEST AND***	***SSE 1/2 - 1 (0.787 mi.)***	***206***	***76***

Database: RESPONSE, Date of Government Version: 07/29/2019
Status: Certified / Operation & Maintenance
Facility Id: 1440006

OAKLAND ARMY BASE-EA	***700 MURMANSK STREET,***	***WNW 1/2 - 1 (0.895 mi.)***	***221***	***83***

Database: RESPONSE, Date of Government Version: 07/29/2019
AWP Facility Id: 01970016
Status: Active
Facility Id: 1970016

SOUTHERN PACIFIC - D	***CYPRESS CORRIDOR***	***N 1/2 - 1 (0.912 mi.)***	***222***	***83***

Database: RESPONSE, Date of Government Version: 07/29/2019
AWP Facility Id: 01400009
Status: Certified O&M - Land Use Restrictions Only
Facility Id: 1400009

CITY OF OAKLAND - SU	***WAKE AVENUE AND WEST***	***NNW 1/2 - 1 (0.984 mi.)***	***234***	***87***

Database: RESPONSE, Date of Government Version: 07/29/2019
Status: Certified O&M - Land Use Restrictions Only
Facility Id: 80001227

State- and tribal - equivalent CERCLIS

ENVIROSTOR: A review of the ENVIROSTOR list, as provided by EDR, and dated 07/29/2019 has revealed that there are 87 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMCO CHEMICAL	***1414 THIRD STREET***	***SW 1/4 - 1/2 (0.357 mi.)***	***0***	***9***

Status: Active
Facility Id: 1390001

NABISCO BRANDS INC	***1267 14TH ST***	***NNE 0 - 1/8 (0.067 mi.)***	***D12***	***11***

Status: No Further Action Facility Id: 60000369				
PALM COURT Status: No Further Action Facility Id: 1990027	***902 UNION STREET***	***S 0 - 1/8 (0.094 mi.)***	***F24***	***14***
VEND MART PROPERTY Status: Certified Facility Id: 1990012	***1035 7TH ST***	***SSE 1/4 - 1/2 (0.348 mi.)***	***W106***	***39***
CHANG'S AUTOMOTIVE Status: Certified Facility Id: 1750019	***1009 7TH STREET***	***SSE 1/4 - 1/2 (0.367 mi.)***	***W111***	***40***
MICRONESIAN CARGO IN Status: No Further Action Facility Id: 1420129	***955 7TH STREET***	***SE 1/4 - 1/2 (0.412 mi.)***	***AA123***	***46***
FRANCIS PLATING OF O Status: No Further Action Status: Refer: Local Agency Facility Id: 1330049 Facility Id: 80001620	***785 7TH ST***	***SE 1/2 - 1 (0.542 mi.)***	***160***	***60***
CHRIS AND GEORGE'S A Status: Refer: Local Agency Facility Id: 60000362	2520 WEST STREET	ENE 1/2 - 1 (0.947 mi.)	230	86
ABC DRY CLEANERS Status: Inactive - Needs Evaluation Facility Id: 60000359	***2701 SAN PABLO AVENU***	***NE 1/2 - 1 (0.968 mi.)***	***232***	***86***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DAIRIES Status: Refer: Other Agency Facility Id: 60000370	***1310 14TH STREET/131***	***N 1/8 - 1/4 (0.126 mi.)***	***E29***	***15***
COMMAIR MECHANICAL S Status: No Action Required Facility Id: 60000366	1266 14TH STREET	NNE 1/8 - 1/4 (0.127 mi.)	G33	17
AUTO CHLOR PROJ Status: Active Facility Id: 60002513	***1350 14TH ST***	***N 1/8 - 1/4 (0.128 mi.)***	***E36***	***17***
NEW OAKLAND FIRE STA Status: Certified Facility Id: 1920063	***CENTER AND 14TH STRE***	***NW 1/8 - 1/4 (0.238 mi.)***	***O82***	***30***
J & A TRUCK REPAIR Status: Active Facility Id: 1510022	***500 KIRKHAM ST***	***SSW 1/4 - 1/2 (0.256 mi.)***	***S88***	***32***
CONDOR FREIGHT LINES Status: No Further Action Facility Id: 1420126	***324 UNION ST***	***SSW 1/4 - 1/2 (0.265 mi.)***	***N93***	***34***
CONTAINER FREIGHT Status: Inactive - Needs Evaluation Facility Id: 1420128	***1285 5TH ST***	***SSW 1/4 - 1/2 (0.289 mi.)***	***S94***	***34***
WEST OAKLAND BART ST	***1451 7TH STREET***	***WSW 1/4 - 1/2 (0.309 mi.)***	***V102***	***38***

Status: Active Facility Id: 70000133				
MANNYSERVICES/MCKINN Status: Refer: Other Agency Facility Id: 1750027	1600 PERALTA	NNW 1/4 - 1/2 (0.322 mi.)	U105	38
CALIFORNIA SODA COMP Status: No Further Action Facility Id: 1280091	***355 MANDELA PARKWAY***	***SW 1/4 - 1/2 (0.361 mi.)***	***X108***	***40***
WESTERN PACIFIC RAIL Status: Certified / Operation & Maintenance Facility Id: 1400008	***UNION STREET***	***S 1/4 - 1/2 (0.366 mi.)***	***Y110***	***40***
SF BAY AREA RAPID TR Status: Certified Facility Id: 1750021	***349 MANDELA PKWY***	***SW 1/4 - 1/2 (0.369 mi.)***	***X112***	***41***
AMTRAK MAINTENANCE F Status: Certified / Operation & Maintenance Facility Id: 1400014	***3RD & UNION STREETS***	***SSW 1/4 - 1/2 (0.378 mi.)***	***115***	***42***
ALTA PLATING & CHEMI Status: Inactive - Needs Evaluation Facility Id: 70000088	1433 18TH STREET	NNW 1/4 - 1/2 (0.384 mi.)	Z117	43
RELIANCE UPHOLSTERY Status: Certified Facility Id: 70000082	***1614 CAMPBELL ST***	***NNW 1/4 - 1/2 (0.402 mi.)***	***AB120***	***44***
MARK ABOUDI PROPERTY Status: Certified O&M - Land Use Restrictions Only Facility Id: 1420131	***1639 18TH STREET***	***NNW 1/4 - 1/2 (0.412 mi.)***	***Z124***	***46***
FOOD EXPRESS INC Status: Active Facility Id: 60002775	***1639 18TH ST***	***NNW 1/4 - 1/2 (0.412 mi.)***	***Z126***	***47***
BOBO'S JUNKYARD Status: Certified / Operation & Maintenance Facility Id: 1400003	***1401 THIRD STREET***	***SW 1/4 - 1/2 (0.445 mi.)***	***AC132***	***49***
CITY OF OAKLAND (PUB Status: No Further Action Facility Id: 1990028	***1368 WILLOW ST***	***NW 1/4 - 1/2 (0.446 mi.)***	***AD133***	***49***
DTSC AT 528 LEWIS ST Status: Certified Facility Id: 1880002	***528 LEWIS ST***	***WSW 1/4 - 1/2 (0.455 mi.)***	***AF136***	***51***
ACME GALVANIZING Status: Active Facility Id: 60002571	***1655 17TH***	***NNW 1/4 - 1/2 (0.457 mi.)***	***AG139***	***51***
INMONT CORPORATION Status: Refer: RWQCB Facility Id: 60000360	***1545 WILLOW STREET***	***NW 1/4 - 1/2 (0.485 mi.)***	***AI153***	***58***
SOUTHERN PACIFIC 3RD Status: Certified Facility Id: 1400013	***1509/1513 THIRD STRE***	***SW 1/4 - 1/2 (0.500 mi.)***	***AK156***	***59***
1536 THIRD STREET Status: Refer: Other Agency	1536 THIRD STREET	SW 1/2 - 1 (0.522 mi.)	AK157	59

Facility Id: 1880003				
SO. PRESCOTT NEIGHBO	***3RD STREET***	***SW 1/2 - 1 (0.531 mi.)***	***AK159***	***60***
Status: Certified Facility Id: 1990019				
MANDELA PARKWAY CORR	***MANDELA PARKWAY BETW***	***N 1/2 - 1 (0.546 mi.)***	***AL161***	***61***
Status: Certified Facility Id: 1410118				
US POSTAL SERVICE	***1675 7TH ST***	***WSW 1/2 - 1 (0.547 mi.)***	***162***	***61***
Status: Certified Facility Id: 1430001				
MANDELA GRAND	***MANDELA PARKWAY AND***	***N 1/2 - 1 (0.550 mi.)***	***AL163***	***62***
Status: Inactive - Needs Evaluation Facility Id: 60000433				
CYPRESS FREEWAY-3RD	***3RD STREET BETWEEN C***	***SW 1/2 - 1 (0.553 mi.)***	***AM164***	***63***
Status: Certified Facility Id: 1400012				
ZUEDELAC APARTMENTS	***1600 3RD AVE***	***WSW 1/2 - 1 (0.559 mi.)***	***165***	***63***
Status: Certified Facility Id: 1990014				
SAFETYKLEEN SER CTR	***400 MARKET ST***	***SE 1/2 - 1 (0.561 mi.)***	***AN168***	***65***
Status: Active Facility Id: 80001412				
COMMERCIAL BUILDINGS	***1250-1276, 1284 W. G***	***NNE 1/2 - 1 (0.568 mi.)***	***169***	***65***
Status: Active Facility Id: 1720110				
SCHNITZER STEEL	***1101 EMBARCADERO WES***	***S 1/2 - 1 (0.583 mi.)***	***170***	***65***
Status: Active Facility Id: 60002854				
WEST RECYCLER BIN ST	1405 WOOD STREET	NW 1/2 - 1 (0.584 mi.)	171	66
Status: Refer: RWQCB Facility Id: 1890018				
SOUTHERN PACIFIC -WE	***CYPRESS CORRIDOR***	***WSW 1/2 - 1 (0.584 mi.)***	***AM172***	***66***
Status: Certified / Operation & Maintenance Facility Id: 1400010				
SOUTHERN PACIFIC TRA	***1707 WOOD ST***	***NNW 1/2 - 1 (0.613 mi.)***	***AP175***	***67***
Status: Refer: RWQCB Facility Id: 1400001				
COLE BROTHERS AUTO W	1797 12TH STREET	WNW 1/2 - 1 (0.618 mi.)	178	68
Status: No Action Required Facility Id: 60000365				
JENKINS AUTO WRECKER	***1778 10TH STREET***	***WNW 1/2 - 1 (0.619 mi.)***	***AQ179***	***68***
Status: Inactive - Needs Evaluation Facility Id: 1750025				
ARTESIAN OIL RECOVER	2306 MAGNOLIA STREET	NNE 1/2 - 1 (0.630 mi.)	AO181	68
Status: No Action Required Facility Id: 60000364				
GAINES PROPERTY	***1795 11TH STREET***	***WNW 1/2 - 1 (0.630 mi.)***	***AQ182***	***69***
Status: Certified Facility Id: 1750030				
RADOMSKY PROPERTY	930 PINE STREET	WNW 1/2 - 1 (0.653 mi.)	AQ184	69

Status: No Action Required Facility Id: 1880001				
E-D COAT INC Status: Active Facility Id: 60002501	***715 4TH STREET***	***SE 1/2 - 1 (0.654 mi.)***	***185***	***69***
NORTHWESTERN VENETIA Status: Active Facility Id: 1340123	***1218 24TH ST***	***NNE 1/2 - 1 (0.670 mi.)***	***AR187***	***70***
CHURCH'S FRIED CHICK Status: Certified Facility Id: 1540002	***1766 7TH STREET***	***W 1/2 - 1 (0.678 mi.)***	***188***	***70***
CA WASTE SOLUTIONS I Status: Active Facility Id: 60002788	***1820 10TH ST***	***WNW 1/2 - 1 (0.694 mi.)***	***189***	***71***
LAHER SPRING AND ELE Status: Certified Facility Id: 1990016	2419 MAGNOLIA STREET	NNE 1/2 - 1 (0.695 mi.)	AR190	71
PG&E OAKLAND-1 MGP Status: Certified / Operation & Maintenance Facility Id: 1490012	***50 MARKET STREET AND***	***SSE 1/2 - 1 (0.725 mi.)***	***AS191***	***71***
MERRITT TWO SITE Status: Certified O&M - Land Use Restrictions Only Facility Id: 60002149	***655 3RD STREET***	***SE 1/2 - 1 (0.735 mi.)***	***193***	***72***
DEPT OF TRANSPORTATI Status: Inactive - Needs Evaluation Facility Id: 1330037	***800 CEDAR ST***	***W 1/2 - 1 (0.736 mi.)***	***194***	***72***
BELL METAL FABRICATO Status: No Further Action Facility Id: 60000361	2500 ADELINE	NNE 1/2 - 1 (0.743 mi.)	195	73
BATAVIA PROPERTY Status: No Further Action Facility Id: 1990021	1832 9TH STREET	WNW 1/2 - 1 (0.745 mi.)	196	73
LDS TRUCKING Status: Certified Facility Id: 1420127	***2233 WOOD STREET***	***NNW 1/2 - 1 (0.748 mi.)***	***AT197***	***73***
VACANT AUTO REPAIR Status: No Further Action Facility Id: 1750020	***SHOREY STREET***	***W 1/2 - 1 (0.749 mi.)***	***AU198***	***73***
ARMY-NAVY DISTRIBUTI Status: No Further Action Facility Id: 80000374	2233 WOOD STREET	NNW 1/2 - 1 (0.749 mi.)	AT199	74
OLD OAKLAND FIRE HOU Status: Certified Facility Id: 1920064	***727 PINE STREET***	***W 1/2 - 1 (0.749 mi.)***	***AV200***	***74***
TKG CALIFORNIA STORA Status: Certified O&M - Land Use Restrictions Only Facility Id: 60000712	***2450 MANDELA PARKWAY***	***N 1/2 - 1 (0.750 mi.)***	***AW201***	***74***
BNSF WOOD STREET YAR Status: Certified O&M - Land Use Restrictions Only	***WOOD STREET & WEST G***	***NNW 1/2 - 1 (0.758 mi.)***	***AT202***	***75***

Facility Id: 1400017				
B & A AUTO DISMANTLE	***1823 SHOREY STREET***	***W 1/2 - 1 (0.770 mi.)***	***AU203***	***75***
Status: Certified Facility Id: 1500106				
WILFRED'S AUTO WRECK	***1834 7TH STREET***	***W 1/2 - 1 (0.777 mi.)***	***AV205***	***76***
Status: Certified Facility Id: 1500105				
HOWARD MARINE TERMIN	***EMBARCADERO WEST AND***	***SSE 1/2 - 1 (0.787 mi.)***	***206***	***76***
Status: Certified / Operation & Maintenance Facility Id: 1440006				
SHEREX CHEMICAL COMP	***1401 MIDDLE HARBOR R***	***SSW 1/2 - 1 (0.817 mi.)***	***209***	***77***
Status: Refer: Local Agency Facility Id: 1730096				
PHOENIX 766 PROPERTY	***766 CEDAR***	***W 1/2 - 1 (0.840 mi.)***	***AX210***	***78***
Status: Certified Facility Id: 1330036				
PG & E OAKLAND POWER	***50 MARTIN LUTHER KIN***	***SSE 1/2 - 1 (0.843 mi.)***	***211***	***78***
Status: Certified / Operation & Maintenance Facility Id: 1490020				
PHOENIX 524 PROPERTY	***524 CEDAR***	***W 1/2 - 1 (0.852 mi.)***	***AY212***	***79***
Status: Inactive - Needs Evaluation Facility Id: 1330038				
ALL WEATHER DOOR	***1851 5TH ST***	***W 1/2 - 1 (0.862 mi.)***	***213***	***79***
Status: Inactive - Needs Evaluation Facility Id: 1990013				
CAL EAST FOODS	***505 CEDAR ST***	***W 1/2 - 1 (0.863 mi.)***	***AY214***	***80***
Status: Certified Facility Id: 1510024				
LIPS PROPELLERS	***1899 7TH***	***W 1/2 - 1 (0.865 mi.)***	***AX215***	***81***
Status: No Further Action Facility Id: 1350121				
B & P DISMANTLERS	***2525 WOOD STREET***	***N 1/2 - 1 (0.870 mi.)***	***AZ217***	***82***
Status: Certified Facility Id: 1750017				
RUSS ELLIOT, INC.	2526 WOOD STREET	N 1/2 - 1 (0.875 mi.)	AZ218	82
Status: No Action Required Facility Id: 60000363				
CUSTOM ALLOY SCRAP S	***2730 PERALTA ST***	***NNE 1/2 - 1 (0.876 mi.)***	***BA219***	***82***
Status: Active Facility Id: 60000374				
ALAMEDA CHEMICAL AND	***2668 HANNAH STREET***	***NNE 1/2 - 1 (0.879 mi.)***	***BA220***	***83***
Status: Certified Facility Id: 1280089				
OAKLAND ARMY BASE-EA	***700 MURMANSK STREET,***	***WNW 1/2 - 1 (0.895 mi.)***	***221***	***83***
Status: Active Facility Id: 1970016				
SOUTHERN PACIFIC - D	***CYPRESS CORRIDOR***	***N 1/2 - 1 (0.912 mi.)***	***222***	***83***
Status: Certified O&M - Land Use Restrictions Only Facility Id: 1400009				
CALIFORNIA DEPARTMEN	***2601 WOOD STREET***	***N 1/2 - 1 (0.920 mi.)***	***BC225***	***84***

Status: Certified O&M - Land Use Restrictions Only
Facility Id: 1280090

PAC OVERSEA AIR SVCC Status: Inactive - Needs Evaluation Facility Id: 80000689	2801 MANDELA PKWY	N 1/2 - 1 (0.935 mi.)	228	85
PERALTA Status: No Further Action Facility Id: 1750038	***2847 PERALTA STREET***	***NNE 1/2 - 1 (0.942 mi.)***	***229***	***85***
CITY OF OAKLAND - SU Status: Certified O&M - Land Use Restrictions Only Facility Id: 80001227	***WAKE AVENUE AND WEST***	***NNW 1/2 - 1 (0.984 mi.)***	***234***	***87***
AT & SF RAILROAD PRO Status: Inactive - Needs Evaluation Facility Id: 1400005	***ALONG WOOD & 32ND ST***	***N 1/2 - 1 (0.989 mi.)***	***235***	***87***

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, has revealed that there are 46 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAKLAND CITY OF HOUS Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST, Date of Government Version: 09/09/2019 Status: Completed - Case Closed Facility Id: 01-0414 Facility Status: Case Closed Global Id: T0600100378 date9: 6/30/1993	***935 UNION ST***	***S 0 - 1/8 (0.002 mi.)***	***B7***	***10***
NABISCO BRANDS INC Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST, Date of Government Version: 09/09/2019 Status: Completed - Case Closed Facility Id: 01-1028 Facility Status: Case Closed Global Id: T0600100949 date9: 6/8/1993	***1267 14TH ST***	***NNE 0 - 1/8 (0.067 mi.)***	***D12***	***11***
GIBSON PAINT COMPANY Database: LUST REG 2, Date of Government Version: 09/30/2004 Facility Id: 01-0699 Facility Status: Case Closed date9: 3/10/1998	1199 12TH ST E	ENE 0 - 1/8 (0.071 mi.)	C17	12
MANDELA TRUCKING Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST, Date of Government Version: 09/09/2019 Status: Open - Site Assessment Facility Id: 01-2437 Facility Status: Preliminary site assessment underway	***1225 MANDELA PKWY***	***NW 1/8 - 1/4 (0.156 mi.)***	***51***	***21***

Global Id: T0600102246

THOMPSON PROPERTY ***1409-1417 12TH STREE*** ***WNW 1/8 - 1/4 (0.157 mi.)*** ***J52*** ***22***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: T0600158621

VEND MART PROPERTY ***1035 7TH ST*** ***SSE 1/4 - 1/2 (0.348 mi.)*** ***W106*** ***39***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-1778
Facility Status: Preliminary site assessment underway
Global Id: T0600101646

Lower Elevation	Address	Direction / Distance	Map ID	Page

CARNATION DIARIES ***1310 14TH ST*** ***N 1/8 - 1/4 (0.126 mi.)*** ***E28*** ***14***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 01-0282
Facility Status: Remedial action (cleanup) Underway

COMM AIR ***1266 14TH ST*** ***NNE 1/8 - 1/4 (0.127 mi.)*** ***G31*** ***16***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-2287
Facility Status: Case Closed
Global Id: T0600102103
date9: 8/21/2000

COCA COLA ***1340 MANDELA PARKWAY*** ***NNW 1/8 - 1/4 (0.127 mi.)*** ***H35*** ***17***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-0438
Facility Status: Case Closed
Global Id: T0600100398
date9: 2/18/1998

VACANT LOT SABEK INC ***1230 14TH ST*** ***NNE 1/8 - 1/4 (0.130 mi.)*** ***G40*** ***18***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Eligible for Closure
Facility Id: 01-1825
Facility Status: Preliminary site assessment underway
Global Id: T0600101691

ARMORED TRANSPORT ***1333 8TH ST*** ***SW 1/8 - 1/4 (0.168 mi.)*** ***L56*** ***23***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-2212
Facility Status: Case Closed
Global Id: T0600102031
date9: 7/8/1997

ALL MERCEDES DISMANT ***1255 7TH ST*** ***S 1/8 - 1/4 (0.225 mi.)*** ***N68*** ***26***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019

Status: Completed - Case Closed
Facility Id: 01-1266
Facility Status: Case Closed
Global Id: T0600101163
date9: 6/6/1997

SIGNAL SS/CHEVRON 20 ***800 CENTER ST*** ***WSW 1/8 - 1/4 (0.228 mi.)*** ***P75*** ***28***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Verification Monitoring
Facility Id: 01-2421
Facility Status: Preliminary site assessment underway
Global Id: T0600102230

FORMER EVERIDGE SERV ***1211 7TH*** ***S 1/8 - 1/4 (0.229 mi.)*** ***N77*** ***28***
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Site Assessment
Global Id: T0600100683

EVERIDGE SERVICE COM ***1211 7TH ST*** ***S 1/8 - 1/4 (0.229 mi.)*** ***N78*** ***29***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 01-0741
Facility Status: Preliminary site assessment underway

CONTAINER CARE LIMIT ***1350 16TH ST*** ***N 1/8 - 1/4 (0.231 mi.)*** ***80*** ***29***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-2221
Facility Status: Case Closed
Global Id: T0600102039
date9: 7/11/1997

KELLY'S TRUCK REPAIR ***1390 7TH ST*** ***SW 1/8 - 1/4 (0.235 mi.)*** ***Q81*** ***30***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-2118
Facility Status: Case Closed
Global Id: T0600101944
date9: 3/6/1997

J & A TRUCK REPAIR ***500 KIRKHAM ST*** ***SSW 1/4 - 1/2 (0.256 mi.)*** ***S88*** ***32***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Site Assessment
Facility Id: 01-2433
Facility Status: Leak being confirmed
Global Id: T0600102242

CHEVRON 1395 7TH ST SW 1/4 - 1/2 (0.258 mi.) Q90 33
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 01-0323
Facility Status: Preliminary site assessment underway

TRUCKER'S FRIEND ***1395 7TH*** ***SW 1/4 - 1/2 (0.258 mi.)*** ***Q91*** ***33***
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Assessment & Interim Remedial Action
Global Id: T0600100296

CONDOR FREIGHT LINES ***324 UNION ST*** ***SSW 1/4 - 1/2 (0.265 mi.)*** ***N93*** ***34***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019

Status: Completed - Case Closed
Facility Id: 01-1305
Facility Status: Case Closed
Global Id: T0600101200
date9: 11/6/1997

CONTAINER FREIGHT ***1285 5TH ST*** ***SSW 1/4 - 1/2 (0.289 mi.)*** ***S94*** ***34***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Remediation
Facility Id: 01-2399
Facility Status: Leak being confirmed
Global Id: T0600102209

CALTRANS CYPRESS PRO ***UNKNOWN 5TH & ADELIN*** ***S 1/4 - 1/2 (0.297 mi.)*** ***T95*** ***35***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 01-2398
Facility Status: Leak being confirmed

SOUTHERN PACIFIC TRA ***0 5TH AVE & KIRKHAM*** ***SSW 1/4 - 1/2 (0.301 mi.)*** ***S97*** ***36***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: T0600101304

CALTRANS CYPRESS PRO ***0 5TH ST AND ADELINE*** ***S 1/4 - 1/2 (0.301 mi.)*** ***T98*** ***36***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: T0600102208

RINO PACIFIC OAKLAND ***1107 5TH ST*** ***S 1/4 - 1/2 (0.303 mi.)*** ***T99*** ***36***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-2322
Facility Status: Preliminary site assessment underway
Global Id: T0600102136

PACIFIC BELL ***1075 7TH*** ***SSE 1/4 - 1/2 (0.306 mi.)*** ***100*** ***37***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: T06019796972

OSAGIE PROPERTY ***1532 PERALTA STREET*** ***NNW 1/4 - 1/2 (0.306 mi.)*** ***U101*** ***37***
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Remediation
Global Id: T0600191668

RELIABLE HANDI CAB ***1520 7TH ST*** ***WSW 1/4 - 1/2 (0.350 mi.)*** ***107*** ***39***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-1234
Facility Status: Case Closed
Global Id: T0600101133
date9: 6/14/1995

PACIFIC PIPE COMPANY ***1901 POPLAR ST*** ***N 1/4 - 1/2 (0.377 mi.)*** ***114*** ***41***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-2048

Facility Status: Case Closed
Global Id: T0600101893
date9: 10/24/1995

GARDINER MFG COMPANY ***1920 UNION ST*** ***NNE 1/4 - 1/2 (0.400 mi.)*** ***119*** ***43***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-0681
Facility Status: Case Closed
Global Id: T0600100626
date9: 1/8/1998

GREITZER PROPERTY ***1614 CAMPBELL ST*** ***NNW 1/4 - 1/2 (0.402 mi.)*** ***AB121*** ***44***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: SL0600145137

ARATEX SERVICES, INC ***330 CHESTNUT ST*** ***SSE 1/4 - 1/2 (0.405 mi.)*** ***122*** ***45***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-0086
Facility Status: Preliminary site assessment underway
Global Id: T0600100079

OAKLAND WAREHOUSE ***1221 3RD ST*** ***S 1/4 - 1/2 (0.417 mi.)*** ***127*** ***47***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-1054
Facility Status: Case Closed
Global Id: T0600100972
date9: 2/7/2000

CADEMARTORI TRUCKING ***1833 PERALTA ST*** ***NNW 1/4 - 1/2 (0.420 mi.)*** ***Z128*** ***48***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: T0600100239

CADOMARTORI TRUCKING 1833 PERALTA ST NNW 1/4 - 1/2 (0.420 mi.) Z129 48
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 01-0254
Facility Status: Preliminary site assessment underway

DC METALS ***1414 3RD ST*** ***SW 1/4 - 1/2 (0.431 mi.)*** ***AC131*** ***49***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Site Assessment
Facility Id: 01-2396
Facility Status: Preliminary site assessment underway
Global Id: T0600102206

EAST BAY FORD TRUCK ***333 FIBERT ST*** ***SSE 1/4 - 1/2 (0.460 mi.)*** ***142*** ***52***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-0531
Facility Status: Case Closed
Global Id: T0600100485

date9: 8/1/1994

EAST BAY MUNICIPAL U ***1200 21ST STREET*** ***NNE 1/4 - 1/2 (0.468 mi.)*** ***145*** ***54***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Open - Remediation
Facility Id: 01-2299
Facility Status: Preliminary site assessment underway
Global Id: T0600102115

SUNSET WHOLESALE COM ***105 EMBARCADERO AVE*** ***S 1/4 - 1/2 (0.472 mi.)*** ***146*** ***55***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-1742
Facility Status: Case Closed
Global Id: T0600101613
date9: 10/17/1996

ROADWAY EXPRESS INC ***1708 WOOD ST*** ***NNW 1/4 - 1/2 (0.477 mi.)*** ***AG147*** ***55***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-2291
Facility Status: Preliminary site assessment underway
Global Id: T0600102107

FRANK'S TIRE SERVICE ***1115 21ST ST*** ***NE 1/4 - 1/2 (0.478 mi.)*** ***148*** ***56***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: T06019759797

BASF CORPORATION ***1545 WILLOW ST*** ***NW 1/4 - 1/2 (0.485 mi.)*** ***AI152*** ***57***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 01-0152
Facility Status: Case Closed
date9: 11/4/1994

INMONT CORPORATION ***1545 WILLOW STREET*** ***NW 1/4 - 1/2 (0.485 mi.)*** ***AI153*** ***58***
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Global Id: SLT19763584
Global Id: T0600100141

NORCAL METAL FABRICA ***114 ADELINE ST*** ***S 1/4 - 1/2 (0.498 mi.)*** ***AJ154*** ***58***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-1636
Facility Status: Case Closed
Global Id: T0600101511
date9: 2/14/1994

LEHAR SALES ***150 CHESTNUT ST*** ***S 1/4 - 1/2 (0.499 mi.)*** ***AJ155*** ***58***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 09/09/2019
Status: Completed - Case Closed
Facility Id: 01-1268
Facility Status: Case Closed
Global Id: T0600101165

EXECUTIVE SUMMARY

date9: 5/29/1998

CPS-SLIC: A review of the CPS-SLIC list, as provided by EDR, has revealed that there are 16 CPS-SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
1125 MANDELA PKWY	***1125 MANDELA PKWY***	***WNW 1/8 - 1/4 (0.155 mi.)***	***J49***	***21***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Open - Inactive Global Id: T10000011421				
1125 MANDELA REUSE	***1125 MANDELA PARKWAY***	***WNW 1/8 - 1/4 (0.155 mi.)***	***J50***	***21***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Completed - Case Closed Global Id: T10000007322				
FORMER ADELINE CLEAN	***979 7TH ST***	***SE 1/4 - 1/2 (0.393 mi.)***	***AA118***	***43***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Open - Site Assessment Global Id: T10000009189				
JB AUTO	***819 12TH***	***ESE 1/4 - 1/2 (0.462 mi.)***	***AH144***	***54***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Open - Inactive Global Id: T06019761004				
OAK VILLAGE APARTMEN	***780 AND 828 13TH STR***	***E 1/4 - 1/2 (0.478 mi.)***	***149***	***56***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Completed - Case Closed Global Id: T10000008207				

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***14***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Completed - Case Closed Global Id: T10000000210 Global Id: T0600100262				
SIGNAL SS/CHEVRON 20	***800 CENTER ST***	***WSW 1/8 - 1/4 (0.228 mi.)***	***P75***	***28***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Open - Active Global Id: T10000011146				
MANDELA GATEWAY REDE	***0 7TH ST & MANDELA***	***WSW 1/8 - 1/4 (0.243 mi.)***	***85***	***31***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Completed - Case Closed Global Id: T06019796839				
5TH ST AND MAGNOLIA	***0 5TH ST & MAGNOLIA***	***S 1/4 - 1/2 (0.254 mi.)***	***N86***	***31***
Database: CPS-SLIC, Date of Government Version: 09/09/2019 Facility Status: Open - Site Assessment Global Id: T10000007974				
UNION PACIFIC RAILRO	***CROSS 5TH & UNION***	***SSW 1/4 - 1/2 (0.259 mi.)***	***92***	***33***
Database: SLIC REG 2, Date of Government Version: 09/30/2004 Facility Id: SL20246864				
RED STAR YEAST / 139	***1396 5TH***	***SW 1/4 - 1/2 (0.299 mi.)***	***96***	***35***
Database: CPS-SLIC, Date of Government Version: 09/09/2019				

Facility Status: Completed - Case Closed
Global Id: T06019794669

THE BURKE COMPANY ***310 UNION*** ***S 1/4 - 1/2 (0.376 mi.)*** ***Y113*** ***41***
Database: CPS-SLIC, Date of Government Version: 09/09/2019
Facility Status: Completed - Case Closed
Global Id: T06019739692

HALL PROPERTY ***1455 5TH*** ***SW 1/4 - 1/2 (0.381 mi.)*** ***116*** ***42***
Database: CPS-SLIC, Date of Government Version: 09/09/2019
Facility Status: Completed - Case Closed
Global Id: T06019778849

ACME GALVANIZING ***1655 17TH*** ***NNW 1/4 - 1/2 (0.457 mi.)*** ***AG139*** ***51***
Database: CPS-SLIC, Date of Government Version: 09/09/2019
Facility Status: Open - Assessment & Interim Remedial Action
Global Id: T10000001503

EAST BAY FORD TRUCK ***333 FIBERT ST*** ***SSE 1/4 - 1/2 (0.460 mi.)*** ***142*** ***52***
Database: CPS-SLIC, Date of Government Version: 09/09/2019
Facility Status: Open - Assessment & Interim Remedial Action
Global Id: T10000005774

ROADWAY EXPRESS INC ***1708 WOOD ST*** ***NNW 1/4 - 1/2 (0.477 mi.)*** ***AG147*** ***55***
Database: CPS-SLIC, Date of Government Version: 09/09/2019
Facility Status: Open - Active
Global Id: T10000009064

Alameda County CS: A review of the Alameda County CS list, as provided by EDR, and dated 01/09/2019 has revealed that there are 47 Alameda County CS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NABISCO BRANDS INC	***1267 14TH ST***	***NNE 0 - 1/8 (0.067 mi.)***	***D12***	***11***
Record Id: RO0001166				
Status: Case Closed				
1125 MANDELA PKWY	***1125 MANDELA PKWY***	***WNW 1/8 - 1/4 (0.155 mi.)***	***J49***	***21***
Record Id: RO0003298				
Status: Leak Confirmation				
1125 MANDELA REUSE	***1125 MANDELA PARKWAY***	***WNW 1/8 - 1/4 (0.155 mi.)***	***J50***	***21***
Record Id: RO0003184				
Status: Pollution Characterization				
MANDELA TRUCKING	***1225 MANDELA PKWY***	***NW 1/8 - 1/4 (0.156 mi.)***	***51***	***21***
Record Id: RO0000041				
Status: Leak Confirmation				
Status: Pollution Characterization				
THOMPSON PROPERTY	***1409-1417 12TH STREE***	***WNW 1/8 - 1/4 (0.157 mi.)***	***J52***	***22***
Record Id: RO0002933				
Status: Leak Confirmation				
Status: Preliminary Site Assessment Underway				
Status: Pollution Characterization				
Status: Case Closed				
VEND MART PROPERTY	***1035 7TH ST***	***SSE 1/4 - 1/2 (0.348 mi.)***	***W106***	***39***

Record Id: RO0000036
Status: Leak Confirmation
Status: Pollution Characterization

FORMER ADELINE CLEAN	***979 7TH ST***	***SE 1/4 - 1/2 (0.393 mi.)***	***AA118***	***43***

Record Id: RO0003227
Status: Leak Confirmation

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***14***

Record Id: RO0002978
Record Id: RO0000018
Status: Leak Confirmation
Status: Preliminary Site Assessment Underway
Status: Pollution Characterization
Status: Remedial Action Underway
Status: Case Closed

COMM AIR	***1266 14TH ST***	***NNE 1/8 - 1/4 (0.127 mi.)***	***G31***	***16***

Record Id: RO0001053
Status: Case Closed

COCA COLA	***1340 MANDELA PARKWAY***	***NNW 1/8 - 1/4 (0.127 mi.)***	***H35***	***17***

Record Id: RO0001205
Status: Case Closed

VACANT LOT SABEK INC	***1230 14TH ST***	***NNE 1/8 - 1/4 (0.130 mi.)***	***G40***	***18***

Record Id: RO0000433
Status: Leak Confirmation
Status: Preliminary Site Assessment Underway
Status: Pollution Characterization
Status: Remediation Plan
Status: Remedial Action Underway

ARMORED TRANSPORT	***1333 8TH ST***	***SW 1/8 - 1/4 (0.168 mi.)***	***L56***	***23***

Record Id: RO0000627
Status: Case Closed

ALL MERCEDES DISMANT	***1255 7TH ST***	***S 1/8 - 1/4 (0.225 mi.)***	***N68***	***26***

Record Id: RO0000937
Status: Case Closed

SIGNAL SS/CHEVRON 20	***800 CENTER ST***	***WSW 1/8 - 1/4 (0.228 mi.)***	***P75***	***28***

Record Id: RO0000454
Record Id: RO0003272
Status: Leak Confirmation
Status: Pollution Characterization

EVERIDGE SERVICE COM	***1211 7TH ST***	***S 1/8 - 1/4 (0.229 mi.)***	***N78***	***29***

Record Id: RO0000235
Status: Leak Confirmation
Status: Pollution Characterization

CONTAINER CARE LIMIT	***1350 16TH ST***	***N 1/8 - 1/4 (0.231 mi.)***	***80***	***29***

Record Id: RO0000620
Status: Case Closed

KELLY'S TRUCK REPAIR	***1390 7TH ST***	***SW 1/8 - 1/4 (0.235 mi.)***	***Q81***	***30***

Record Id: RO0001071
Status: Case Closed

MANDELA GATEWAY REDE	***0 7TH ST & MANDELA***	***WSW 1/8 - 1/4 (0.243 mi.)***	***85***	***31***

Record Id: RO0002517
Status: Preliminary Site Assessment Underway
Status: Pollution Characterization
Status: Remediation Plan
Status: Remedial Action Underway
Status: Case Closed

J & A TRUCK REPAIR ***500 KIRKHAM ST*** ***SSW 1/4 - 1/2 (0.256 mi.)*** ***S88*** ***32***
Record Id: RO0000421
Status: Leak Confirmation
Status: Pollution Characterization

TRUCKER'S FRIEND ***1395 7TH*** ***SW 1/4 - 1/2 (0.258 mi.)*** ***Q91*** ***33***
Record Id: RO0000053
Status: Preliminary Site Assessment Workplan Submitted

CONDOR FREIGHT LINES ***324 UNION ST*** ***SSW 1/4 - 1/2 (0.265 mi.)*** ***N93*** ***34***
Record Id: RO0000989
Status: Case Closed

CONTAINER FREIGHT ***1285 5TH ST*** ***SSW 1/4 - 1/2 (0.289 mi.)*** ***S94*** ***34***
Record Id: RO0000420
Status: Leak Confirmation
Status: Pollution Characterization
Status: Remedial Action Underway

RED STAR YEAST / 139 ***1396 5TH*** ***SW 1/4 - 1/2 (0.299 mi.)*** ***96*** ***35***
Record Id: RO0002896
Status: Pollution Characterization
Status: Case Closed

SOUTHERN PACIFIC TRA ***0 5TH AVE & KIRKHAM*** ***SSW 1/4 - 1/2 (0.301 mi.)*** ***S97*** ***36***
Record Id: RO0000122
Status: Leak Confirmation
Status: Pollution Characterization

CALTRANS CYPRESS PRO ***0 5TH ST AND ADELINE*** ***S 1/4 - 1/2 (0.301 mi.)*** ***T98*** ***36***
Record Id: RO0000178
Status: Leak Confirmation

RINO PACIFIC OAKLAND ***1107 5TH ST*** ***S 1/4 - 1/2 (0.303 mi.)*** ***T99*** ***36***
Record Id: RO0000234
Status: Leak Confirmation
Status: Preliminary Site Assessment Underway
Status: Pollution Characterization
Status: Remediation Plan
Status: Remedial Action Underway
**Additional key fields are available in the Map Findings section*

PACIFIC BELL ***1075 7TH*** ***SSE 1/4 - 1/2 (0.306 mi.)*** ***100*** ***37***
Record Id: RO0000628
Status: Leak Confirmation
Status: Case Closed

OSAGIE PROPERTY ***1532 PERALTA STREET*** ***NNW 1/4 - 1/2 (0.306 mi.)*** ***U101*** ***37***
Record Id: RO0000117
Status: Leak Confirmation
Status: Preliminary Site Assessment Workplan Submitted
Status: Preliminary Site Assessment Underway

RELIABLE HANDI CAB ***1520 7TH ST*** ***WSW 1/4 - 1/2 (0.350 mi.)*** ***107*** ***39***
Record Id: RO0001137

Status: Case Closed

THE BURKE COMPANY	***310 UNION***	***S 1/4 - 1/2 (0.376 mi.)***	***Y113***	***41***
Record Id: RO0002828				
Status: Leak Confirmation				
Status: Pollution Characterization				
Status: Case Closed				
PACIFIC PIPE COMPANY	***1901 POPLAR ST***	***N 1/4 - 1/2 (0.377 mi.)***	***114***	***41***
Record Id: RO0000677				
Status: Case Closed				
HALL PROPERTY	***1455 5TH***	***SW 1/4 - 1/2 (0.381 mi.)***	***116***	***42***
Record Id: RO0002537				
Status: Preliminary Site Assessment Underway				
Status: Pollution Characterization				
Status: Remedial Action Underway				
Status: Case Closed				
GARDINER MFG COMPANY	***1920 UNION ST***	***NNE 1/4 - 1/2 (0.400 mi.)***	***119***	***43***
Record Id: RO0001185				
Status: Case Closed				
RELIANCE UPHOLSTERY	***1614 CAMPBELL ST***	***NNW 1/4 - 1/2 (0.402 mi.)***	***AB120***	***44***
Record Id: RO0002613				
Status: Preliminary Site Assessment Underway				
ARATEX SERVICES, INC	***330 CHESTNUT ST***	***SSE 1/4 - 1/2 (0.405 mi.)***	***122***	***45***
Record Id: RO0000446				
Status: Leak Confirmation				
Status: Preliminary Site Assessment Underway				
Status: Pollution Characterization				
Status: Remedial Action Underway				
Status: Case Closed				
OAKLAND WAREHOUSE	***1221 3RD ST***	***S 1/4 - 1/2 (0.417 mi.)***	***127***	***47***
Record Id: RO0000673				
Status: Case Closed				
CADEMARTORI TRUCKING	***1833 PERALTA ST***	***NNW 1/4 - 1/2 (0.420 mi.)***	***Z128***	***48***
Record Id: RO0000015				
Status: Preliminary Site Assessment Workplan Submitted				
DC METALS	***1414 3RD ST***	***SW 1/4 - 1/2 (0.431 mi.)***	***AC131***	***49***
Record Id: RO0000444				
Status: Leak Confirmation				
ACME GALVANIZING	***1655 17TH***	***NNW 1/4 - 1/2 (0.457 mi.)***	***AG139***	***51***
Record Id: RO0002777				
Status: Leak Confirmation				
EAST BAY FORD TRUCK	***333 FIBERT ST***	***SSE 1/4 - 1/2 (0.460 mi.)***	***142***	***52***
Record Id: RO0001091				
Status: Case Closed				
EAST BAY MUNICIPAL U	***1200 21ST STREET***	***NNE 1/4 - 1/2 (0.468 mi.)***	***145***	***54***
Record Id: RO0000030				
Status: Preliminary Site Assessment Underway				
SUNSET WHOLESALE COM	***105 EMBARCADERO AVE***	***S 1/4 - 1/2 (0.472 mi.)***	***146***	***55***
Record Id: RO0000735				
Status: Case Closed				
ROADWAY EXPRESS INC	***1708 WOOD ST***	***NNW 1/4 - 1/2 (0.477 mi.)***	***AG147***	***55***

Record Id: RO0000039
Record Id: RO0003206
Status: Preliminary Site Assessment Workplan Submitted
Status: Preliminary Site Assessment Underway
Status: Pollution Characterization

FRANK'S TIRE SERVICE	***1115 21ST ST***	***NE 1/4 - 1/2 (0.478 mi.)***	***148***	***56***
Record Id: RO0000301				
Status: Case Closed				
INMONT CORPORATION	***1545 WILLOW STREET***	***NW 1/4 - 1/2 (0.485 mi.)***	***AI153***	***58***
Record Id: RO0002956				
Status: Case Closed				
NORCAL METAL FABRICA	***114 ADELINE ST***	***S 1/4 - 1/2 (0.498 mi.)***	***AJ154***	***58***
Record Id: RO0000570				
Status: Case Closed				
LEHAR SALES	***150 CHESTNUT ST***	***S 1/4 - 1/2 (0.499 mi.)***	***AJ155***	***58***
Record Id: RO0001138				
Status: Case Closed				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL SUPPLY CENTER,	1200 12TH STREET	ENE 0 - 1/8 (0.065 mi.)	C10	10
Database: MILITARY UST SITES, Date of Government Version: 09/09/2019				

AST: A review of the AST list, as provided by EDR, has revealed that there are 4 AST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AT SYTEMS INTERNATIO	1333 8TH STREET	SW 1/8 - 1/4 (0.168 mi.)	L55	23
Database: AST, Date of Government Version: 07/06/2016				
ZENTRUM MOTORS	1225 7TH ST	S 1/8 - 1/4 (0.224 mi.)	N65	25
Database: AST, Date of Government Version: 07/06/2016				
FIRE STATION #03	1445 14TH ST	NW 1/8 - 1/4 (0.227 mi.)	O70	27
Database: AST, Date of Government Version: 07/06/2016				
CITY OF OAKLAND FIRE	1445 14TH ST.	NW 1/8 - 1/4 (0.227 mi.)	O72	27
Database: AST, Date of Government Version: 07/06/2016				

State and tribal voluntary cleanup sites

VCP: A review of the VCP list, as provided by EDR, and dated 07/29/2019 has revealed that there are 16 VCP sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PALM COURT Status: No Further Action Facility Id: 1990027	***902 UNION STREET***	***S 0 - 1/8 (0.094 mi.)***	***F24***	***14***
VEND MART PROPERTY Status: Certified Facility Id: 1990012	***1035 7TH ST***	***SSE 1/4 - 1/2 (0.348 mi.)***	***W106***	***39***
CHANG'S AUTOMOTIVE Status: Certified Facility Id: 1750019	***1009 7TH STREET***	***SSE 1/4 - 1/2 (0.367 mi.)***	***W111***	***40***
MICRONESIAN CARGO IN Status: No Further Action Facility Id: 1420129	***955 7TH STREET***	***SE 1/4 - 1/2 (0.412 mi.)***	***AA123***	***46***

Lower Elevation	Address	Direction / Distance	Map ID	Page
NEW OAKLAND FIRE STA Status: Certified Facility Id: 1920063	***CENTER AND 14TH STRE***	***NW 1/8 - 1/4 (0.238 mi.)***	***O82***	***30***
J & A TRUCK REPAIR Status: Active Facility Id: 1510022	***500 KIRKHAM ST***	***SSW 1/4 - 1/2 (0.256 mi.)***	***S88***	***32***
CONDOR FREIGHT LINES Status: No Further Action Facility Id: 1420126	***324 UNION ST***	***SSW 1/4 - 1/2 (0.265 mi.)***	***N93***	***34***
CONTAINER FREIGHT Status: Inactive - Needs Evaluation Facility Id: 1420128	***1285 5TH ST***	***SSW 1/4 - 1/2 (0.289 mi.)***	***S94***	***34***
WEST OAKLAND BART ST Status: Active Facility Id: 70000133	***1451 7TH STREET***	***WSW 1/4 - 1/2 (0.309 mi.)***	***V102***	***38***
WESTERN PACIFIC RAIL Status: Certified / Operation & Maintenance Facility Id: 1400008	***UNION STREET***	***S 1/4 - 1/2 (0.366 mi.)***	***Y110***	***40***
AMTRAK MAINTENANCE F Status: Certified / Operation & Maintenance Facility Id: 1400014	***3RD & UNION STREETS***	***SSW 1/4 - 1/2 (0.378 mi.)***	***115***	***42***
RELIANCE UPHOLSTERY Status: Certified Facility Id: 70000082	***1614 CAMPBELL ST***	***NNW 1/4 - 1/2 (0.402 mi.)***	***AB120***	***44***
MARK ABOUDI PROPERTY Status: Certified O&M - Land Use Restrictions Only Facility Id: 1420131	***1639 18TH STREET***	***NNW 1/4 - 1/2 (0.412 mi.)***	***Z124***	***46***
BOBO'S JUNKYARD	***1401 THIRD STREET***	***SW 1/4 - 1/2 (0.445 mi.)***	***AC132***	***49***

Status: Certified / Operation & Maintenance
Facility Id: 1400003

CITY OF OAKLAND (PUB	***1368 WILLOW ST***	***NW 1/4 - 1/2 (0.446 mi.)***	***AD133***	***49***
Status: No Further Action Facility Id: 1990028				
SOUTHERN PACIFIC 3RD	***1509/1513 THIRD STRE***	***SW 1/4 - 1/2 (0.500 mi.)***	***AK156***	***59***
Status: Certified Facility Id: 1400013				

State and tribal Brownfields sites

BROWNFIELDS: A review of the BROWNFIELDS list, as provided by EDR, and dated 09/23/2019 has revealed that there are 2 BROWNFIELDS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FORMER ADELINE CLEAN	***979 7TH ST***	***SE 1/4 - 1/2 (0.393 mi.)***	***AA118***	***43***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
EAST BAY FORD TRUCK	***333 FIBERT ST***	***SSE 1/4 - 1/2 (0.460 mi.)***	***142***	***52***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A review of the US BROWNFIELDS list, as provided by EDR, and dated 06/03/2019 has revealed that there are 5 US BROWNFIELDS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WEST OAKLAND AREA I	***7TH STREET BETWEEN P***	***W 1/8 - 1/4 (0.209 mi.)***	***61***	***24***
ACRES property ID: 131530				
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
WEST OAKLAND BART ST	***1451 7TH STREET***	***WSW 1/4 - 1/2 (0.309 mi.)***	***V103***	***38***
ACRES property ID: 133801				
WILLOW PARK	***14TH AND WILLOW ST W***	***NW 1/4 - 1/2 (0.460 mi.)***	***AD141***	***52***
Cleanup Completion Date: 12/01/2004 00:00:00 ACRES property ID: 16501				
WEST OAKLAND III	***WOOD, 9TH, 12TH AND***	***NNW 1/4 - 1/2 (0.482 mi.)***	***AG150***	***57***
ACRES property ID: 131561				
WEST OAKLAND AREA II	***WOOD AND PERALTA STR***	***NNW 1/4 - 1/2 (0.482 mi.)***	***AG151***	***57***
ACRES property ID: 131541				

EXECUTIVE SUMMARY

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A review of the SWRCY list, as provided by EDR, and dated 09/09/2019 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NATIONAL RECYCLING C Cert Id: RC3530	***1312 KIRKHAM ST***	***NNW 0 - 1/8 (0.090 mi.)***	***E21***	***13***

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there are 12 HIST Cal-Sites sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMCO CHEMICAL	***1414 THIRD STREET***	***SW 1/4 - 1/2 (0.357 mi.)***	***0***	***9***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SF BAY AREA RAPID TR	***349 MANDELA PKWY***	***SW 1/4 - 1/2 (0.369 mi.)***	***X112***	***41***
528 LEWIS STREET	***528 LEWIS STREET***	***WSW 1/4 - 1/2 (0.455 mi.)***	***AF137***	***51***
COMMERCIAL BUILDINGS	***1250-1276, 1284 W. G***	***NNE 1/2 - 1 (0.568 mi.)***	***169***	***65***
SOUTHERN PACIFIC -WE	***CYPRESS CORRIDOR***	***WSW 1/2 - 1 (0.584 mi.)***	***AM172***	***66***
GAINES PROPERTY	***1795 11TH STREET***	***WNW 1/2 - 1 (0.630 mi.)***	***AQ183***	***69***
NORTHWESTERN VENETIA	1218 24TH STREET	NNE 1/2 - 1 (0.670 mi.)	AR186	70
BNSF WOOD STREET YAR	***WOOD STREET & WEST G***	***NNW 1/2 - 1 (0.758 mi.)***	***AT202***	***75***
HOWARD MARINE TERMIN	***EMBARCADERO WEST AND***	***SSE 1/2 - 1 (0.787 mi.)***	***206***	***76***
ALAMEDA CHEMICAL AND	***2668 HANNAH STREET***	***NNE 1/2 - 1 (0.879 mi.)***	***BA220***	***83***
OAKLAND ARMY BASE-EA	***700 MURMANSK STREET,***	***WNW 1/2 - 1 (0.895 mi.)***	***221***	***83***
SOUTHERN PACIFIC - D	***CYPRESS CORRIDOR***	***N 1/2 - 1 (0.912 mi.)***	***222***	***83***

Toxic Pits: A review of the Toxic Pits list, as provided by EDR, and dated 07/01/1995 has revealed that there are 2 Toxic Pits sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SP, W.OAKLAND YD.-(O Closure Date: 04/21/93 Task #: 82010 Status: CLOSED	1707 WOOD STREET	NNW 1/2 - 1 (0.613 mi.)	AP176	67
SP, W.OAKLAND YARD-(Closure Date: 06/30/92 Task #: 82034 Status: CLOSED	1707 WOOD STREET	NNW 1/2 - 1 (0.613 mi.)	AP177	67

CERS HAZ WASTE: A review of the CERS HAZ WASTE list, as provided by EDR, and dated 08/14/2019 has revealed that there are 6 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CALIFORNIA CEREAL PR	***1267 14TH ST***	***NNE 0 - 1/8 (0.067 mi.)***	***D13***	***11***

Lower Elevation	Address	Direction / Distance	Map ID	Page
NATIONAL RECYCLING C	***1312 KIRKHAM ST***	***NNW 0 - 1/8 (0.090 mi.)***	***E19***	***12***
AUTO-CHLOR SYSTEM	***1350 14TH STREET***	***N 1/8 - 1/4 (0.128 mi.)***	***E37***	***18***
OTIS ELEVATOR COMPAN	***1358 14TH ST***	***N 1/8 - 1/4 (0.128 mi.)***	***E39***	***18***
THE CRUCIBLE	***1260 7TH ST***	***SSW 1/8 - 1/4 (0.199 mi.)***	***M60***	***24***
ZENTRUM MOTORS	***1225 7TH ST***	***S 1/8 - 1/4 (0.224 mi.)***	***N64***	***25***

Local Lists of Registered Storage Tanks

SWEEPS UST: A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 9 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAKLAND CITY OF HOUS Comp Number: 64509	***935 UNION ST***	***S 0 - 1/8 (0.002 mi.)***	***B7***	***10***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES Comp Number: 65866	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***14***
COMM AIR Status: A Tank Status: A Comp Number: 46625	***1266 14TH ST***	***NNE 1/8 - 1/4 (0.127 mi.)***	***G31***	***16***
OAKLAND PRODUCTION A Status: A Tank Status: A Comp Number: 7065	***1340 CYPRESS ST***	***NNW 1/8 - 1/4 (0.145 mi.)***	***H44***	***20***
NABISCO BRANDS Comp Number: 53463	***1267 014TH ST***	***N 1/8 - 1/4 (0.162 mi.)***	***K54***	***22***
SABEK, INC. Comp Number: 1546	***1230 014TH ST***	***N 1/8 - 1/4 (0.174 mi.)***	***K58***	***24***
ALL MERCEDES DISMANT Comp Number: 51603	***1225 7TH ST***	***S 1/8 - 1/4 (0.224 mi.)***	***N63***	***25***
EVERIDGE SERVICE COM Comp Number: 42543	***1211 7TH ST***	***S 1/8 - 1/4 (0.229 mi.)***	***N78***	***29***
ARMORED TRANSPORT IN Status: A Tank Status: A Comp Number: 209	1333 7TH ST	SW 1/8 - 1/4 (0.231 mi.)	Q79	29

EXECUTIVE SUMMARY

HIST UST: A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 11 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAKLAND CITY OF HOUS	***935 UNION ST***	***S 0 - 1/8 (0.002 mi.)***	***B7***	***10***
WEST DISTRICT OFFICE Facility Id: 00000064509	935 UNION ST	S 0 - 1/8 (0.002 mi.)	B8	10
NABISCO BRANDS Facility Id: 00000053463	1267 14TH ST	NNE 0 - 1/8 (0.067 mi.)	D14	11
STEPHEN R BELL	***1267 14TH ST***	***NNE 0 - 1/8 (0.067 mi.)***	***D15***	***12***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES Facility Id: 00000065866	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***14***
FORMER OAKLAND CARNA	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E30***	***16***
CARRON AIR Facility Id: 00000046625	1266 14TH ST	NNE 1/8 - 1/4 (0.127 mi.)	G32	16
VACANT LOT SABEK INC	***1230 14TH ST***	***NNE 1/8 - 1/4 (0.130 mi.)***	***G40***	***18***
SABEK, INC. Facility Id: 00000001546	1230 14TH ST	NNE 1/8 - 1/4 (0.130 mi.)	G41	19
OAKLAND PRODUCTION A Facility Id: 00000007065	1340 CYPRESS ST	NNW 1/8 - 1/4 (0.145 mi.)	H47	20
WILLIE EVERIDGE Facility Id: 00000042543	1211 7TH ST	S 1/8 - 1/4 (0.229 mi.)	N76	28

CERS TANKS: A review of the CERS TANKS list, as provided by EDR, and dated 08/14/2019 has revealed that there are 2 CERS TANKS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL SUPPLY CENTER,	1200 12TH STREET	ENE 0 - 1/8 (0.065 mi.)	C9	10

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRE STATION #03	***1445 14TH ST***	***NW 1/8 - 1/4 (0.227 mi.)***	***O71***	***27***

CA FID UST: A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 7 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAKLAND CITY OF HOUS Facility Id: 01000546 Status: I	***935 UNION ST***	***S 0 - 1/8 (0.002 mi.)***	***B7***	***10***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***14***

Facility Id: 01002256 Status: I				
OAKLAND PRODUCTION A Facility Id: 01000569 Status: A	***1340 CYPRESS ST***	***NNW 1/8 - 1/4 (0.145 mi.)***	***H44***	***20***
NABISCO BRANDS Facility Id: 01002226 Status: I	***1267 014TH ST***	***N 1/8 - 1/4 (0.162 mi.)***	***K54***	***22***
SABEK, INC. Facility Id: 01002523 Status: A	***1230 014TH ST***	***N 1/8 - 1/4 (0.174 mi.)***	***K58***	***24***
WILLIE EVERIDGE Facility Id: 01002696 Status: A	1211 007TH ST	SSW 1/8 - 1/4 (0.215 mi.)	M62	25
ALL MERCEDES DISMANT Facility Id: 01000177 Status: I	***1225 7TH ST***	***S 1/8 - 1/4 (0.224 mi.)***	***N63***	***25***

Local Land Records

DEED: A review of the DEED list, as provided by EDR, and dated 09/03/2019 has revealed that there are 5 DEED sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES Status: COMPLETED - CASE CLOSED Envirostor ID: T0600100262	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***14***
WESTERN PACIFIC RAIL Status: CERTIFIED / OPERATION & MAINTENANCE Envirostor ID: 1400008	***UNION STREET***	***S 1/4 - 1/2 (0.366 mi.)***	***Y110***	***40***
AMTRAK MAINTENANCE F Status: CERTIFIED / OPERATION & MAINTENANCE Envirostor ID: 1400014	***3RD & UNION STREETS***	***SSW 1/4 - 1/2 (0.378 mi.)***	***115***	***42***
MARK ABOUDI PROPERTY Status: CERTIFIED O&M - LAND USE RESTRICTIONS ONLY Envirostor ID: 1420131	***1639 18TH STREET***	***NNW 1/4 - 1/2 (0.412 mi.)***	***Z124***	***46***
BOBO'S JUNKYARD Status: CERTIFIED / OPERATION & MAINTENANCE Envirostor ID: 1400003	***1401 THIRD STREET***	***SW 1/4 - 1/2 (0.445 mi.)***	***AC132***	***49***

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/24/2019

has revealed that there are 15 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CALIFORNIA CEREAL PR EPA ID:: CAL000142005	1267 14TH ST	NNE 0 - 1/8 (0.067 mi.)	D11	11
ACORN TOWERS EPA ID:: CAC002981481	914 UNION ST	S 0 - 1/8 (0.091 mi.)	F22	13
ACORN TOWERS / 910 U EPA ID:: CAC002969756	910 UNION ST	S 0 - 1/8 (0.092 mi.)	F23	13
BERG, ANNA EPA ID:: CAC002989036	1015 ADELINE STREET	ESE 0 - 1/8 (0.118 mi.)	25	14
DARRYL BRICE EPA ID:: CAC002973104	808 UNION ST	S 0 - 1/8 (0.119 mi.)	F27	14
ACORN TOWERS EPA ID:: CAC002995296	1174 8TH STREET	SSE 1/8 - 1/4 (0.155 mi.)	I48	20
ACORN EPA ID:: CAC002994712	1162 8TH ST	SSE 1/8 - 1/4 (0.162 mi.)	I53	22
ACORN EPA ID:: CAC003000608	831 ADELINE STREET	SSE 1/8 - 1/4 (0.170 mi.)	I57	23
ARNICE RODGERS EPA ID:: CAC002984669	1109 LINDEN STREET	ESE 1/8 - 1/4 (0.240 mi.)	R83	30
DOROTHY WHITEHEAD EPA ID:: CAC002995709	1127 LINDEN STREET	E 1/8 - 1/4 (0.240 mi.)	R84	31

Lower Elevation	Address	Direction / Distance	Map ID	Page
NATIONAL RECYCLING C EPA ID:: CAL000263916	1312 KIRKHAM ST	NNW 0 - 1/8 (0.090 mi.)	E20	13
COCA COLA BOTTLING O EPA ID:: CAD982475410	1340 CYPRESS STREET	NNW 1/8 - 1/4 (0.145 mi.)	H46	20
THE CRUCIBLE EPA ID:: CAL000292982	1260 7TH ST	SSW 1/8 - 1/4 (0.199 mi.)	M59	24
ZENTRUM MOTORS EPA ID:: CAL000019582	1225 7TH ST	S 1/8 - 1/4 (0.224 mi.)	N66	25
CHEVRON USA STATION EPA ID:: CAL000213391	800 CENTER ST	WSW 1/8 - 1/4 (0.228 mi.)	P74	27

FUDS: A review of the FUDS list, as provided by EDR, and dated 05/15/2019 has revealed that there are 2 FUDS sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARMY-NAVY DISTRIBUTI		N 1/2 - 1 (0.812 mi.)	208	77
PACIFIC OVERSEAS AIR		N 1/2 - 1 (0.933 mi.)	BC227	85

EXECUTIVE SUMMARY

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAKLAND ARMY BASE (C		NW 1/2 - 1 (0.973 mi.)	0	9

CA BOND EXP. PLAN: A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there is 1 CA BOND EXP. PLAN site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SOUTHERN PACIFIC TRA	1707 WOOD STREET	NNW 1/2 - 1 (0.613 mi.)	AP174	67

Cortese: A review of the Cortese list, as provided by EDR, and dated 09/23/2019 has revealed that there are 11 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMCO CHEMICAL	***1414 THIRD STREET***	***SW 1/4 - 1/2 (0.357 mi.)***	***0***	***9***
Envirostor Id: 1390001 Cleanup Status: ACTIVE				
MANDELA TRUCKING	***1225 MANDELA PKWY***	***NW 1/8 - 1/4 (0.156 mi.)***	***51***	***21***
Cleanup Status: OPEN - SITE ASSESSMENT				

Lower Elevation	Address	Direction / Distance	Map ID	Page
VACANT LOT SABEK INC	***1230 14TH ST***	***NNE 1/8 - 1/4 (0.130 mi.)***	***G40***	***18***
Cleanup Status: OPEN - ELIGIBLE FOR CLOSURE				
SIGNAL SS/CHEVRON 20	***800 CENTER ST***	***WSW 1/8 - 1/4 (0.228 mi.)***	***P75***	***28***
Cleanup Status: OPEN - VERIFICATION MONITORING				
FORMER EVERIDGE SERV	***1211 7TH***	***S 1/8 - 1/4 (0.229 mi.)***	***N77***	***28***
Cleanup Status: OPEN - SITE ASSESSMENT				
J & A TRUCK REPAIR	***500 KIRKHAM ST***	***SSW 1/4 - 1/2 (0.256 mi.)***	***S88***	***32***
Cleanup Status: OPEN - SITE ASSESSMENT				
TRUCKER'S FRIEND	***1395 7TH***	***SW 1/4 - 1/2 (0.258 mi.)***	***Q91***	***33***
Cleanup Status: OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION				
CONTAINER FREIGHT	***1285 5TH ST***	***SSW 1/4 - 1/2 (0.289 mi.)***	***S94***	***34***
Cleanup Status: OPEN - REMEDIATION				
OSAGIE PROPERTY	***1532 PERALTA STREET***	***NNW 1/4 - 1/2 (0.306 mi.)***	***U101***	***37***
Cleanup Status: OPEN - REMEDIATION				
DC METALS	***1414 3RD ST***	***SW 1/4 - 1/2 (0.431 mi.)***	***AC131***	***49***
Cleanup Status: OPEN - SITE ASSESSMENT				
EAST BAY MUNICIPAL U	***1200 21ST STREET***	***NNE 1/4 - 1/2 (0.468 mi.)***	***145***	***54***
Cleanup Status: OPEN - REMEDIATION				

EXECUTIVE SUMMARY

HIST CORTESE: A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 37 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAKLAND CITY OF HOUS Reg Id: 01-0414	***935 UNION ST***	***S 0 - 1/8 (0.002 mi.)***	***B7***	***10***
NABISCO BRANDS INC Reg Id: 01-1028	***1267 14TH ST***	***NNE 0 - 1/8 (0.067 mi.)***	***D12***	***11***
MANDELA TRUCKING Reg Id: 01-2437	***1225 MANDELA PKWY***	***NW 1/8 - 1/4 (0.156 mi.)***	***51***	***21***
VEND MART PROPERTY Reg Id: 01-1778	***1035 7TH ST***	***SSE 1/4 - 1/2 (0.348 mi.)***	***W106***	***39***
JR USED AUTO PARTS Reg Id: 01-0806	823 12TH	ESE 1/4 - 1/2 (0.462 mi.)	AH143	53

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARNATION DIARIES Reg Id: 01-0282	***1310 14TH ST***	***N 1/8 - 1/4 (0.126 mi.)***	***E28***	***14***
COMM AIR Reg Id: 01-2287	***1266 14TH ST***	***NNE 1/8 - 1/4 (0.127 mi.)***	***G31***	***16***
VACANT LOT SABEK INC Reg Id: 01-1825	***1230 14TH ST***	***NNE 1/8 - 1/4 (0.130 mi.)***	***G40***	***18***
COCA COLA Reg Id: 01-0438	1340 CYPRESS	NNW 1/8 - 1/4 (0.145 mi.)	H43	19
ARMORED TRANSPORT Reg Id: 01-2212	***1333 8TH ST***	***SW 1/8 - 1/4 (0.168 mi.)***	***L56***	***23***
ALL MERCEDES DISMANT Reg Id: 01-1266	***1255 7TH ST***	***S 1/8 - 1/4 (0.225 mi.)***	***N68***	***26***
SIGNAL SS/CHEVRON 20 Reg Id: 01-2421	***800 CENTER ST***	***WSW 1/8 - 1/4 (0.228 mi.)***	***P75***	***28***
EVERIDGE SERVICE COM Reg Id: 01-0741	***1211 7TH ST***	***S 1/8 - 1/4 (0.229 mi.)***	***N78***	***29***
CONTAINER CARE LIMIT Reg Id: 01-2221	***1350 16TH ST***	***N 1/8 - 1/4 (0.231 mi.)***	***80***	***29***
KELLY'S TRUCK REPAIR Reg Id: 01-2118	***1390 7TH ST***	***SW 1/8 - 1/4 (0.235 mi.)***	***Q81***	***30***
CHRYSLER AUTO UNLOAD Reg Id: 01-2210	1401 7 MIDDLE HARBOR	SW 1/4 - 1/2 (0.255 mi.)	Q87	31
J & A TRUCK REPAIR Reg Id: 01-2433 Reg Id: 01510022	***500 KIRKHAM ST***	***SSW 1/4 - 1/2 (0.256 mi.)***	***S88***	***32***
TRUCKER'S FRIEND Reg Id: 01-0323	***1395 7TH***	***SW 1/4 - 1/2 (0.258 mi.)***	***Q91***	***33***
CONDOR FREIGHT LINES Reg Id: 01420126 Reg Id: 01-1305	***324 UNION ST***	***SSW 1/4 - 1/2 (0.265 mi.)***	***N93***	***34***
CONTAINER FREIGHT	***1285 5TH ST***	***SSW 1/4 - 1/2 (0.289 mi.)***	***S94***	***34***

Reg Id: 01-2399				
CALTRANS CYPRESS PRO Reg Id: 01-2398	***UNKNOWN 5TH & ADELIN***	***S 1/4 - 1/2 (0.297 mi.)***	***T95***	***35***
RINO PACIFIC OAKLAND Reg Id: 01-2322	***1107 5TH ST***	***S 1/4 - 1/2 (0.303 mi.)***	***T99***	***36***
RELIABLE HANDI CAB Reg Id: 01-1234	***1520 7TH ST***	***WSW 1/4 - 1/2 (0.350 mi.)***	***107***	***39***
PACIFIC PIPE COMPANY Reg Id: 01-2156	***1901 POPLAR ST***	***N 1/4 - 1/2 (0.377 mi.)***	***114***	***41***
GARDINER MFG COMPANY Reg Id: 01-0681	***1920 UNION ST***	***NNE 1/4 - 1/2 (0.400 mi.)***	***119***	***43***
ARATEX SERVICES, INC Reg Id: 01-0086	***330 CHESTNUT ST***	***SSE 1/4 - 1/2 (0.405 mi.)***	***122***	***45***
OAKLAND WAREHOUSE Reg Id: 01-1054	***1221 3RD ST***	***S 1/4 - 1/2 (0.417 mi.)***	***127***	***47***
CADEMARTORI TRUCKING Reg Id: 01-0254	***1833 PERALTA ST***	***NNW 1/4 - 1/2 (0.420 mi.)***	***Z128***	***48***
DC METALS Reg Id: 01-2396	***1414 3RD ST***	***SW 1/4 - 1/2 (0.431 mi.)***	***AC131***	***49***
FACILITY 10201-1 Reg Id: 2650	***1121 3RD***	***S 1/4 - 1/2 (0.446 mi.)***	***AE134***	***50***
EAST BAY FORD TRUCK Reg Id: 01-0531	***333 FIBERT ST***	***SSE 1/4 - 1/2 (0.460 mi.)***	***142***	***52***
EAST BAY MUNICIPAL U Reg Id: 01-2299	***1200 21ST STREET***	***NNE 1/4 - 1/2 (0.468 mi.)***	***145***	***54***
SUNSET WHOLESALE COM Reg Id: 01-1742	***105 EMBARCADERO AVE***	***S 1/4 - 1/2 (0.472 mi.)***	***146***	***55***
ROADWAY EXPRESS INC Reg Id: 01-2291	***1708 WOOD ST***	***NNW 1/4 - 1/2 (0.477 mi.)***	***AG147***	***55***
INMONT CORPORATION Reg Id: 01-0152	***1545 WILLOW STREET***	***NW 1/4 - 1/2 (0.485 mi.)***	***AI153***	***58***
NORCAL METAL FABRICA Reg Id: 01-1636	***114 ADELINE ST***	***S 1/4 - 1/2 (0.498 mi.)***	***AJ154***	***58***
LEHAR SALES Reg Id: 01-1268	***150 CHESTNUT ST***	***S 1/4 - 1/2 (0.499 mi.)***	***AJ155***	***58***

HWP: A review of the HWP list, as provided by EDR, and dated 08/19/2019 has revealed that there are 3 HWP sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FRANCIS PLATING OF O EPA Id: CAD009206160 Cleanup Status: PROTECTIVE FILER	***785 7TH ST***	***SE 1/2 - 1 (0.542 mi.)***	***160***	***60***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SAFETY-KLEEN CORP.	***404 MARKET ST***	***SE 1/2 - 1 (0.561 mi.)***	***AN166***	***63***

EPA Id: CAD053044053
Cleanup Status: CLOSED

ARTESIAN OIL RECOVER	***2306 MAGNOLIA ST***	***NNE 1/2 - 1 (0.630 mi.)***	***AO180***	***68***

EPA Id: CAL000161741
Cleanup Status: CLOSED

PROC: A review of the PROC list, as provided by EDR, and dated 09/09/2019 has revealed that there is 1 PROC site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NATIONAL RECYCLING C	***1312 KIRKHAM ST***	***NNW 0 - 1/8 (0.090 mi.)***	***E21***	***13***

Cert Id: PR0313
Reg Id: 19434

Notify 65: A review of the Notify 65 list, as provided by EDR, and dated 09/16/2019 has revealed that there are 11 Notify 65 sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NABISCO BRANDS, INC.	1267 14TH STREET	NNE 0 - 1/8 (0.067 mi.)	D16	12
OAKLAND CITY HALL	***#1 CITY HALL PLAZA***	***E 1/2 - 1 (0.963 mi.)***	***231***	***86***

Lower Elevation	Address	Direction / Distance	Map ID	Page
EAST BAY FORD TRUCK	***333 FIBERT ST***	***SSE 1/4 - 1/2 (0.460 mi.)***	***142***	***52***
TAYLOR ROOF STRUCTUR	1769 13TH STREET	WNW 1/2 - 1 (0.525 mi.)	158	59
NED CLYDE CONSTRUCTI	2311 ADELINE STREET	NNE 1/2 - 1 (0.612 mi.)	AO173	66
KANTOR WAREHOUSE	***2525 MANDELA PARKWAY***	***N 1/2 - 1 (0.774 mi.)***	***AW204***	***75***
C. E. TOLAND & SON,	***2635 PERALTA***	***N 1/2 - 1 (0.812 mi.)***	***207***	***76***
MARSHALL STEEL CLEAN	***1229 28TH***	***NNE 1/2 - 1 (0.868 mi.)***	***216***	***81***
LINDFORD AIR & REFRI	2850 POPLAR	NNE 1/2 - 1 (0.914 mi.)	BB223	84
LINDFORD AIR & REFRI	***2850 POPLAR***	***NNE 1/2 - 1 (0.914 mi.)***	***BB224***	***84***
BUILDING 331 EAST	7 MERRITIME	NW 1/2 - 1 (0.931 mi.)	226	85

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: A review of the EDR MGP list, as provided by EDR, has revealed that there are 2 EDR MGP sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PG AND E OAKLAND	50 MARKET ST BTWN 1S	SSE 1/2 - 1 (0.725 mi.)	AS192	72
PG AND E GAS PLANT O	FIRST AND WASHINGTON	SE 1/2 - 1 (0.969 mi.)	233	87

EXECUTIVE SUMMARY

EDR Hist Auto: A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within approximately 0.125 miles of the target property.

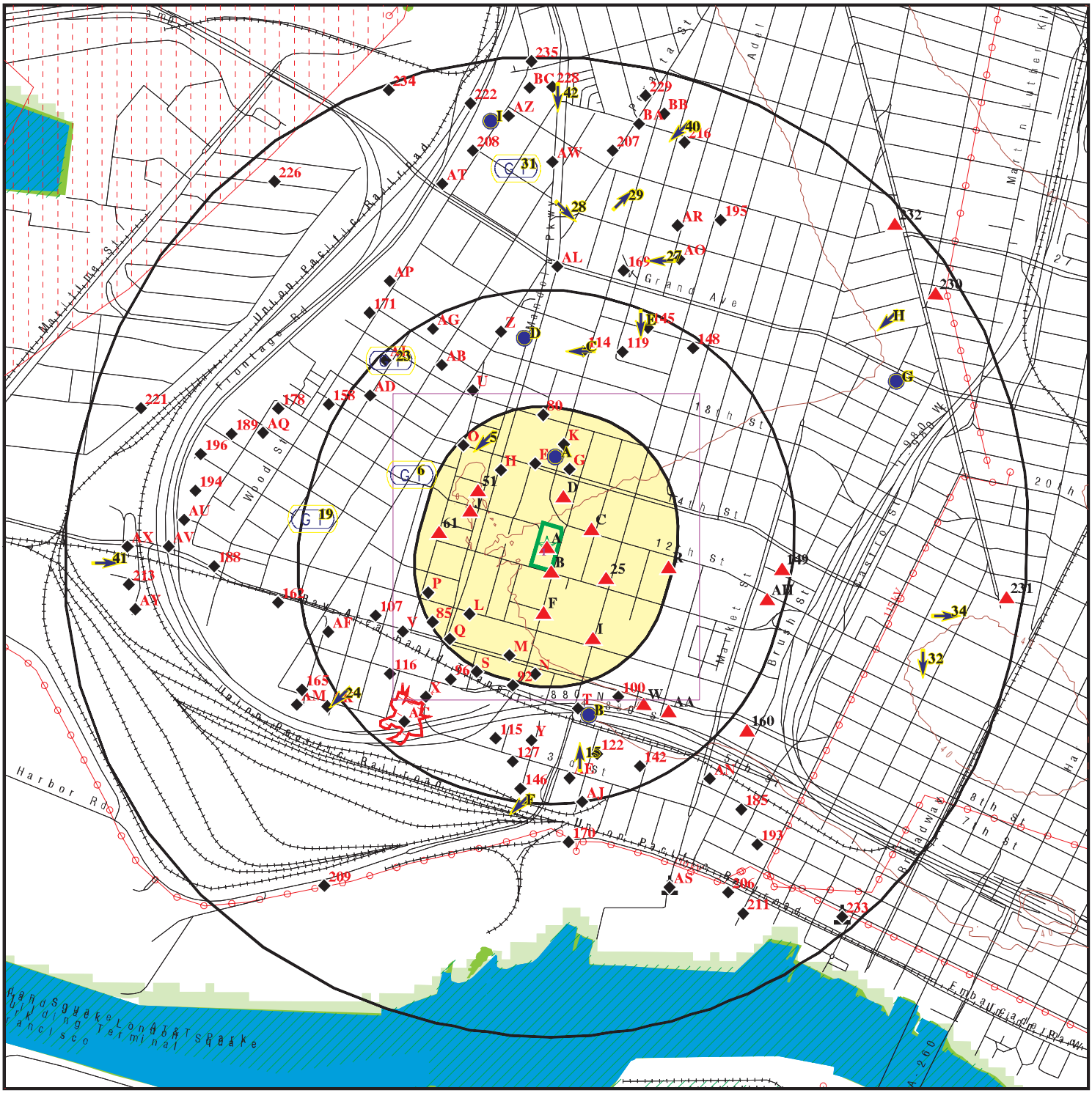
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LALLY J L	1308 UNION AVE	NNE 0 - 1/8 (0.076 mi.)	D18	12

Lower Elevation	Address	Direction / Distance	Map ID	Page
TALLARICO PHILIP	1333 14TH ST	N 0 - 1/8 (0.118 mi.)	E26	14

Count: 3 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
OAKLAND	S118421406	5TH ST AND MAGNOLIA ST REDEVELOPME	0 5TH STREET AND MAGNOLIA ST	94607	Alameda County CS
OAKLAND	S103881512	UPTOWN THEATER DISTRICT	BORDERED BY 20TH ST SAN PABLO		CPS-SLIC
OAKLAND	S104539364	SOUTHERN PACIFIC TRANS CO	UNKNOWN 5TH AVE & KIRKHAM	94607	LUST, HIST CORTESE

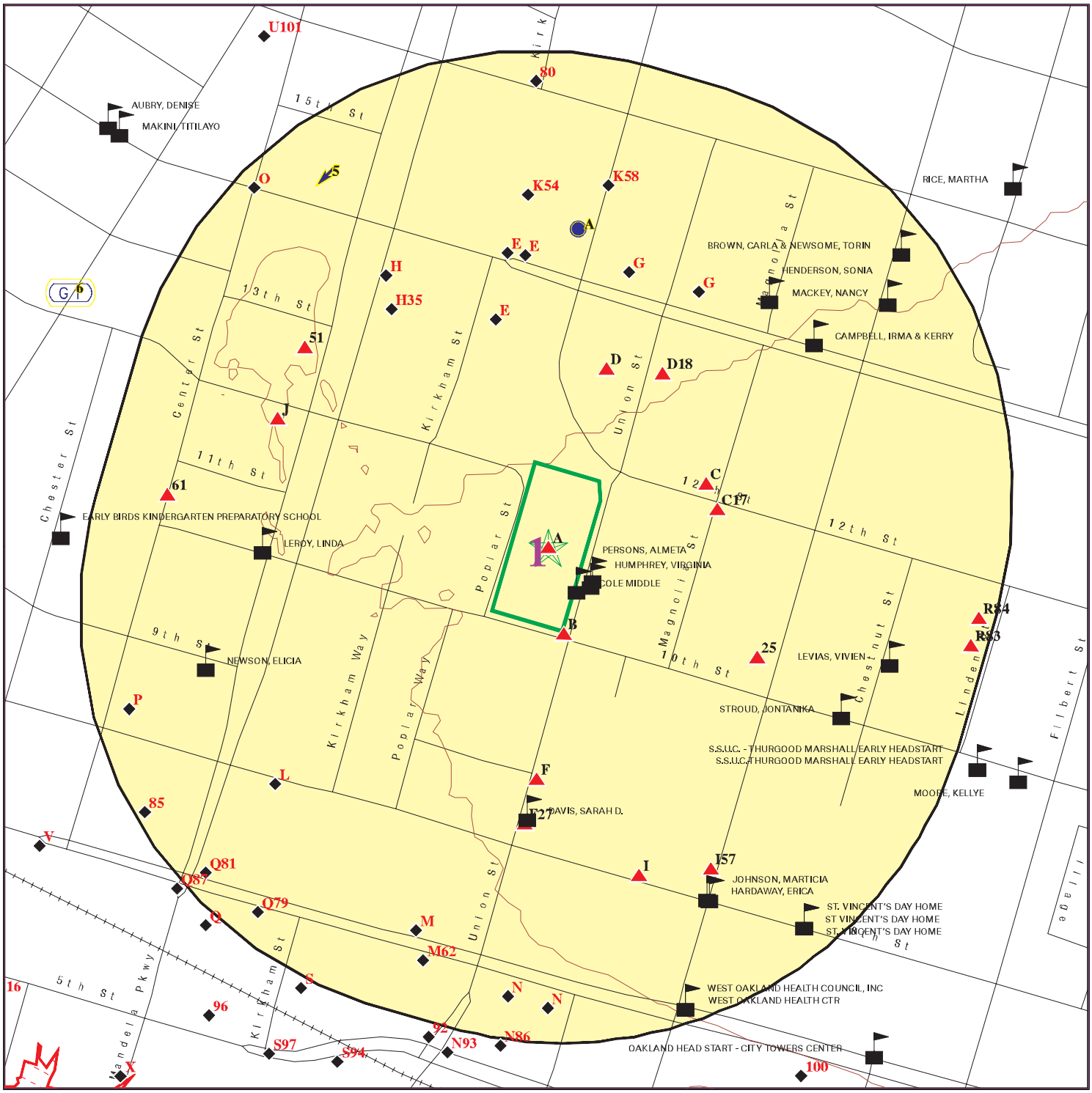
OVERVIEW MAP - 5871762.2S



SITE NAME:	OUSD Central Administrative Center	CLIENT:	Ninyo & Moore
ADDRESS:	1011 Union Street Oakland CA 94607	CONTACT:	Luke Swickard
LAT/LONG:	37.807958 / 122.289605	INQUIRY #:	5871762.2s
		DATE:	November 15, 2019 1:44 pm

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DETAIL MAP - 5871762.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: OUSD Central Administrative Center	CLIENT: Ninyo & Moore
ADDRESS: 1011 Union Street Oakland CA 94607	CONTACT: Luke Swickard
LAT/LONG: 37.807958 / 122.289605	INQUIRY #: 5871762.2s DATE: November 15, 2019 1:48 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	1	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	4	NR	NR	4
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	5	NR	NR	5
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	2	NR	2
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	1	NR	NR	NR	1
RCRA-SQG	0.250		0	8	NR	NR	NR	8
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	1	2	12	NR	15
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		2	4	23	58	NR	87
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		3	13	30	NR	NR	46

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	5	11	NR	NR	16
Alameda County CS	0.500		1	15	31	NR	NR	47
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	0	NR	NR	NR	1
AST	0.250		0	4	NR	NR	NR	4
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		1	1	14	NR	NR	16
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	2	NR	NR	2
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	1	4	NR	NR	5
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		1	0	0	NR	NR	1
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	3	9	NR	12
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	2	NR	2
CERS HAZ WASTE	0.250		2	4	NR	NR	NR	6
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	8	NR	NR	NR	9
HIST UST	0.250		4	7	NR	NR	NR	11
CERS TANKS	0.250		1	1	NR	NR	NR	2
CA FID UST	0.250		1	6	NR	NR	NR	7
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	1	4	NR	NR	5
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		6	9	NR	NR	NR	15
FUDS	1.000		0	0	0	2	NR	2
DOD	1.000		0	0	0	1	NR	1
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	1	NR	1
Cortese	0.500		0	4	7	NR	NR	11
CUPA Listings	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP	1	NR	NR	NR	NR	NR	1
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP	5	NR	NR	NR	NR	NR	5
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		2	11	24	NR	NR	37
HWP	1.000		0	0	0	3	NR	3
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		1	0	0	NR	NR	1
Notify 65	1.000		1	0	1	9	NR	11
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP	1	NR	NR	NR	NR	NR	1
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	2	NR	2
EDR Hist Auto	0.125		2	NR	NR	NR	NR	2
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		8	30	104	166	101	0	409

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target
Property
Actual:
20 ft.

OAKLAND UNIFIED SCHOOL DISTRICT
1011 UNION STREET
OAKLAND, CA 94607

EMI **S112982128**
HAZNET **N/A**
CERS

Click here for full text details

EMI
Facility Id 20527

HAZNET
GEPAID CAC002659716

A2
Target
Property
Actual:
20 ft.

COLE MIDDLE SCHOOL
1011 UNION ST
OAKLAND, CA 94607

HAZNET **S123600836**
N/A

Click here for full text details

HAZNET
GEPAID CAC002837988

A3
Target
Property
Actual:
20 ft.

OUSD - COLE ELEMENTARY
1011 UNION ST
OAKLAND, CA 94607

HAZNET **S123579441**
N/A

Click here for full text details

HAZNET
GEPAID CAC001327848

A4
Target
Property
Actual:
20 ft.

OAKLAND UNIFIED SCHOOL DISTRICT
1011 UNION STREET
OAKLAND, CA 94607

FINDS **1023652040**
N/A

Click here for full text details

FINDS
Registry ID: 110070062628

A5
Target
Property
Actual:
20 ft.

OAKLAND UNIFIED SCHOOL DISTRICT
1011 UNION ST
OAKLAND, CA 94607

HAZNET **S112858144**
N/A

Click here for full text details

HAZNET
GEPAID CAC000980408

A6
Target
Property

1X COLE ELEMENTARY
1011 UNION ST
OAKLAND, CA 94607

HAZNET **S123746951**
N/A

Actual:
20 ft.

Click here for full text details

HAZNET
GEPAID CAC000805480

DOD
Region
NW
1/2-1
5135 ft.

OAKLAND ARMY BASE (CLOSED)

OAKLAND ARMY BASE (CLOSED (County), CA

DOD **CUSA136080**
N/A

Click here for full text details

NPL
Region
SW
1/4-1/2
1887 ft.

AMCO CHEMICAL
1414 THIRD STREET
OAKLAND, CA 94607

NPL **1001115054**
SEMS **CA0001576081**
RCRA-VSQG
ENVIROSTOR
HIST Cal-Sites
Cortese

Click here for full text details

NPL
Cerclis ID: 905334
EPA Id CA0001576081

SEMS
Site ID 0905334
EPA Id CA0001576081

RCRA-VSQG
EPA Id CA0001576081

ENVIROSTOR
Status Active
Facility Id 1390001

Cortese
Envirostor Id 1390001
Cleanup Status ACTIVE

B7
South
< 1/8
0.002 mi.
9 ft.

Relative:
Higher

OAKLAND CITY OF HOUSING AUTHORITY
935 UNION ST
OAKLAND, CA 94607

LUST
SWEEPS UST
HIST UST
CA FID UST
HIST CORTESE
CERS

S101624399
N/A

Click here for full text details

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-0414
Global Id T0600100378
date9 6/30/1993

SWEEPS UST
Comp Number 64509

CA FID UST
Facility Id 01000546
Status I

HIST CORTESE
Reg Id 01-0414

B8
South
< 1/8
0.002 mi.
9 ft.

Relative:
Higher

WEST DISTRICT OFFICE - OAKLAND
935 UNION ST
OAKLAND, CA 94607

HIST UST

U001599236
N/A

Click here for full text details

HIST UST
Facility Id 00000064509

C9
ENE
< 1/8
0.065 mi.
342 ft.

Relative:
Higher

NAVAL SUPPLY CENTER, OAKLAND - OAKLAND FISC 842-1
1200 12TH STREET
OAKLAND, CA 94607

CERS TANKS

S121753527
N/A

Click here for full text details

C10
ENE
< 1/8
0.065 mi.
342 ft.

Relative:
Higher

NAVAL SUPPLY CENTER, OAKLAND - OAKLAND FISC 842-1
1200 12TH STREET
OAKLAND, CA 94607

UST

U004269167
N/A

Click here for full text details

D11
NNE
< 1/8
0.067 mi.
352 ft.

Relative:
Higher

CALIFORNIA CEREAL PRODUCTS, INC.
1267 14TH ST
OAKLAND, CA 94607

RCRA NonGen / NLR **1024793726**
CAL000142005

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000142005

D12
NNE
< 1/8
0.067 mi.
352 ft.

Relative:
Higher

NABISCO BRANDS INC
1267 14TH ST
OAKLAND, CA 94607

ENVIROSTOR **S102434115**
LUST **N/A**
Alameda County CS
HIST CORTESE
CERS

Click here for full text details

ENVIROSTOR
Status No Further Action
Facility Id 60000369

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-1028
Global Id T0600100949
date9 6/8/1993

Alameda County CS
Record Id RO0001166
Status Case Closed

HIST CORTESE
Reg Id 01-1028

D13
NNE
< 1/8
0.067 mi.
352 ft.

Relative:
Higher

CALIFORNIA CEREAL PRODUCTS, INC.
1267 14TH ST
OAKLAND, CA 94607

CERS HAZ WASTE **S113077800**
HAZNET **N/A**
CERS

Click here for full text details

HAZNET
GEPAID CAL000142005

D14
NNE
< 1/8
0.067 mi.
352 ft.

Relative:
Higher

NABISCO BRANDS
1267 14TH ST
OAKLAND, CA 94623

HIST UST **U001599543**
N/A

Click here for full text details

HIST UST
Facility Id 00000053463

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
D15	**STEPHEN R BELL**	**HIST UST**	**S117630137**
NNE	**1267 14TH ST**	**PEST LIC**	**N/A**
< 1/8	**OAKLAND, CA 94607**		
0.067 mi.			
352 ft.			
Relative: Higher	Click here for full text details		
D16	**NABISCO BRANDS, INC.**	**Notify 65**	**U000057663**
NNE	**1267 14TH STREET**		**N/A**
< 1/8	**OAKLAND, CA 92626**		
0.067 mi.			
352 ft.			
Relative: Higher	Click here for full text details		
C17	**GIBSON PAINT COMPANY SCREEN PROCESS**	**LUST**	**1001612912**
ENE	**1199 12TH ST E**		**N/A**
< 1/8	**OAKLAND, CA 94606**		
0.071 mi.			
375 ft.			
Relative: Higher	Click here for full text details		
	LUST		
	Facility Status Case Closed		
	Facility Id 01-0699		
	date9 3/10/1998		
D18	**LALLY J L**	**EDR Hist Auto**	**1009013812**
NNE	**1308 UNION AVE**		**N/A**
< 1/8	**OAKLAND, CA**		
0.076 mi.			
401 ft.			
Relative: Higher	Click here for full text details		
E19	**NATIONAL RECYCLING CORP.**	**CERS HAZ WASTE**	**S121787144**
NNW	**1312 KIRKHAM ST**	**CERS**	**N/A**
< 1/8	**OAKLAND, CA 94607**		
0.090 mi.			
475 ft.			
Relative: Lower	Click here for full text details		

E20
NNW
< 1/8
0.090 mi.
475 ft.

Relative:
Lower

NATIONAL RECYCLING CORP.
1312 KIRKHAM ST
OAKLAND, CA 94607

RCRA NonGen / NLR **1024805481**
CAL000263916

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000263916

E21
NNW
< 1/8
0.090 mi.
475 ft.

Relative:
Lower

NATIONAL RECYCLING CORP
1312 KIRKHAM ST
OAKLAND, CA 94607

SWRCY **S106101693**
NPDES **N/A**
PROC
WDS
CIWQS

Click here for full text details

SWRCY
Cert Id RC3530

NPDES
Facility Status Active

PROC
Cert Id PR0313
Reg Id 19434

WDS
Facility Id 2 01I013217
Facility Status Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.

F22
South
< 1/8
0.091 mi.
479 ft.

Relative:
Higher

ACORN TOWERS
914 UNION ST
OAKLAND, CA 94607

RCRA NonGen / NLR **1024761621**
CAC002981481

Click here for full text details

RCRA NonGen / NLR
EPA Id CAC002981481

F23
South
< 1/8
0.092 mi.
484 ft.

Relative:
Higher

ACORN TOWERS / 910 UNION ST
910 UNION ST
OAKLAND, CA 94607

RCRA NonGen / NLR **1024749968**
CAC002969756

Click here for full text details

RCRA NonGen / NLR
EPA Id CAC002969756

F24
South
< 1/8
0.094 mi.
495 ft.

Relative:
Higher

PALM COURT
902 UNION STREET
OAKLAND, CA 94612

ENVIROSTOR **S106568180**
VCP **N/A**

Click here for full text details

ENVIROSTOR
Status No Further Action
Facility Id 1990027

VCP
Facility Id 1990027
Status No Further Action

25
ESE
< 1/8
0.118 mi.
621 ft.

Relative:
Higher

BERG, ANNA
1015 ADELINE STREET
OAKLAND, CA 94607

RCRA NonGen / NLR **1024769148**
CAC002989036

Click here for full text details

RCRA NonGen / NLR
EPA Id CAC002989036

E26
North
< 1/8
0.118 mi.
622 ft.

Relative:
Lower

TALLARICO PHILIP
1333 14TH ST
OAKLAND, CA

EDR Hist Auto **1009013313**
N/A

Click here for full text details

F27
South
< 1/8
0.119 mi.
627 ft.

Relative:
Higher

DARRYL BRICE
808 UNION ST
OAKLAND, CA 94607

RCRA NonGen / NLR **1024753292**
CAC002973104

Click here for full text details

RCRA NonGen / NLR
EPA Id CAC002973104

E28
North
1/8-1/4
0.126 mi.
664 ft.

Relative:
Lower

CARNATION DIARIES
1310 14TH ST
OAKLAND, CA 94607

RCRA-SQG **1000307618**
LUST **CAD130171283**
CPS-SLIC
Alameda County CS
SWEEPS UST
HIST UST
CA FID UST
DEED
HIST CORTESE
CERS

Click here for full text details

RCRA-SQG

CARNATION DIARIES (Continued) **1000307618**

EPA Id CAD130171283

LUST
Facility Status Remedial action (cleanup) Underway
Facility Id 01-0282

CPS-SLIC
Facility Status Completed - Case Closed
Global Id T10000000210
Global Id T0600100262

Click here to access the California GeoTracker records for this facility

Alameda County CS
Record Id RO0002978
Record Id RO0000018
Status Leak Confirmation
Status Preliminary Site Assessment Underway
Status Pollution Characterization
Status Remedial Action Underway
Status Case Closed

SWEEPS UST
Comp Number 65866

HIST UST
Facility Id 00000065866

CA FID UST
Facility Id 01002256
Status I

DEED
Envirostor ID T0600100262
Status COMPLETED - CASE CLOSED

HIST CORTESE
Reg Id 01-0282

E29
North
1/8-1/4
0.126 mi.
664 ft.

Relative:
Lower

CARNATION DAIRIES **RESPONSE** **S108054490**
1310 14TH STREET/1315 16TH STREET **ENVIROSTOR** **N/A**
OAKLAND, CA 94607 **CERS**

Click here for full text details

RESPONSE
Status Refer: Other Agency
Facility Id 60000370

CARNATION DAIRIES (Continued) **S108054490**

ENVIROSTOR
Status Refer: Other Agency
Facility Id 60000370

E30
North
1/8-1/4
0.126 mi.
664 ft.

Relative:
Lower

FORMER OAKLAND CARNATION FACILITY **HIST UST** **S112964495**
1310 14TH ST **HAZNET** **N/A**
OAKLAND, CA 94607

Click here for full text details

HAZNET
GEPAID CAC002621456

G31
NNE
1/8-1/4
0.127 mi.
669 ft.

Relative:
Lower

COMM AIR **LUST** **U003713189**
1266 14TH ST **Alameda County CS** **N/A**
OAKLAND, CA 94607 **SWEEPS UST**
HIST CORTESE
CERS

Click here for full text details

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-2287
Global Id T0600102103
date9 8/21/2000

Alameda County CS
Record Id RO0001053
Status Case Closed

SWEEPS UST
Status A
Tank Status A
Comp Number 46625

HIST CORTESE
Reg Id 01-2287

G32
NNE
1/8-1/4
0.127 mi.
669 ft.

Relative:
Lower

CARRON AIR **HIST UST** **U001599161**
1266 14TH ST **N/A**
OAKLAND, CA 94607

Click here for full text details

HIST UST
Facility Id 00000046625

G33
NNE
1/8-1/4
0.127 mi.
669 ft.

Relative:
Lower

COMMAIR MECHANICAL SERVICE
1266 14TH STREET
OAKLAND, CA 94607

ENVIROSTOR **S118757106**
N/A

Click here for full text details

ENVIROSTOR
Status No Action Required
Facility Id 60000366

G34
NNE
1/8-1/4
0.127 mi.
669 ft.

Relative:
Lower

COMMAIR OAKLAND
1266 14TH ST
OAKLAND, CA 94607

RCRA-SQG **1008372067**
CAR000162388

Click here for full text details

RCRA-SQG
EPA Id CAR000162388

H35
NNW
1/8-1/4
0.127 mi.
672 ft.

Relative:
Lower

COCA COLA
1340 MANDELA PARKWAY
OAKLAND, CA 94607

LUST **S105688709**
Alameda County CS **N/A**
CERS

Click here for full text details

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-0438
Global Id T0600100398
date9 2/18/1998

Alameda County CS
Record Id RO0001205
Status Case Closed

E36
North
1/8-1/4
0.128 mi.
676 ft.

Relative:
Lower

AUTO CHLOR PROJ
1350 14TH ST
OAKLAND, CA 94607

ENVIROSTOR **S121621688**
CIWQS **N/A**

Click here for full text details

ENVIROSTOR
Status Active
Facility Id 60002513

E37
North
1/8-1/4
0.128 mi.
676 ft.

Relative:
Lower

AUTO-CHLOR SYSTEM
1350 14TH STREET
OAKLAND, CA 94607

CERS HAZ WASTE **S121794994**
CERS **N/A**

Click here for full text details

E38
North
1/8-1/4
0.128 mi.
676 ft.

Relative:
Lower

UNITED TECHNOLOGIES OTIS ELEVATOR
1358 14TH ST
OAKLAND, CA 94607

RCRA-SQG **1014915728**
HAZNET **CAR000222323**

Click here for full text details

RCRA-SQG
EPA Id CAR000222323

HAZNET
GEPAID CAR000222323

E39
North
1/8-1/4
0.128 mi.
676 ft.

Relative:
Lower

OTIS ELEVATOR COMPANY
1358 14TH ST
OAKLAND, CA 94607

CERS HAZ WASTE **S121783444**
CERS **N/A**

Click here for full text details

G40
NNE
1/8-1/4
0.130 mi.
684 ft.

Relative:
Lower

VACANT LOT SABEK INC
1230 14TH ST
OAKLAND, CA 94607

LUST **S101293763**
Alameda County CS **N/A**
HIST UST
Cortese
EMI
HIST CORTESE
CERS

Click here for full text details

LUST
Facility Status Preliminary site assessment underway
Status Open - Eligible for Closure
Facility Id 01-1825
Global Id T0600101691

Alameda County CS
Record Id RO0000433
Status Leak Confirmation
Status Preliminary Site Assessment Underway
Status Pollution Characterization
Status Remediation Plan
Status Remedial Action Underway

Cortese

VACANT LOT SABEK INC (Continued) **S101293763**

Cleanup Status OPEN - ELIGIBLE FOR CLOSURE

EMI
Facility Id 20186

HIST CORTESE
Reg Id 01-1825

G41
NNE
1/8-1/4
0.130 mi.
684 ft.

Relative:
Lower

SABEK, INC. **HIST UST** **U001599217**
1230 14TH ST **N/A**
OAKLAND, CA 94607

Click here for full text details

HIST UST
Facility Id 00000001546

H42
NNW
1/8-1/4
0.144 mi.
761 ft.

Relative:
Lower

PACIFIC RIM **RCRA-SQG** **1000985175**
1338 CYPRESS AVE AT MANDELA PK **FINDS** **CA0001012269**
OAKLAND, CA 94607 **ECHO**

Click here for full text details

RCRA-SQG
EPA Id CA0001012269

FINDS
Registry ID: 110002623590

ECHO
Registry ID 110002623590

H43
NNW
1/8-1/4
0.145 mi.
764 ft.

Relative:
Lower

COCA COLA **HIST CORTESE** **S102428184**
1340 CYPRESS **N/A**
OAKLAND, CA 94607

Click here for full text details

HIST CORTESE
Reg Id 01-0438

H44
NNW
1/8-1/4
0.145 mi.
764 ft.

Relative:
Lower

OAKLAND PRODUCTION AND DISTRIB
1340 CYPRESS ST
OAKLAND, CA 94607

SWEEPS UST **S101624378**
CA FID UST **N/A**

Click here for full text details

SWEEPS UST
Status A
Tank Status A
Comp Number 7065

CA FID UST
Facility Id 01000569
Status A

H45
NNW
1/8-1/4
0.145 mi.
764 ft.

Relative:
Lower

COCA-COLA BOTTLING CO OF CA
1340 CYPRESS ST
OAKLAND, CA 94607

RCRA-SQG **1000143587**
CAD009103748

Click here for full text details

RCRA-SQG
EPA Id CAD009103748

H46
NNW
1/8-1/4
0.145 mi.
764 ft.

Relative:
Lower

COCA COLA BOTTLING OAKLAND
1340 CYPRESS STREET
OAKLAND, CA 94607

RCRA NonGen / NLR **1000142194**
CAD982475410

Click here for full text details

RCRA NonGen / NLR
EPA Id CAD982475410

H47
NNW
1/8-1/4
0.145 mi.
764 ft.

Relative:
Lower

OAKLAND PRODUCTION AND DISTRIB
1340 CYPRESS ST
OAKLAND, CA 94607

HIST UST **U001599199**
N/A

Click here for full text details

HIST UST
Facility Id 00000007065

I48
SSE
1/8-1/4
0.155 mi.
818 ft.

Relative:
Higher

ACORN TOWERS
1174 8TH STREET
OAKLAND, CA 94607

RCRA NonGen / NLR **1024775367**
CAC002995296

Click here for full text details

RCRA NonGen / NLR
EPA Id CAC002995296

J49
WNW
1/8-1/4
0.155 mi.
821 ft.

Relative:
Higher

1125 MANDELA PKWY
1125 MANDELA PKWY
OAKLAND, CA 94607

CPS-SLIC
Alameda County CS
CERS

S121476047
N/A

Click here for full text details

CPS-SLIC
Facility Status Open - Inactive
Global Id T10000011421

Click here to access the California GeoTracker records for this facility

Alameda County CS
Record Id RO0003298
Status Leak Confirmation

J50
WNW
1/8-1/4
0.155 mi.
821 ft.

Relative:
Higher

1125 MANDELA REUSE
1125 MANDELA PARKWAY
OAKLAND, CA 94607

CPS-SLIC
Alameda County CS
CERS

S118154729
N/A

Click here for full text details

CPS-SLIC
Facility Status Completed - Case Closed
Global Id T10000007322

Click here to access the California GeoTracker records for this facility

Alameda County CS
Record Id RO0003184
Status Pollution Characterization

51
NW
1/8-1/4
0.156 mi.
823 ft.

Relative:
Higher

MANDELA TRUCKING
1225 MANDELA PKWY
OAKLAND, CA 94607

LUST
Alameda County CS
Cortese
HIST CORTESE

S103976094
N/A

Click here for full text details

LUST
Facility Status Preliminary site assessment underway
Status Open - Site Assessment
Facility Id 01-2437
Global Id T0600102246

Alameda County CS
Record Id RO0000041
Status Leak Confirmation
Status Pollution Characterization

Cortese
Cleanup Status OPEN - SITE ASSESSMENT

MANDELA TRUCKING (Continued) **S103976094**

HIST CORTESE
Reg Id 01-2437

J52
WNW
1/8-1/4
0.157 mi.
829 ft.

Relative:
Higher

THOMPSON PROPERTY
1409-1417 12TH STREET
OAKLAND, CA 94607

LUST **S109936205**
Alameda County CS **N/A**
CERS

Click here for full text details

LUST
Status Completed - Case Closed
Global Id T0600158621

Alameda County CS
Record Id RO0002933
Status Leak Confirmation
Status Preliminary Site Assessment Underway
Status Pollution Characterization
Status Case Closed

I53
SSE
1/8-1/4
0.162 mi.
856 ft.

Relative:
Higher

ACORN
1162 8TH ST
OAKLAND, CA 94607

RCRA NonGen / NLR **1024774790**
CAC002994712

Click here for full text details

RCRA NonGen / NLR
EPA Id CAC002994712

K54
North
1/8-1/4
0.162 mi.
858 ft.

Relative:
Lower

NABISCO BRANDS
1267 014TH ST
OAKLAND, CA 94623

SWEEPS UST **S101624552**
CA FID UST **N/A**

Click here for full text details

SWEEPS UST
Comp Number 53463

CA FID UST
Facility Id 01002226
Status I

L55
SW
1/8-1/4
0.168 mi.
888 ft.

Relative:
Lower

AT SYTEMS INTERNATIONAL
1333 8TH STREET
OAKLAND, CA

Click here for full text details

AST **A100345528**
N/A

L56
SW
1/8-1/4
0.168 mi.
888 ft.

Relative:
Lower

ARMORED TRANSPORT
1333 8TH ST
OAKLAND, CA 94607

Click here for full text details

RCRA-SQG **1000341304**
LUST **CAD981967391**
Alameda County CS
FINDS
ECHO
HIST CORTESE
NPDES
CIWQS
CERS

RCRA-SQG
EPA Id CAD981967391

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-2212
Global Id T0600102031
date9 7/8/1997

Alameda County CS
Record Id RO0000627
Status Case Closed

FINDS
Registry ID: 110002758819

ECHO
Registry ID 110002758819

HIST CORTESE
Reg Id 01-2212

I57
SSE
1/8-1/4
0.170 mi.
896 ft.

Relative:
Higher

ACORN
831 ADELINE STREET
OAKLAND, CA 94607

Click here for full text details

RCRA NonGen / NLR **1024780646**
CAC003000608

RCRA NonGen / NLR
EPA Id CAC003000608

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
K58 **North** **1/8-1/4** **0.174 mi.** **918 ft.** **Relative: Lower**	**SABEK, INC.** **1230 014TH ST** **OAKLAND, CA 94607** Click here for full text details **SWEEPS UST** Comp Number 1546 **CA FID UST** Facility Id 01002523 Status A	**SWEEPS UST** **CA FID UST**	**S101624392** **N/A**
M59 **SSW** **1/8-1/4** **0.199 mi.** **1050 ft.** **Relative: Lower**	**THE CRUCIBLE** **1260 7TH ST** **OAKLAND, CA 94607** Click here for full text details **RCRA NonGen / NLR** EPA Id CAL000292982	**RCRA NonGen / NLR**	**1024811047** **CAL000292982**
M60 **SSW** **1/8-1/4** **0.199 mi.** **1050 ft.** **Relative: Lower**	**THE CRUCIBLE** **1260 7TH ST** **OAKLAND, CA 94607** Click here for full text details	**CERS HAZ WASTE** **CERS**	**S121779645** **N/A**
61 **West** **1/8-1/4** **0.209 mi.** **1101 ft.** **Relative: Higher**	**WEST OAKLAND AREA I** **7TH STREET BETWEEN PINE AND CENTER STREETS** **OAKLAND, CA 94607** Click here for full text details **US BROWNFIELDS** ACRES property ID 131530 **FINDS** Registry ID: 110043562999	**US BROWNFIELDS** **FINDS**	**1016358727** **N/A**

M62
SSW
1/8-1/4
0.215 mi.
1137 ft.

Relative:
Lower

WILLIE EVERIDGE
1211 007TH ST
OAKLAND, CA 94607

CA FID UST **S101624403**
N/A

Click here for full text details

CA FID UST
Facility Id 01002696
Status A

N63
South
1/8-1/4
0.224 mi.
1182 ft.

Relative:
Lower

ALL MERCEDES DISMANTLERS
1225 7TH ST
OAKLAND, CA 94607

SWEEPS UST **1000847217**
CA FID UST **N/A**

Click here for full text details

SWEEPS UST
Comp Number 51603

CA FID UST
Facility Id 01000177
Status I

N64
South
1/8-1/4
0.224 mi.
1182 ft.

Relative:
Lower

ZENTRUM MOTORS
1225 7TH ST
OAKLAND, CA 94607

CERS HAZ WASTE **S121793329**
CERS **N/A**

Click here for full text details

N65
South
1/8-1/4
0.224 mi.
1182 ft.

Relative:
Lower

ZENTRUM MOTORS
1225 7TH ST
OAKLAND, CA 94607

AST **A100426347**
N/A

Click here for full text details

N66
South
1/8-1/4
0.224 mi.
1182 ft.

Relative:
Lower

ZENTRUM MOTORS
1225 7TH ST
OAKLAND, CA 94607

RCRA NonGen / NLR **1024786560**
CAL000019582

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000019582

N67
South
1/8-1/4
0.224 mi.
1182 ft.

Relative:
Lower

ALL MERCEDES DISMANTLERS
1225 SEVENTH ST
OAKLAND, CA 94607

RCRA-SQG **1000857655**
CAD983670985

Click here for full text details

RCRA-SQG
EPA Id CAD983670985

N68
South
1/8-1/4
0.225 mi.
1190 ft.

Relative:
Lower

ALL MERCEDES DISMANTLERS INC
1255 7TH ST
OAKLAND, CA 94607

LUST **S103472303**
Alameda County CS **N/A**
HIST CORTESE
CERS

Click here for full text details

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-1266
Global Id T0600101163
date9 6/6/1997

Alameda County CS
Record Id RO0000937
Status Case Closed

HIST CORTESE
Reg Id 01-1266

O69
NW
1/8-1/4
0.227 mi.
1197 ft.

Relative:
Lower

OAKLAND FIRE SERVICES AGENCY
1445 14TH ST
OAKLAND, CA 94607

RCRA-SQG **1001231494**
FINDS **CAR000046425**
ECHO
HAZNET

Click here for full text details

RCRA-SQG
EPA Id CAR000046425

FINDS
Registry ID: 110002925443

ECHO
Registry ID 110002925443

HAZNET
GEPAID CAR000046425

O70
NW
1/8-1/4
0.227 mi.
1197 ft.

Relative:
Lower

FIRE STATION #03
1445 14TH ST
OAKLAND, CA 94607

Click here for full text details

AST **A100419952**
N/A

O71
NW
1/8-1/4
0.227 mi.
1197 ft.

Relative:
Lower

FIRE STATION #03
1445 14TH ST
OAKLAND, CA 94607

Click here for full text details

CERS TANKS **S121760067**
CERS **N/A**

O72
NW
1/8-1/4
0.227 mi.
1197 ft.

Relative:
Lower

CITY OF OAKLAND FIRE STATION 3
1445 14TH ST.
OAKLAND, CA

Click here for full text details

AST **A100345644**
N/A

P73
WSW
1/8-1/4
0.228 mi.
1204 ft.

Relative:
Lower

800 CENTER ST.
OAKLAND, CA 94607

Click here for full text details

RCRA-LQG
EPA Id CAP000067231

RCRA-LQG **1007200485**
CAP000067231

P74
WSW
1/8-1/4
0.228 mi.
1204 ft.

Relative:
Lower

CHEVRON USA STATION #206145
800 CENTER ST
OAKLAND, CA 94607

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000213391

RCRA NonGen / NLR **1024799708**
CAL000213391

P75
WSW
1/8-1/4
0.228 mi.
1204 ft.

Relative:
Lower

SIGNAL SS/CHEVRON 206145
800 CENTER ST
OAKLAND, CA 94607

LUST
CPS-SLIC
Alameda County CS
Cortese
HIST CORTESE
CERS

S104583294
N/A

Click here for full text details

LUST
Facility Status Preliminary site assessment underway
Status Open - Verification Monitoring
Facility Id 01-2421
Global Id T0600102230

CPS-SLIC
Facility Status Open - Active
Global Id T10000011146

Click here to access the California GeoTracker records for this facility

Alameda County CS
Record Id RO0000454
Record Id RO0003272
Status Leak Confirmation
Status Pollution Characterization

Cortese
Cleanup Status OPEN - VERIFICATION MONITORING

HIST CORTESE
Reg Id 01-2421

N76
South
1/8-1/4
0.229 mi.
1208 ft.

Relative:
Lower

WILLIE EVERIDGE
1211 7TH ST
OAKLAND, CA 94607

HIST UST

U001599240
N/A

Click here for full text details

HIST UST
Facility Id 00000042543

N77
South
1/8-1/4
0.229 mi.
1208 ft.

Relative:
Lower

FORMER EVERIDGE SERVICE COMPANY
1211 7TH
OAKLAND, CA 94607

LUST
Cortese
CERS

S118821887
N/A

Click here for full text details

LUST
Status Open - Site Assessment
Global Id T0600100683

Cortese

FORMER EVERIDGE SERVICE COMPANY (Continued) **S118821887**

Cleanup Status OPEN - SITE ASSESSMENT

N78
South
1/8-1/4
0.229 mi.
1208 ft.

Relative:
Lower

EVERIDGE SERVICE COMPANY
1211 7TH ST
OAKLAND, CA 94607

LUST **S102423340**
Alameda County CS **N/A**
SWEEPS UST
HIST CORTESE

Click here for full text details

LUST
Facility Status Preliminary site assessment underway
Facility Id 01-0741

Alameda County CS
Record Id RO0000235
Status Leak Confirmation
Status Pollution Characterization

SWEEPS UST
Comp Number 42543

HIST CORTESE
Reg Id 01-0741

Q79
SW
1/8-1/4
0.231 mi.
1221 ft.

Relative:
Lower

ARMORED TRANSPORT INC.
1333 7TH ST
OAKLAND, CA 94607

SWEEPS UST **S106922854**
N/A

Click here for full text details

SWEEPS UST
Status A
Tank Status A
Comp Number 209

80
North
1/8-1/4
0.231 mi.
1221 ft.

Relative:
Lower

CONTAINER CARE LIMITED
1350 16TH ST
OAKLAND, CA 94607

LUST **S102425297**
Alameda County CS **N/A**
HIST CORTESE
CERS

Click here for full text details

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-2221
Global Id T0600102039
date9 7/11/1997

Alameda County CS

CONTAINER CARE LIMITED (Continued) **S102425297**

Record Id RO0000620
Status Case Closed

HIST CORTESE
Reg Id 01-2221

Q81
SW
1/8-1/4
0.235 mi.
1242 ft.

Relative:
Lower

KELLY'S TRUCK REPAIR
1390 7TH ST
OAKLAND, CA 94607

LUST **U003713138**
Alameda County CS **N/A**
HIST CORTESE

Click here for full text details

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-2118
Global Id T0600101944
date9 3/6/1997

Alameda County CS
Record Id RO0001071
Status Case Closed

HIST CORTESE
Reg Id 01-2118

O82
NW
1/8-1/4
0.238 mi.
1257 ft.

Relative:
Lower

NEW OAKLAND FIRE STATION #3
CENTER AND 14TH STREET
OAKLAND, CA 94607

ENVIROSTOR **S116165254**
VCP **N/A**

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1920063

VCP
Facility Id 1920063
Status Certified

R83
ESE
1/8-1/4
0.240 mi.
1268 ft.

Relative:
Higher

ARNICE RODGERS
1109 LINDEN STREET
OAKLAND, CA 94607

RCRA NonGen / NLR **1024764801**
CAC002984669

Click here for full text details

RCRA NonGen / NLR
EPA Id CAC002984669

R84
East
1/8-1/4
0.240 mi.
1269 ft.

Relative:
Higher

DOROTHY WHITEHEAD
1127 LINDEN STREET
OAKLAND, CA 94607

RCRA NonGen / NLR

1024775777
CAC002995709

Click here for full text details

RCRA NonGen / NLR
EPA Id CAC002995709

85
WSW
1/8-1/4
0.243 mi.
1285 ft.

Relative:
Lower

MANDELA GATEWAY REDEVELOPMENT
0 7TH ST & MANDELA
OAKLAND, CA 94607

CPS-SLIC
Alameda County CS
CERS

S106784897
N/A

Click here for full text details

CPS-SLIC
Facility Status Completed - Case Closed
Global Id T06019796839

Click here to access the California GeoTracker records for this facility

Alameda County CS
Record Id RO0002517
Status Preliminary Site Assessment Underway
Status Pollution Characterization
Status Remediation Plan
Status Remedial Action Underway
Status Case Closed

N86
South
1/4-1/2
0.254 mi.
1342 ft.

Relative:
Lower

5TH ST AND MAGNOLIA ST REDEVELOPMENT
0 5TH ST & MAGNOLIA ST
OAKLAND, CA 94607

CPS-SLIC
CERS

S118405958
N/A

Click here for full text details

CPS-SLIC
Facility Status Open - Site Assessment
Global Id T10000007974

Click here to access the California GeoTracker records for this facility

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Q87
SW
1/4-1/2
0.255 mi.
1345 ft.

Relative:
Lower

CHRYSLER AUTO UNLOADING F
1401 7 MIDDLE HARBOR
OAKLAND, CA 94607

HIST CORTESE

S103556428
N/A

Click here for full text details

HIST CORTESE
Reg Id 01-2210

S88
SSW
1/4-1/2
0.256 mi.
1354 ft.

Relative:
Lower

J & A TRUCK REPAIR
500 KIRKHAM ST
OAKLAND, CA 94607

Click here for full text details

ENVIROSTOR
LUST
Alameda County CS
VCP
Cortese
HIST CORTESE
CERS

EDR ID Number: S104578474
EPA ID Number: N/A

ENVIROSTOR
Status Active
Facility Id 1510022

LUST
Facility Status Leak being confirmed
Status Open - Site Assessment
Facility Id 01-2433
Global Id T0600102242

Alameda County CS
Record Id RO0000421
Status Leak Confirmation
Status Pollution Characterization

VCP
Facility Id 1510022
Status Active

Cortese
Cleanup Status OPEN - SITE ASSESSMENT

HIST CORTESE
Reg Id 01-2433
Reg Id 01510022

S89
SSW
1/4-1/2
0.256 mi.
1354 ft.

Relative:
Lower

SMILO CHEMICAL COMPANY
500 KIRKHAM ST
OAKLAND, CA 94607

Click here for full text details

SEMS-ARCHIVE
RCRA-SQG
FINDS
ECHO

EDR ID Number: 1000290035
EPA ID Number: CAD029247319

SEMS-ARCHIVE
Site ID 0901286
EPA Id CAD029247319

RCRA-SQG
EPA Id CAD029247319

FINDS
Registry ID: 110002641865

ECHO

SMILO CHEMICAL COMPANY (Continued) **1000290035**

Registry ID 110002641865

Q90
SW
1/4-1/2
0.258 mi.
1362 ft.

Relative:
Lower

CHEVRON **LUST** **S105030293**
1395 7TH ST **N/A**
OAKLAND, CA 94607

Click here for full text details

LUST
Facility Status Preliminary site assessment underway
Facility Id 01-0323

Q91
SW
1/4-1/2
0.258 mi.
1362 ft.

Relative:
Lower

TRUCKER'S FRIEND **LUST** **S110060453**
1395 7TH **Alameda County CS** **N/A**
OAKLAND, CA 94607 **Cortese**
HIST CORTESE

Click here for full text details

LUST
Status Open - Assessment & Interim Remedial Action
Global Id T0600100296

Alameda County CS
Record Id RO0000053
Status Preliminary Site Assessment Workplan Submitted

Cortese
Cleanup Status OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION

HIST CORTESE
Reg Id 01-0323

92
SSW
1/4-1/2
0.259 mi.
1367 ft.

Relative:
Lower

UNION PACIFIC RAILROAD - 5TH AND UNION ST **CPS-SLIC** **S106235215**
CROSS 5TH & UNION **NON-CASE INFO** **N/A**
OAKLAND, CA 94615

Click here for full text details

CPS-SLIC
Facility Id SL20246864

N93
SSW
1/4-1/2
0.265 mi.
1397 ft.

Relative:
Lower

CONDOR FREIGHT LINES
324 UNION ST
OAKLAND, CA 94607

Click here for full text details

ENVIROSTOR
LUST
Alameda County CS
VCP
SWEEPS UST
HIST UST
CA FID UST
HIST CORTESE
CERS

1000191295
N/A

ENVIROSTOR
Status No Further Action
Facility Id 1420126

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-1305
Global Id T0600101200
date9 11/6/1997

Alameda County CS
Record Id RO0000989
Status Case Closed

VCP
Facility Id 1420126
Status No Further Action

SWEEPS UST
Comp Number 42073

CA FID UST
Facility Id 01000581
Status A

HIST CORTESE
Reg Id 01420126
Reg Id 01-1305

S94
SSW
1/4-1/2
0.289 mi.
1526 ft.

Relative:
Lower

CONTAINER FREIGHT
1285 5TH ST
OAKLAND, CA 94607

Click here for full text details

ENVIROSTOR
LUST
Alameda County CS
VCP
Cortese
HIST CORTESE
CERS

S103576443
N/A

ENVIROSTOR
Status Inactive - Needs Evaluation
Facility Id 1420128

CONTAINER FREIGHT (Continued) **S103576443**

LUST
Facility Status Leak being confirmed
Status Open - Remediation
Facility Id 01-2399
Global Id T0600102209

Alameda County CS
Record Id RO0000420
Status Leak Confirmation
Status Pollution Characterization
Status Remedial Action Underway

VCP
Facility Id 1420128
Status Inactive - Needs Evaluation

Cortese
Cleanup Status OPEN - REMEDIATION

HIST CORTESE
Reg Id 01-2399

T95
South
1/4-1/2
0.297 mi.
1568 ft.

Relative:
Lower

CALTRANS CYPRESS PROJECT **LUST** **S104233703**
UNKNOWN 5TH & ADELINE **HIST CORTESE** **N/A**
OAKLAND, CA 94607

Click here for full text details

LUST
Facility Status Leak being confirmed
Facility Id 01-2398

HIST CORTESE
Reg Id 01-2398

96
SW
1/4-1/2
0.299 mi.
1581 ft.

Relative:
Lower

RED STAR YEAST / 1396 FIFTH STREET LLC **CPS-SLIC** **S107410896**
1396 5TH **Alameda County CS** **N/A**
OAKLAND, CA 94607 **CERS**

Click here for full text details

CPS-SLIC
Facility Status Completed - Case Closed
Global Id T06019794669

Click here to access the California GeoTracker records for this facility

Alameda County CS

RED STAR YEAST / 1396 FIFTH STREET LLC (Continued) **S107410896**

Record Id RO0002896
Status Pollution Characterization
Status Case Closed

S97
SSW
1/4-1/2
0.301 mi.
1588 ft.

Relative:
Lower

SOUTHERN PACIFIC TRANSPORTATION COMPANY
0 5TH AVE & KIRKHAM WAY
OAKLAND, CA 94607

LUST
Alameda County CS
CERS

S106661085
N/A

Click here for full text details

LUST
Status Completed - Case Closed
Global Id T0600101304

Alameda County CS
Record Id RO0000122
Status Leak Confirmation
Status Pollution Characterization

T98
South
1/4-1/2
0.301 mi.
1589 ft.

Relative:
Lower

CALTRANS CYPRESS PROJECT
0 5TH ST AND ADELINE ST
OAKLAND, CA 94607

LUST
Alameda County CS
CERS

S106661088
N/A

Click here for full text details

LUST
Status Completed - Case Closed
Global Id T0600102208

Alameda County CS
Record Id RO0000178
Status Leak Confirmation

T99
South
1/4-1/2
0.303 mi.
1602 ft.

Relative:
Lower

RINO PACIFIC OAKLAND TRUCKSTOP
1107 5TH ST
OAKLAND, CA 94607

LUST
Alameda County CS
HIST UST
HIST CORTESE
CERS

S103472301
N/A

Click here for full text details

LUST
Facility Status Preliminary site assessment underway
Status Completed - Case Closed
Facility Id 01-2322
Global Id T0600102136

Alameda County CS
Record Id RO0000234
Status Leak Confirmation
Status Preliminary Site Assessment Underway

RINO PACIFIC OAKLAND TRUCKSTOP (Continued) **S103472301**

Status Pollution Characterization
Status Remediation Plan
Status Remedial Action Underway
Status Case Closed

HIST CORTESE
Reg Id 01-2322

100
SSE
1/4-1/2
0.306 mi.
1616 ft.

Relative:
Lower

PACIFIC BELL
1075 7TH
OAKLAND, CA 94607

LUST
Alameda County CS
CERS

S108244638
N/A

Click here for full text details

LUST
Status Completed - Case Closed
Global Id T06019796972

Alameda County CS
Record Id RO0000628
Status Leak Confirmation
Status Case Closed

U101
NNW
1/4-1/2
0.306 mi.
1617 ft.

Relative:
Lower

OSAGIE PROPERTY
1532 PERALTA STREET
OAKLAND, CA 94607

LUST
Alameda County CS
Cortese
CERS

S104573593
N/A

Click here for full text details

LUST
Status Open - Remediation
Global Id T0600191668

Alameda County CS
Record Id RO0000117
Status Leak Confirmation
Status Preliminary Site Assessment Workplan Submitted
Status Preliminary Site Assessment Underway

Cortese
Cleanup Status OPEN - REMEDIATION

V102
WSW
1/4-1/2
0.309 mi.
1633 ft.

Relative:
Lower

WEST OAKLAND BART STATION SITE
1451 7TH STREET
OAKLAND, CA 94607

ENVIROSTOR **S110372802**
VCP **N/A**

Click here for full text details

ENVIROSTOR
Status Active
Facility Id 70000133

VCP
Facility Id 70000133
Status Active

V103
WSW
1/4-1/2
0.309 mi.
1633 ft.

Relative:
Lower

WEST OAKLAND BART STATION SITE
1451 7TH STREET
OAKLAND, CA 94607

US BROWNFIELDS **1015888663**
FINDS **N/A**

Click here for full text details

US BROWNFIELDS
ACRES property ID 133801

FINDS
Registry ID: 110054146651

U104
NNW
1/4-1/2
0.322 mi.
1698 ft.

Relative:
Lower

MANNY SERVICES
1600 PERALTA STREET
OAKLAND, CA 94607

SEMS-ARCHIVE **1001470902**
CASFN0905432

Click here for full text details

SEMS-ARCHIVE
Site ID 0905432
EPA Id CASFN0905432

U105
NNW
1/4-1/2
0.322 mi.
1698 ft.

Relative:
Lower

MANNYSERVICES/MCKINNEY GAS
1600 PERALTA
OAKLAND, CA 94607

ENVIROSTOR **S102860814**
N/A

Click here for full text details

ENVIROSTOR
Status Refer: Other Agency
Facility Id 1750027

W106
SSE
1/4-1/2
0.348 mi.
1838 ft.

Relative:
Higher

VEND MART PROPERTY
1035 7TH ST
OAKLAND, CA 94607

ENVIROSTOR **S101293799**
LUST **N/A**
Alameda County CS
VCP
HIST CORTESE
CERS

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1990012

LUST
Facility Status Preliminary site assessment underway
Status Completed - Case Closed
Facility Id 01-1778
Global Id T0600101646

Alameda County CS
Record Id RO0000036
Status Leak Confirmation
Status Pollution Characterization

VCP
Facility Id 1990012
Status Certified

HIST CORTESE
Reg Id 01-1778

107
WSW
1/4-1/2
0.350 mi.
1847 ft.

Relative:
Lower

RELIABLE HANDI CAB
1520 7TH ST
OAKLAND, CA 94607

LUST **U003713129**
Alameda County CS **N/A**
HIST CORTESE
CERS

Click here for full text details

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-1234
Global Id T0600101133
date9 6/14/1995

Alameda County CS
Record Id RO0001137
Status Case Closed

HIST CORTESE
Reg Id 01-1234

X108
SW
1/4-1/2
0.361 mi.
1907 ft.

Relative:
Lower

CALIFORNIA SODA COMPANY
355 MANDELA PARKWAY
OAKLAND, CA 94067

ENVIROSTOR **S113013459**
HAZNET **N/A**

Click here for full text details

ENVIROSTOR
Status No Further Action
Facility Id 1280091

HAZNET
GEPAID CAD982044232

X109
SW
1/4-1/2
0.361 mi.
1907 ft.

Relative:
Lower

CALIFORNIA SODA COMPANY
355 MANDELA PARKWAY
OAKLAND, CA 94607

SEMS-ARCHIVE **1015732671**
CAD009122409

Click here for full text details

SEMS-ARCHIVE
Site ID 0905381
EPA Id CAD009122409

Y110
South
1/4-1/2
0.366 mi.
1933 ft.

Relative:
Lower

WESTERN PACIFIC RAILROAD
UNION STREET
OAKLAND, CA 94607

ENVIROSTOR **S102008220**
VCP **N/A**
DEED

Click here for full text details

ENVIROSTOR
Status Certified / Operation & Maintenance
Facility Id 1400008

VCP
Facility Id 1400008
Status Certified / Operation & Maintenance

DEED
Envirostor ID 1400008
Status CERTIFIED / OPERATION & MAINTENANCE

W111
SSE
1/4-1/2
0.367 mi.
1940 ft.

Relative:
Higher

CHANG'S AUTOMOTIVE
1009 7TH STREET
OAKLAND, CA 94607

ENVIROSTOR **S113054762**
VCP **N/A**
HAZNET

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1750019

CHANG'S AUTOMOTIVE (Continued) **S113054762**

VCP
Facility Id 1750019
Status Certified

HAZNET
GEPAID CAL000087908

X112
SW
1/4-1/2
0.369 mi.
1947 ft.

Relative:
Lower

SF BAY AREA RAPID TRANSIT DISTRICT
349 MANDELA PKWY
OAKLAND, CA 94607

RESPONSE **S102769550**
ENVIROSTOR **N/A**
HIST Cal-Sites

Click here for full text details

RESPONSE
Status Certified
Facility Id 1750021

ENVIROSTOR
Status Certified
Facility Id 1750021

Y113
South
1/4-1/2
0.376 mi.
1984 ft.

Relative:
Lower

THE BURKE COMPANY
310 UNION
OAKLAND, CA 94607

CPS-SLIC **S108246095**
Alameda County CS **N/A**
CERS

Click here for full text details

CPS-SLIC
Facility Status Completed - Case Closed
Global Id T06019739692

Click here to access the California GeoTracker records for this facility

Alameda County CS
Record Id RO0002828
Status Leak Confirmation
Status Pollution Characterization
Status Case Closed

114
North
1/4-1/2
0.377 mi.
1993 ft.

Relative:
Lower

PACIFIC PIPE COMPANY
1901 POPLAR ST
OAKLAND, CA 94607

LUST **S101624349**
Alameda County CS **N/A**
SWEEPS UST
CA FID UST
HIST CORTESE
CERS

Click here for full text details

LUST

PACIFIC PIPE COMPANY (Continued) **S101624349**

Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-2048
Global Id T0600101893
date9 10/24/1995

Alameda County CS
Record Id RO0000677
Status Case Closed

SWEEPS UST
Comp Number 66110

CA FID UST
Facility Id 01002818
Status A

HIST CORTESE
Reg Id 01-2156

115
SSW
1/4-1/2
0.378 mi.
1995 ft.

Relative:
Lower

AMTRAK MAINTENANCE FACILITY **ENVIROSTOR** **S104549015**
3RD & UNION STREETS **VCP** **N/A**
OAKLAND, CA 94607 **DEED**

Click here for full text details

ENVIROSTOR
Status Certified / Operation & Maintenance
Facility Id 1400014

VCP
Facility Id 1400014
Status Certified / Operation & Maintenance

DEED
Envirostor ID 1400014
Status CERTIFIED / OPERATION & MAINTENANCE

116
SW
1/4-1/2
0.381 mi.
2014 ft.

Relative:
Lower

HALL PROPERTY **CPS-SLIC** **S106784891**
1455 5TH **Alameda County CS** **N/A**
OAKLAND, CA 94607 **CERS**

Click here for full text details

CPS-SLIC
Facility Status Completed - Case Closed
Global Id T06019778849

HALL PROPERTY (Continued) **S106784891**

Click here to access the California GeoTracker records for this facility

Alameda County CS
Record Id RO0002537
Status Preliminary Site Assessment Underway
Status Pollution Characterization
Status Remedial Action Underway
Status Case Closed

Z117
NNW
1/4-1/2
0.384 mi.
2028 ft.

Relative:
Lower

ALTA PLATING & CHEMICAL CORP. **ENVIROSTOR** **S107735828**
1433 18TH STREET **N/A**
OAKLAND, CA 94607

Click here for full text details

ENVIROSTOR
Status Inactive - Needs Evaluation
Facility Id 70000088

AA118
SE
1/4-1/2
0.393 mi.
2073 ft.

Relative:
Higher

FORMER ADELINE CLEANERS & WASH HOUS **CPS-SLIC** **S118822751**
979 7TH ST **Alameda County CS** **N/A**
OAKLAND, CA 94607 **BROWNFIELDS**
CERS

Click here for full text details

CPS-SLIC
Facility Status Open - Site Assessment
Global Id T10000009189

Click here to access the California GeoTracker records for this facility

Alameda County CS
Record Id RO0003227
Status Leak Confirmation

119
NNE
1/4-1/2
0.400 mi.
2111 ft.

Relative:
Lower

GARDINER MFG COMPANY **LUST** **S102430607**
1920 UNION ST **Alameda County CS** **N/A**
OAKLAND, CA 94607 **HIST CORTESE**
CERS

Click here for full text details

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-0681
Global Id T0600100626
date9 1/8/1998

Alameda County CS

GARDINER MFG COMPANY (Continued) **S102430607**

Record Id RO0001185
Status Case Closed

HIST CORTESE
Reg Id 01-0681

AB120
NNW
1/4-1/2
0.402 mi.
2122 ft.

Relative:
Lower

RELIANCE UPHOLSTERY SUPPLY
1614 CAMPBELL ST
OAKLAND, CA 94607

Click here for full text details

RCRA-LQG **1001217518**
ENVIROSTOR **CAR000036111**
Alameda County CS
VCP
FINDS
ECHO

RCRA-LQG
EPA Id CAR000036111

ENVIROSTOR
Status Certified
Facility Id 70000082

Alameda County CS
Record Id RO0002613
Status Preliminary Site Assessment Underway

VCP
Facility Id 70000082
Status Certified

FINDS
Registry ID: 110002920876

ECHO
Registry ID 110002920876

AB121
NNW
1/4-1/2
0.402 mi.
2122 ft.

Relative:
Lower

GREITZER PROPERTY
1614 CAMPBELL ST
OAKLAND, CA 94607

Click here for full text details

LUST **S112879647**
CERS **N/A**

LUST
Status Completed - Case Closed
Global Id SL0600145137

122
SSE
1/4-1/2
0.405 mi.
2138 ft.

Relative:
Lower

ARATEX SERVICES, INC
330 CHESTNUT ST
OAKLAND, CA 94607

Click here for full text details

Database(s): RCRA-SQG, LUST, Alameda County CS, SWEEPS UST, HIST UST, CA FID UST, EMI, HIST CORTESE, CERS

EDR ID Number: 1000404149
EPA ID Number: CAD980814248

RCRA-SQG
EPA Id CAD980814248

LUST
Facility Status Preliminary site assessment underway
Status Completed - Case Closed
Facility Id 01-0086
Global Id T0600100079

Alameda County CS
Record Id RO0000446
Status Leak Confirmation
Status Preliminary Site Assessment Underway
Status Pollution Characterization
Status Remedial Action Underway
Status Case Closed

SWEEPS UST
Comp Number 68757

HIST UST
Facility Id 00000068757

CA FID UST
Facility Id 01000203
Status I

EMI
Facility Id 2112

HIST CORTESE
Reg Id 01-0086

AA123
SE
1/4-1/2
0.412 mi.
2175 ft.

Relative:
Higher

MICRONESIAN CARGO INTERNATIONAL
955 7TH STREET
OAKLAND, CA 94607

ENVIROSTOR
VCP
HAZNET

S112966153
N/A

Click here for full text details

ENVIROSTOR
Status No Further Action
Facility Id 1420129

VCP
Facility Id 1420129
Status No Further Action

HAZNET
GEPAID CAC002624091

Z124
NNW
1/4-1/2
0.412 mi.
2176 ft.

Relative:
Lower

MARK ABOUDI PROPERTY
1639 18TH STREET
OAKLAND, CA 94607

ENVIROSTOR
VCP
DEED
HAZNET

S112865832
N/A

Click here for full text details

ENVIROSTOR
Status Certified O&M - Land Use Restrictions Only
Facility Id 1420131

VCP
Facility Id 1420131
Status Certified O&M - Land Use Restrictions Only

DEED
Envirostor ID 1420131
Status CERTIFIED O&M - LAND USE RESTRICTIONS ONLY

HAZNET
GEPAID CAC001081848

Z125
NNW
1/4-1/2
0.412 mi.
2176 ft.

Relative:
Lower

BERCOVICH, A., CO. A/K/A SUNSET SMELTING & REFININ
1639 18TH
OAKLAND, CA

SEMS
LEAD SMELTERS

1014201711
CAN000909419

Click here for full text details

LEAD SMELTERS
Site ID: 909419
Site ID: 905957
Site number: 449
EPAID: CAN000909419
EPAID: CAN000905957

Z126
NNW
1/4-1/2
0.412 mi.
2176 ft.

Relative:
Lower

FOOD EXPRESS INC
1639 18TH ST
OAKLAND, CA 94607

ENVIROSTOR
NPDES
CIWQS

S117700342
N/A

Click here for full text details

ENVIROSTOR
Status Active
Facility Id 60002775

127
South
1/4-1/2
0.417 mi.
2202 ft.

Relative:
Lower

OAKLAND WAREHOUSE
1221 3RD ST
OAKLAND, CA 94607

Click here for full text details

LUST
Alameda County CS
SWEEPS UST
CA FID UST
HIST CORTESE
NPDES
CIWQS
CERS

S101580386
N/A

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-1054
Global Id T0600100972
date9 2/7/2000

Alameda County CS
Record Id RO0000673
Status Case Closed

SWEEPS UST
Status A
Tank Status A
Comp Number 46065

CA FID UST
Facility Id 01002711
Status A

HIST CORTESE
Reg Id 01-1054

NPDES
Facility Status Active

Z128
NNW
1/4-1/2
0.420 mi.
2216 ft.

Relative:
Lower

CADEMARTORI TRUCKING, INC.
1833 PERALTA ST
OAKLAND, CA 94607

Click here for full text details

Database(s): LUST, Alameda County CS, SWEEPS UST, HIST UST, CA FID UST, HIST CORTESE, CERS

EDR ID Number: S101624356
EPA ID Number: N/A

LUST
Status Completed - Case Closed
Global Id T0600100239

Alameda County CS
Record Id RO0000015
Status Preliminary Site Assessment Workplan Submitted

SWEEPS UST
Comp Number 60046

CA FID UST
Facility Id 01000388
Status I

HIST CORTESE
Reg Id 01-0254

Z129
NNW
1/4-1/2
0.420 mi.
2216 ft.

Relative:
Lower

CADOMARTORI TRUCKING COMPANY
1833 PERALTA ST
OAKLAND, CA 94607

Click here for full text details

Database(s): LUST

EDR ID Number: S103890463
EPA ID Number: N/A

LUST
Facility Status Preliminary site assessment underway
Facility Id 01-0254

AC130
SW
1/4-1/2
0.431 mi.
2278 ft.

Relative:
Lower

WEST OAKLAND LEAD
1414 3RD STREET
OAKLAND, CA 94607

Click here for full text details

Database(s): SEMS

EDR ID Number: 1012210091
EPA ID Number: CAN000908776

SEMS
Site ID 0908776
EPA Id CAN000908776

AC131
SW
1/4-1/2
0.431 mi.
2278 ft.

Relative:
Lower

DC METALS
1414 3RD ST
OAKLAND, CA 94607

LUST
Alameda County CS
HIST UST
Cortese
HIST CORTESE
CERS

S101641564
N/A

Click here for full text details

LUST
Facility Status Preliminary site assessment underway
Status Open - Site Assessment
Facility Id 01-2396
Global Id T0600102206

Alameda County CS
Record Id RO0000444
Status Leak Confirmation

Cortese
Cleanup Status OPEN - SITE ASSESSMENT

HIST CORTESE
Reg Id 01-2396

AC132
SW
1/4-1/2
0.445 mi.
2347 ft.

Relative:
Lower

BOBO'S JUNKYARD
1401 THIRD STREET
OAKLAND, CA 94607

ENVIROSTOR
VCP
DEED

S117333348
N/A

Click here for full text details

ENVIROSTOR
Status Certified / Operation & Maintenance
Facility Id 1400003

VCP
Facility Id 1400003
Status Certified / Operation & Maintenance

DEED
Envirostor ID 1400003
Status CERTIFIED / OPERATION & MAINTENANCE

AD133
NW
1/4-1/2
0.446 mi.
2356 ft.

Relative:
Lower

CITY OF OAKLAND (PUBLIC WORKS ENVIRON PROGRAM)
1368 WILLOW ST
OAKLAND, CA 94607

ENVIROSTOR
VCP
HAZNET

S112941986
N/A

Click here for full text details

ENVIROSTOR
Status No Further Action
Facility Id 1990028

CITY OF OAKLAND (PUBLIC WORKS ENVIRON PROGRAM) (Continued) **S112941986**

VCP
Facility Id 1990028
Status No Further Action

HAZNET
GEPAID CAC002584655

AE134
South
1/4-1/2
0.446 mi.
2356 ft.

Relative:
Lower

FACILITY 10201-1
1121 3RD
OAKLAND, CA 94607

HIST CORTESE **S101293783**
NPDES **N/A**
CIWQS
CERS

Click here for full text details

HIST CORTESE
Reg Id 2650

NPDES
Facility Status Active

AE135
South
1/4-1/2
0.446 mi.
2356 ft.

Relative:
Lower

NOR CAL METAL FABRICATORS
1121 3RD ST
OAKLAND, CA 94607

SEMS-ARCHIVE **1000138493**
RCRA-SQG **CAD009148669**
FINDS
ECHO

Click here for full text details

SEMS-ARCHIVE
Site ID 0901171
EPA Id CAD009148669

RCRA-SQG
EPA Id CAD009148669

FINDS
Registry ID: 110001184904

ECHO
Registry ID 110001184904

AF136
WSW
1/4-1/2
0.455 mi.
2403 ft.

Relative:
Lower

DTSC AT 528 LEWIS ST
528 LEWIS ST
OAKLAND, CA 94607

RESPONSE
ENVIROSTOR
HAZNET

S112935742
N/A

Click here for full text details

RESPONSE
Status Certified
Facility Id 1880002

ENVIROSTOR
Status Certified
Facility Id 1880002

HAZNET
GEPAID CAC002574674

AF137
WSW
1/4-1/2
0.455 mi.
2403 ft.

Relative:
Lower

528 LEWIS STREET
528 LEWIS STREET
OAKLAND, CA 94607

HIST Cal-Sites
CERS

S105749935
N/A

Click here for full text details

AF138
WSW
1/4-1/2
0.457 mi.
2413 ft.

Relative:
Lower

LOT AT 530-542 LEWIS STREET
530-542 LEWIS STREET
OAKLAND, CA 94607

SEMS-ARCHIVE

1001212408
CA0002059467

Click here for full text details

SEMS-ARCHIVE
Site ID 0905369
EPA Id CA0002059467

AG139
NNW
1/4-1/2
0.457 mi.
2414 ft.

Relative:
Lower

ACME GALVANIZING
1655 17TH
OAKLAND, CA 94607

ENVIROSTOR
CPS-SLIC
Alameda County CS
CERS

S100854038
N/A

Click here for full text details

ENVIROSTOR
Status Active
Facility Id 60002571

CPS-SLIC
Facility Status Open - Assessment & Interim Remedial Action
Global Id T10000001503

Click here to access the California GeoTracker records for this facility

ACME GALVANIZING (Continued) **S100854038**

Alameda County CS
Record Id RO0002777
Status Leak Confirmation

AG140
NNW
1/4-1/2
0.457 mi.
2414 ft.

Relative:
Lower

ACME GALVANIZING CO
1655 17TH ST
OAKLAND, CA 94607

SEMS **1015730617**
RCRA-SQG **CAD009108861**

Click here for full text details

SEMS
Site ID 0905931
EPA Id CAD009108861

RCRA-SQG
EPA Id CAD009108861

AD141
NW
1/4-1/2
0.460 mi.
2427 ft.

Relative:
Lower

WILLOW PARK
14TH AND WILLOW ST WEST
WEST OAKLAND, CA 94607

US BROWNFIELDS **1014949625**
FINDS **N/A**

Click here for full text details

US BROWNFIELDS
Cleanup Completion Date 12/01/2004 00:00:00
ACRES property ID 16501

FINDS
Registry ID: 110061015360

142
SSE
1/4-1/2
0.460 mi.
2429 ft.

Relative:
Lower

EAST BAY FORD TRUCK
333 FIBERT ST
OAKLAND, CA 94607

RCRA-SQG **1000391095**
LUST **CAD981443245**
CPS-SLIC
Alameda County CS
BROWNFIELDS
SWEEPS UST
HIST UST
CA FID UST
HAZNET
HIST CORTESE
NPDES
Notify 65
CIWQS
CERS

Click here for full text details

RCRA-SQG
EPA Id CAD981443245

LUST

EAST BAY FORD TRUCK (Continued) **1000391095**

Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-0531
Global Id T0600100485
date9 8/1/1994

CPS-SLIC
Facility Status Open - Assessment & Interim Remedial Action
Global Id T10000005774

Click here to access the California GeoTracker records for this facility

Alameda County CS
Record Id RO0001091
Status Case Closed

SWEEPS UST
Comp Number 32731

HIST UST
Facility Id 00000032731

CA FID UST
Facility Id 01000660
Status I

HAZNET
GEPAID CAL000400734

HIST CORTESE
Reg Id 01-0531

NPDES
Facility Status Active

AH143 **JR USED AUTO PARTS** **HIST CORTESE** **S101293761**
ESE **823 12TH** **N/A**
1/4-1/2 **OAKLAND, CA 94606**
0.462 mi.
2440 ft.

Relative: Higher

Click here for full text details

HIST CORTESE
Reg Id 01-0806

AH144
ESE
1/4-1/2
0.462 mi.
2440 ft.

Relative:
Higher

JB AUTO
819 12TH
OAKLAND, CA 94606

CPS-SLIC **S108245999**
CERS **N/A**

Click here for full text details

CPS-SLIC
Facility Status Open - Inactive
Global Id T06019761004

Click here to access the California GeoTracker records for this facility

---

145
NNE
1/4-1/2
0.468 mi.
2471 ft.

Relative:
Lower

EAST BAY MUNICIPAL UTILITY DIST
1200 21ST STREET
OAKLAND, CA 94607

RCRA-LQG **1000391093**
LUST **CAD981382559**
Alameda County CS
FINDS
ECHO
Cortese
HIST CORTESE
CERS

Click here for full text details

RCRA-LQG
EPA Id CAD981382559

LUST
Facility Status Preliminary site assessment underway
Status Open - Remediation
Facility Id 01-2299
Global Id T0600102115

Alameda County CS
Record Id RO0000030
Status Preliminary Site Assessment Underway

FINDS
Registry ID: 110000886998

ECHO
Registry ID 110000886998

Cortese
Cleanup Status OPEN - REMEDIATION

HIST CORTESE
Reg Id 01-2299

146
South
1/4-1/2
0.472 mi.
2490 ft.

Relative:
Lower

SUNSET WHOLESALE COMPANY
105 EMBARCADERO AVE
OAKLAND, CA 94607

LUST
Alameda County CS
HIST CORTESE
CERS

S102438229
N/A

Click here for full text details

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-1742
Global Id T0600101613
date9 10/17/1996

Alameda County CS
Record Id RO0000735
Status Case Closed

HIST CORTESE
Reg Id 01-1742

AG147
NNW
1/4-1/2
0.477 mi.
2521 ft.

Relative:
Lower

ROADWAY EXPRESS INC
1708 WOOD ST
OAKLAND, CA 94607

LUST
CPS-SLIC
Alameda County CS
SWEEPS UST
CA FID UST
HAZNET
HIST CORTESE
NPDES
CIWQS
CERS

S101624389
N/A

Click here for full text details

LUST
Facility Status Preliminary site assessment underway
Status Completed - Case Closed
Facility Id 01-2291
Global Id T0600102107

CPS-SLIC
Facility Status Open - Active
Global Id T10000009064

Click here to access the California GeoTracker records for this facility

Alameda County CS
Record Id RO0000039
Record Id RO0003206
Status Preliminary Site Assessment Workplan Submitted
Status Preliminary Site Assessment Underway
Status Pollution Characterization

SWEEPS UST
Status A

ROADWAY EXPRESS INC (Continued) **S101624389**

Tank Status A
Comp Number 48445

CA FID UST
Facility Id 01002716
Status A

HAZNET
GEPAID CAR000039180

HIST CORTESE
Reg Id 01-2291

NPDES
Facility Status Active

148
NE
1/4-1/2
0.478 mi.
2525 ft.

Relative:
Lower

FRANK'S TIE SERVICE **LUST** **S108242510**
1115 21ST ST **Alameda County CS** **N/A**
OAKLAND, CA 94607

Click here for full text details

LUST
Status Completed - Case Closed
Global Id T06019759797

Alameda County CS
Record Id RO0000301
Status Case Closed

149
East
1/4-1/2
0.478 mi.
2526 ft.

Relative:
Higher

OAK VILLAGE APARTMENTS **CPS-SLIC** **S118504730**
780 AND 828 13TH STREET **CERS** **N/A**
OAKLAND, CA 94612

Click here for full text details

CPS-SLIC
Facility Status Completed - Case Closed
Global Id T10000008207

Click here to access the California GeoTracker records for this facility

AG150
NNW
1/4-1/2
0.482 mi.
2547 ft.

Relative:
Lower

WEST OAKLAND III
WOOD, 9TH, 12TH AND 26TH STREETS
OAKLAND, CA 94607

US BROWNFIELDS
FINDS

1016358729
N/A

Click here for full text details

US BROWNFIELDS
ACRES property ID 131561

FINDS
Registry ID: 110043563015

AG151
NNW
1/4-1/2
0.482 mi.
2547 ft.

Relative:
Lower

WEST OAKLAND AREA II
WOOD AND PERALTA STREETS AND 14TH AND 20TH STREETS
OAKLAND, CA 94607

US BROWNFIELDS
FINDS

1016358728
N/A

Click here for full text details

US BROWNFIELDS
ACRES property ID 131541

FINDS
Registry ID: 110043563006

AI152
NW
1/4-1/2
0.485 mi.
2562 ft.

Relative:
Lower

BASF CORPORATION
1545 WILLOW ST
OAKLAND, CA 94607

LUST
RCRA NonGen / NLR
FINDS
ECHO
CERS

1000226859
CAD009122912

Click here for full text details

LUST
Facility Status Case Closed
Facility Id 01-0152
date9 11/4/1994

RCRA NonGen / NLR
EPA Id CAD009122912

FINDS
Registry ID: 110009528957

ECHO
Registry ID 110009528957

AI153
NW
1/4-1/2
0.485 mi.
2562 ft.

Relative:
Lower

INMONT CORPORATION
1545 WILLOW STREET
OAKLAND, CA 94607

ENVIROSTOR
LUST
Alameda County CS
HIST UST
HIST CORTESE

S101629611
N/A

Click here for full text details

ENVIROSTOR
Status Refer: RWQCB
Facility Id 60000360

LUST
Status Completed - Case Closed
Global Id SLT19763584
Global Id T0600100141

Alameda County CS
Record Id RO0002956
Status Case Closed

HIST CORTESE
Reg Id 01-0152

AJ154
South
1/4-1/2
0.498 mi.
2627 ft.

Relative:
Lower

NORCAL METAL FABRICATORS
114 ADELINE ST
OAKLAND, CA 94607

LUST
Alameda County CS
HIST CORTESE
CERS

S102434413
N/A

Click here for full text details

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-1636
Global Id T0600101511
date9 2/14/1994

Alameda County CS
Record Id RO0000570
Status Case Closed

HIST CORTESE
Reg Id 01-1636

AJ155
South
1/4-1/2
0.499 mi.
2637 ft.

Relative:
Lower

LEHAR SALES
150 CHESTNUT ST
OAKLAND, CA 94607

LUST
Alameda County CS
CHMIRS
HIST CORTESE
CERS

S102432586
N/A

Click here for full text details

LUST
Facility Status Case Closed

LEHAR SALES (Continued) **S102432586**

Status Completed - Case Closed
Facility Id 01-1268
Global Id T0600101165
date9 5/29/1998

Alameda County CS
Record Id RO0001138
Status Case Closed

CHMIRS
OES Incident Number 16280

HIST CORTESE
Reg Id 01-1268

AK156 **SOUTHERN PACIFIC 3RD ST VACANT LOT** **ENVIROSTOR** **S116165225**
SW **1509/1513 THIRD STREET** **VCP** **N/A**
1/4-1/2 **OAKLAND, CA 94607**
0.500 mi.
2640 ft.

Relative:
Lower

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1400013

VCP
Facility Id 1400013
Status Certified

AK157 **1536 THIRD STREET** **ENVIROSTOR** **S116165252**
SW **1536 THIRD STREET** **N/A**
1/2-1 **OAKLAND, CA 94607**
0.522 mi.
2758 ft.

Relative:
Lower

Click here for full text details

ENVIROSTOR
Status Refer: Other Agency
Facility Id 1880003

---

158 **TAYLOR ROOF STRUCTURES** **Notify 65** **S100226628**
WNW **1769 13TH STREET** **N/A**
1/2-1 **OAKLAND, CA 92626**
0.525 mi.
2770 ft.

Relative:
Lower

Click here for full text details

AK159
SW
1/2-1
0.531 mi.
2804 ft.

Relative:
Lower

SO. PRESCOTT NEIGHBORHOOD PARK
3RD STREET
OAKLAND, CA 94607

ENVIROSTOR **S116165257**
VCP **N/A**

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1990019

VCP
Facility Id 1990019
Status Certified

160
SE
1/2-1
0.542 mi.
2861 ft.

Relative:
Higher

FRANCIS PLATING OF OAKLAND INC
785 7TH ST
OAKLAND, CA 94607

SEMS **1000308458**
CORRACTS **CAD009206160**
RCRA-TSDF
RCRA-SQG
ENVIROSTOR
CPS-SLIC
HIST UST
PRP
HAZNET
HWP
CERS

Click here for full text details

SEMS
Site ID 0903278
EPA Id CAD009206160

CORRACTS
EPA ID: CAD009206160

RCRA-TSDF
EPA Id CAD009206160

RCRA-SQG
EPA Id CAD009206160

ENVIROSTOR
Status No Further Action
Status Refer: Local Agency
Facility Id 1330049
Facility Id 80001620

CPS-SLIC
Facility Status Open - Verification Monitoring
Global Id T10000007028

Click here to access the California GeoTracker records for this facility

HIST UST

FRANCIS PLATING OF OAKLAND INC (Continued) **1000308458**

Facility Id 00000047987

HAZNET
GEPAID CAD009206160

HWP
EPA Id CAD009206160
Cleanup Status PROTECTIVE FILER

AL161
North
1/2-1
0.546 mi.
2884 ft.

Relative:
Lower

MANDELA PARKWAY CORRIDOR
MANDELA PARKWAY BETWEEN 34TH AND 8TH STS
OAKLAND, CA 94607

ENVIROSTOR **S116165227**
VCP **N/A**

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1410118

VCP
Facility Id 1410118
Status Certified

162
WSW
1/2-1
0.547 mi.
2890 ft.

Relative:
Lower

US POSTAL SERVICE
1675 7TH ST
OAKLAND, CA 94607

ENVIROSTOR **S100947861**
LUST **N/A**
CPS-SLIC
Alameda County CS
VCP
EMI
HIST CORTESE
NPDES
WDS
CIWQS
CERS

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1430001

LUST
Facility Status Preliminary site assessment underway
Status Completed - Case Closed
Facility Id 01-0487
Global Id T0600100443

CPS-SLIC
Facility Status Open - Inactive
Global Id T10000001615

US POSTAL SERVICE (Continued) **S100947861**

Click here to access the California GeoTracker records for this facility

Alameda County CS
Record Id RO0000016
Record Id RO0003012
Status Leak Confirmation
Status Pollution Characterization
Status Case Closed

VCP
Facility Id 1430001
Status Certified

EMI
Facility Id 21130

HIST CORTESE
Reg Id 01-0487

NPDES
Facility Status Active

WDS
Facility Id 2 01I006115
Facility Status Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.

AL163 **MANDELA GRAND** **ENVIROSTOR** **S108195929**
North **MANDELA PARKWAY AND WEST GRAND** **VCP** **N/A**
1/2-1 **OAKLAND, CA 94607**
0.550 mi.
2905 ft.

Relative: Lower

Click here for full text details

ENVIROSTOR
Status Inactive - Needs Evaluation
Facility Id 60000433

VCP
Facility Id 60000433
Status Inactive - Needs Evaluation

AM164
SW
1/2-1
0.553 mi.
2920 ft.

Relative:
Lower

CYPRESS FREEWAY-3RD STREET SOUNDWALL
3RD STREET BETWEEN CENTER AND PERALTA ST
OAKLAND, CA 94607

ENVIROSTOR
VCP

S116165224
N/A

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1400012

VCP
Facility Id 1400012
Status Certified

165
WSW
1/2-1
0.559 mi.
2951 ft.

Relative:
Lower

ZUEDELAC APARTMENTS
1600 3RD AVE
OAKLAND, CA 94606

ENVIROSTOR
VCP
HAZNET

S112921473
N/A

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1990014

VCP
Facility Id 1990014
Status Certified

HAZNET
GEPAID CAC002550979

AN166
SE
1/2-1
0.561 mi.
2960 ft.

Relative:
Lower

SAFETY-KLEEN CORP.
404 MARKET ST
OAKLAND, CA 94607

SWEEPS UST
HIST UST
CA FID UST
HWP
CERS

1000224433
N/A

Click here for full text details

SWEEPS UST
Status A
Tank Status A
Comp Number 6278

HIST UST
Facility Id 00000006278

CA FID UST
Facility Id 01002099
Status I

HWP

SAFETY-KLEEN CORP. (Continued) **1000224433**

EPA Id CAD053044053
Cleanup Status CLOSED

AN167
SE
1/2-1
0.561 mi.
2960 ft.

Relative:
Lower

SAFETY-KLEEN SYSTEMS INC
400 MARKET STREET
OAKLAND, CA 94607

Click here for full text details

SEMS **1015730631**
CORRACTS **CAD053044053**
RCRA-TSDF
RCRA-LQG
US INST CONTROL
2020 COR ACTION
LEAD SMELTERS
FINDS
ECHO

SEMS
Site ID 0905732
EPA Id CAD053044053

CORRACTS
EPA ID: CAD053044053

RCRA-TSDF
EPA Id CAD053044053

RCRA-LQG
EPA Id CAD053044053

US INST CONTROL
EPA ID: CAD053044053

2020 COR ACTION
EPA ID: CAD053044053

LEAD SMELTERS
Site ID: 905732
EPAID: CAD053044053

FINDS
Registry ID: 110002334046

ECHO
Registry ID 110002334046

AN168
SE
1/2-1
0.561 mi.
2960 ft.

Relative:
Lower

SAFETYKLEEN SER CTR
400 MARKET ST
OAKLAND, CA 94607

ENVIROSTOR **1001407764**
DEED **N/A**
CHMIRS
WDS
CERS

Click here for full text details

ENVIROSTOR
Status Active
Facility Id 80001412

DEED
Envirostor ID 80001412
Status ACTIVE

CHMIRS
OES Incident Number 5-3944

WDS
Facility Id 2 01I002051
Facility Status Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.

169
NNE
1/2-1
0.568 mi.
2997 ft.

Relative:
Lower

COMMERCIAL BUILDINGS
1250-1276, 1284 W. GRAND & 2232 POPLAR
OAKLAND, CA 94607

RESPONSE **S105861003**
ENVIROSTOR **N/A**
HIST Cal-Sites
Cortese
CERS

Click here for full text details

RESPONSE
Status Active
AWP Facility Id 01720110
Facility Id 1720110

ENVIROSTOR
Status Active
Facility Id 1720110

Cortese
Envirostor Id 1720110
Cleanup Status ACTIVE

170
South
1/2-1
0.583 mi.
3076 ft.

Relative:
Lower

SCHNITZER STEEL
1101 EMBARCADERO WEST
OAKLAND, CA 94607

ENVIROSTOR **S113008441**
HAZNET **N/A**

Click here for full text details

ENVIROSTOR
Status Active
Facility Id 60002854

HAZNET

SCHNITZER STEEL (Continued) **S113008441**

GEPAID CAD981634496

171
NW
1/2-1
0.584 mi.
3081 ft.

Relative:
Lower

WEST RECYCLER BIN STORAGE **ENVIROSTOR** **S102860820**
1405 WOOD STREET **N/A**
OAKLAND, CA 94607

Click here for full text details

ENVIROSTOR
Status Refer: RWQCB
Facility Id 1890018

AM172
WSW
1/2-1
0.584 mi.
3086 ft.

Relative:
Lower

SOUTHERN PACIFIC -WEST OAKLAND RAIL YARD **RESPONSE** **S106893873**
CYPRESS CORRIDOR **ENVIROSTOR** **N/A**
OAKLAND, CA 94607 **HIST Cal-Sites**
DEED
Cortese

Click here for full text details

RESPONSE
Status Certified / Operation & Maintenance
AWP Facility Id 01400010
Facility Id 1400010

ENVIROSTOR
Status Certified / Operation & Maintenance
Facility Id 1400010

DEED
Envirostor ID 1400010
Status CERTIFIED / OPERATION & MAINTENANCE

Cortese
Envirostor Id 1400010
Cleanup Status CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS

AO173
NNE
1/2-1
0.612 mi.
3233 ft.

Relative:
Lower

NED CLYDE CONSTRUCTION YARD **Notify 65** **S100178915**
2311 ADELINE STREET **N/A**
OAKLAND, CA 92626

Click here for full text details

AP174
NNW
1/2-1
0.613 mi.
3239 ft.

Relative:
Lower

SOUTHERN PACIFIC TRANSPORTATION CO. OAKLAND
1707 WOOD STREET
OAKLAND, CA 94607

Click here for full text details

CA BOND EXP. PLAN

S100833473
N/A

AP175
NNW
1/2-1
0.613 mi.
3239 ft.

Relative:
Lower

SOUTHERN PACIFIC TRANSPORTATION CO
1707 WOOD ST
OAKLAND, CA 94607

Click here for full text details

RESPONSE
ENVIROSTOR
CPS-SLIC
FTTS
HIST FTTS
CERS

1004444105
N/A

RESPONSE
Status Refer: RWQCB
Facility Id 1400001

ENVIROSTOR
Status Refer: RWQCB
Facility Id 1400001

CPS-SLIC
Facility Status Completed - Case Closed
Facility Id SLT2O193296
Global Id SLT2O193296

Click here to access the California GeoTracker records for this facility

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AP176
NNW
1/2-1
0.613 mi.
3239 ft.

Relative:
Lower

SP, W.OAKLAND YD.-(OILY WASTE)
1707 WOOD STREET
OAKLAND, CA 94607

Click here for full text details

Toxic Pits
Status CLOSED
Task # 82010
Closure Date 04/21/93

Toxic Pits

S100676226
N/A

AP177
NNW
1/2-1
0.613 mi.
3239 ft.

Relative:
Lower

SP, W.OAKLAND YARD-(WASHWATER)
1707 WOOD STREET
OAKLAND, CA 94607

Click here for full text details

Toxic Pits
Status CLOSED
Task # 82034
Closure Date 06/30/92

Toxic Pits

S100676234
N/A

178
WNW
1/2-1
0.618 mi.
3261 ft.

Relative:
Lower

COLE BROTHERS AUTO WRECKERS
1797 12TH STREET
OAKLAND, CA 94607

ENVIROSTOR **S118757105**
N/A

Click here for full text details

ENVIROSTOR
Status No Action Required
Facility Id 60000365

AQ179
WNW
1/2-1
0.619 mi.
3269 ft.

Relative:
Lower

JENKINS AUTO WRECKERS
1778 10TH STREET
OAKLAND, CA 94607

ENVIROSTOR **S102860812**
ENF **N/A**

Click here for full text details

ENVIROSTOR
Status Inactive - Needs Evaluation
Facility Id 1750025

ENF
Status Never Active
Facility Id 233600
Status Active

AO180
NNE
1/2-1
0.630 mi.
3324 ft.

Relative:
Lower

ARTESIAN OIL RECOVERY INC
2306 MAGNOLIA ST
OAKLAND, CA 94607

ICE **S103644004**
HWP **N/A**
CERS

Click here for full text details

HWP
EPA Id CAL000161741
Cleanup Status CLOSED

AO181
NNE
1/2-1
0.630 mi.
3324 ft.

Relative:
Lower

ARTESIAN OIL RECOVERY
2306 MAGNOLIA STREET
OAKLAND, CA 94607

ENVIROSTOR **S118757104**
N/A

Click here for full text details

ENVIROSTOR
Status No Action Required
Facility Id 60000364

AQ182
WNW
1/2-1
0.630 mi.
3326 ft.

Relative:
Lower

GAINES PROPERTY
1795 11TH STREET
OAKLAND, CA 94607

RESPONSE
ENVIROSTOR
HAZNET

S112927565
N/A

Click here for full text details

RESPONSE
Status Certified
Facility Id 1750030

ENVIROSTOR
Status Certified
Facility Id 1750030

HAZNET
GEPAID CAC002561281

AQ183
WNW
1/2-1
0.630 mi.
3326 ft.

Relative:
Lower

GAINES PROPERTY
1795 11TH STREET
OAKLAND, CA 94607

SEMS-ARCHIVE
HIST Cal-Sites
CERS

1001212406
CA0002059426

Click here for full text details

AQ184
WNW
1/2-1
0.653 mi.
3446 ft.

Relative:
Lower

RADOMSKY PROPERTY
930 PINE STREET
OAKLAND, CA 94607

ENVIROSTOR

S118756499
N/A

Click here for full text details

ENVIROSTOR
Status No Action Required
Facility Id 1880001

185
SE
1/2-1
0.654 mi.
3455 ft.

Relative:
Lower

E-D COAT INC
715 4TH STREET
OAKLAND, CA 94607

RESPONSE
ENVIROSTOR
CERS

S120714344
N/A

Click here for full text details

RESPONSE
Status Active
Facility Id 60002501

ENVIROSTOR
Status Active
Facility Id 60002501

AR186
NNE
1/2-1
0.670 mi.
3539 ft.

Relative:
Lower

NORTHWESTERN VENETIAN SUPPLY CORP. SITE
1218 24TH STREET
OAKLAND, CA 94607

Click here for full text details

HIST Cal-Sites

S106893872
N/A

AR187
NNE
1/2-1
0.670 mi.
3539 ft.

Relative:
Lower

NORTHWESTERN VENETIAN BLIND SUPPLY CO
1218 24TH ST
OAKLAND, CA 94607

Click here for full text details

RESPONSE
ENVIROSTOR
CPS-SLIC
LIENS
DEED
Cortese

S101007019
N/A

RESPONSE
Status Active
Facility Id 1340123

ENVIROSTOR
Status Active
Facility Id 1340123

CPS-SLIC
Facility Id 01S0205

LIENS
Envirostor Id 1340123

DEED
Envirostor ID 1340123
Status ACTIVE

Cortese
Envirostor Id 1340123
Cleanup Status ACTIVE - LAND USE RESTRICTIONS

188
West
1/2-1
0.678 mi.
3581 ft.

Relative:
Lower

CHURCH'S FRIED CHICKEN
1766 7TH STREET
OAKLAND, CA 94607

Click here for full text details

ENVIROSTOR
LUST
Alameda County CS
VCP
HIST CORTESE
CERS

S102008249
N/A

ENVIROSTOR
Status Certified
Facility Id 1540002

LUST

CHURCH'S FRIED CHICKEN (Continued) **S102008249**

Status Completed - Case Closed
Global Id T06019710161

Alameda County CS
Record Id RO0002843
Status Leak Confirmation

VCP
Facility Id 1540002
Status Certified

HIST CORTESE
Reg Id 01540002

189
WNW
1/2-1
0.694 mi.
3662 ft.

Relative:
Lower

CA WASTE SOLUTIONS INC **ENVIROSTOR** **S118589659**
1820 10TH ST **NPDES** **N/A**
OAKLAND, CA 94607 **CIWQS**

Click here for full text details

ENVIROSTOR
Status Active
Facility Id 60002788

AR190
NNE
1/2-1
0.695 mi.
3669 ft.

Relative:
Lower

LAHER SPRING AND ELECTRIC CAR **ENVIROSTOR** **S106895190**
2419 MAGNOLIA STREET **N/A**
OAKLAND, CA 94607

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1990016

AS191
SSE
1/2-1
0.725 mi.
3827 ft.

Relative:
Lower

PG&E OAKLAND-1 MGP **ENVIROSTOR** **S110121723**
50 MARKET STREET AND 101 JEFFERSON STREET **VCP** **N/A**
OAKLAND, CA 94607 **DEED**

Click here for full text details

ENVIROSTOR
Status Certified / Operation & Maintenance
Facility Id 1490012

VCP
Facility Id 1490012
Status Certified / Operation & Maintenance

DEED

PG&E OAKLAND-1 MGP (Continued) **S110121723**

Envirostor ID 1490012
Status CERTIFIED / OPERATION & MAINTENANCE

AS192
SSE
1/2-1
0.725 mi.
3827 ft.

Relative:
Lower

PG AND E OAKLAND
50 MARKET ST BTWN 1ST AND GROVE
OAKLAND, CA 94607

EDR MGP **1008407726**
N/A

Click here for full text details

193
SE
1/2-1
0.735 mi.
3881 ft.

Relative:
Lower

MERRITT TWO SITE
655 3RD STREET
OAKLAND, CA 94607

ENVIROSTOR **S112875990**
VCP **N/A**
DEED
HAZNET

Click here for full text details

ENVIROSTOR
Status Certified O&M - Land Use Restrictions Only
Facility Id 60002149

VCP
Facility Id 60002149
Status Certified O&M - Land Use Restrictions Only

DEED
Envirostor ID 60002149
Status CERTIFIED O&M - LAND USE RESTRICTIONS ONLY

HAZNET
GEPAID CAC001227664

194
West
1/2-1
0.736 mi.
3885 ft.

Relative:
Lower

DEPT OF TRANSPORTATION DIST 4
800 CEDAR ST
OAKLAND, CA 94607

ENVIROSTOR **S112894450**
VCP **N/A**
HAZNET

Click here for full text details

ENVIROSTOR
Status Inactive - Needs Evaluation
Facility Id 1330037

VCP
Facility Id 1330037
Status Inactive - Needs Evaluation

HAZNET

DEPT OF TRANSPORTATION DIST 4 (Continued) **S112894450**

GEPAID CAC001479328

195
NNE
1/2-1
0.743 mi.
3925 ft.

Relative:
Lower

BELL METAL FABRICATORS **ENVIROSTOR** **S108054456**
2500 ADELINE **N/A**
OAKLAND, CA 94607

Click here for full text details

ENVIROSTOR
Status No Further Action
Facility Id 60000361

196
WNW
1/2-1
0.745 mi.
3933 ft.

Relative:
Lower

BATAVIA PROPERTY **ENVIROSTOR** **S102860821**
1832 9TH STREET **N/A**
OAKLAND, CA 94607

Click here for full text details

ENVIROSTOR
Status No Further Action
Facility Id 1990021

AT197
NNW
1/2-1
0.748 mi.
3952 ft.

Relative:
Lower

LDS TRUCKING **ENVIROSTOR** **S102008225**
2233 WOOD STREET **VCP** **N/A**
OAKLAND, CA 94607

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1420127

VCP
Facility Id 1420127
Status Certified

AU198
West
1/2-1
0.749 mi.
3953 ft.

Relative:
Lower

VACANT AUTO REPAIR **RESPONSE** **S116165245**
SHOREY STREET **ENVIROSTOR** **N/A**
OAKLAND, CA 94607 **CERS**

Click here for full text details

RESPONSE
Status No Further Action
Facility Id 1750020

ENVIROSTOR
Status No Further Action

VACANT AUTO REPAIR (Continued) **S116165245**

Facility Id 1750020

AT199
NNW
1/2-1
0.749 mi.
3953 ft.

Relative:
Lower

ARMY-NAVY DISTRIBUTING CENTER (J09CA0753) **ENVIROSTOR** **S109348517**
2233 WOOD STREET **N/A**
EMERYVILLE, CA 94608

Click here for full text details

ENVIROSTOR
Status No Further Action
Facility Id 80000374

AV200
West
1/2-1
0.749 mi.
3954 ft.

Relative:
Lower

OLD OAKLAND FIRE HOUSE 3 **ENVIROSTOR** **S113087267**
727 PINE STREET **VCP** **N/A**
OAKLAND, CA 94607 **HAZNET**

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1920064

VCP
Facility Id 1920064
Status Certified

HAZNET
GEPAID CAL000163017

AW201
North
1/2-1
0.750 mi.
3958 ft.

Relative:
Lower

TKG CALIFORNIA STORAGE **ENVIROSTOR** **S108936104**
2450 MANDELA PARKWAY **VCP** **N/A**
OAKLAND, CA 94607 **DEED**

Click here for full text details

ENVIROSTOR
Status Certified O&M - Land Use Restrictions Only
Facility Id 60000712

VCP
Facility Id 60000712
Status Certified O&M - Land Use Restrictions Only

DEED
Envirostor ID 60000712
Status CERTIFIED O&M - LAND USE RESTRICTIONS ONLY

AT202
NNW
1/2-1
0.758 mi.
4002 ft.

Relative:
Lower

BNSF WOOD STREET YARD
WOOD STREET & WEST GRAND AVENUE
OAKLAND, CA 94607

RESPONSE
ENVIROSTOR
HIST Cal-Sites
DEED

S106568694
N/A

Click here for full text details

RESPONSE
Status Certified O&M - Land Use Restrictions Only
AWP Facility Id 01400017
Facility Id 1400017

ENVIROSTOR
Status Certified O&M - Land Use Restrictions Only
Facility Id 1400017

DEED
Envirostor ID 1400017
Status CERTIFIED O&M - LAND USE RESTRICTIONS ONLY

AU203
West
1/2-1
0.770 mi.
4066 ft.

Relative:
Lower

B & A AUTO DISMANTLERS
1823 SHOREY STREET
OAKLAND, CA 94607

ENVIROSTOR
VCP

S102008243
N/A

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1500106

VCP
Facility Id 1500106
Status Certified

AW204
North
1/2-1
0.774 mi.
4087 ft.

Relative:
Lower

KANTOR WAREHOUSE
2525 MANDELA PARKWAY
OAKLAND, CA 94607

LUST
Alameda County CS
HIST CORTESE
Notify 65
CERS

U000057305
N/A

Click here for full text details

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-0849
Global Id T0600100783
date9 3/18/1996

Alameda County CS
Record Id RO0000623
Status Case Closed

HIST CORTESE

KANTOR WAREHOUSE (Continued) **U000057305**

Reg Id 01-0849

AV205
West
1/2-1
0.777 mi.
4100 ft.

Relative:
Lower

WILFRED'S AUTO WRECKING **ENVIROSTOR** **S102860807**
1834 7TH STREET **VCP** **N/A**
OAKLAND, CA 94607

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1500105

VCP
Facility Id 1500105
Status Certified

206
SSE
1/2-1
0.787 mi.
4156 ft.

Relative:
Lower

HOWARD MARINE TERMINAL SITE **RESPONSE** **S104735467**
EMBARCADERO WEST AND MARKET STREETS **ENVIROSTOR** **N/A**
OAKLAND, CA 94604 **HIST Cal-Sites**
DEED
Cortese

Click here for full text details

RESPONSE
Status Certified / Operation & Maintenance
Facility Id 1440006

ENVIROSTOR
Status Certified / Operation & Maintenance
Facility Id 1440006

DEED
Envirostor ID 1440006
Status CERTIFIED / OPERATION & MAINTENANCE

Cortese
Envirostor Id 1440006
Cleanup Status CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS

207
North
1/2-1
0.812 mi.
4287 ft.

Relative:
Lower

C. E. TOLAND & SON, INC. **LUST** **S100179299**
2635 PERALTA **Alameda County CS** **N/A**
OAKLAND, CA 92626 **HIST CORTESE**
Notify 65
CERS

Click here for full text details

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-0252

C. E. TOLAND & SON, INC. (Continued) **S100179299**

Global Id T0600100237
date9 3/29/1996

Alameda County CS
Record Id RO0000682
Status Case Closed

HIST CORTESE
Reg Id 01-0252

208
North
1/2-1
0.812 mi.
4288 ft.

Relative:
Lower

ARMY-NAVY DISTRIBUTING CENTER **FUDS** **1007211908**
N/A

OAKLAND, CA

Click here for full text details

209
SSW
1/2-1
0.817 mi.
4315 ft.

Relative:
Lower

SHEREX CHEMICAL COMPANY INC **SEMS-ARCHIVE** **1000356959**
1401 MIDDLE HARBOR RD **ENVIROSTOR** **CAD990788168**
OAKLAND, CA 94607 **CPS-SLIC**
SWEEPS UST
HIST UST
CA FID UST
RCRA NonGen / NLR
FINDS
ECHO
HIST CORTESE

Click here for full text details

SEMS-ARCHIVE
Site ID 0903629
EPA Id CAD990788168

ENVIROSTOR
Status Refer: Local Agency
Facility Id 1730096

CPS-SLIC
Facility Id 01S0085

SWEEPS UST
Comp Number 59372

HIST UST
Facility Id 00000059372

CA FID UST

SHEREX CHEMICAL COMPANY INC (Continued) **1000356959**

Facility Id 01002240
Status I

RCRA NonGen / NLR
EPA Id CAD990788168

FINDS
Registry ID: 110002903733

ECHO
Registry ID 110002903733

HIST CORTESE
Reg Id 01730096

AX210 **PHOENIX 766 PROPERTY** **ENVIROSTOR** **S102008190**
West **766 CEDAR** **VCP** **N/A**
1/2-1 **OAKLAND, CA 94607** **HIST CORTESE**
0.840 mi.
4433 ft.

Relative:
Lower

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1330036

VCP
Facility Id 1330036
Status Certified

HIST CORTESE
Reg Id 01330036

---

211 **PG & E OAKLAND POWER PLANT** **ENVIROSTOR** **S103177008**
SSE **50 MARTIN LUTHER KING** **LUST** **N/A**
1/2-1 **OAKLAND, CA 94607** **Alameda County CS**
0.843 mi. **AST**
4449 ft. **VCP**
DEED
Relative: **NPDES**
Lower **CIWQS**
CERS

Click here for full text details

ENVIROSTOR
Status Certified / Operation & Maintenance
Facility Id 1490020

LUST

PG & E OAKLAND POWER PLANT (Continued) **S103177008**

Facility Status Preliminary site assessment underway
Status Completed - Case Closed
Facility Id 01-1075
Global Id T0600100992

Alameda County CS
Record Id RO0000197
Status Leak Confirmation
Status Preliminary Site Assessment Underway
Status Pollution Characterization

VCP
Facility Id 1490020
Status Certified / Operation & Maintenance

DEED
Envirostor ID 1490020
Status CERTIFIED / OPERATION & MAINTENANCE

AY212
West
1/2-1
0.852 mi.
4500 ft.

Relative:
Lower

PHOENIX 524 PROPERTY **ENVIROSTOR** **S102008192**
524 CEDAR **VCP** **N/A**
OAKLAND, CA 94607 **HIST CORTESE**

Click here for full text details

ENVIROSTOR
Status Inactive - Needs Evaluation
Facility Id 1330038

VCP
Facility Id 1330038
Status Inactive - Needs Evaluation

HIST CORTESE
Reg Id 01330038

213
West
1/2-1
0.862 mi.
4552 ft.

Relative:
Lower

ALL WEATHER DOOR **ENVIROSTOR** **S102423862**
1851 5TH ST **LUST** **N/A**
OAKLAND, CA 94607 **Alameda County CS**
VCP
CHMIRS
Cortese
HIST CORTESE
CERS

Click here for full text details

ENVIROSTOR
Status Inactive - Needs Evaluation
Facility Id 1990013

LUST

ALL WEATHER DOOR (Continued) **S102423862**

Facility Status Preliminary site assessment underway
Status Open - Site Assessment
Facility Id 01-1713
Global Id T0600101584

Alameda County CS
Record Id RO0000192
Status Leak Confirmation
Status Preliminary Site Assessment Underway

VCP
Facility Id 1990013
Status Inactive - Needs Evaluation

CHMIRS
OES Incident Number 1-2794

Cortese
Cleanup Status OPEN - SITE ASSESSMENT

HIST CORTESE
Reg Id 01-1713

AY214
West
1/2-1
0.863 mi.
4557 ft.

Relative: Lower

CAL EAST FOODS
505 CEDAR ST
OAKLAND, CA 94607

Click here for full text details

ENVIROSTOR **S100931451**
LUST **N/A**
Alameda County CS
VCP
SWEEPS UST
HIST CORTESE
CERS

ENVIROSTOR
Status Certified
Facility Id 1510024

LUST
Facility Status Leak being confirmed
Status Completed - Case Closed
Facility Id 01-0214
Global Id T0600100200

Alameda County CS
Record Id RO0000306
Status Leak Confirmation
Status Preliminary Site Assessment Underway
Status Pollution Characterization
Status Verificaiton Monitoring Underway

VCP

CAL EAST FOODS (Continued) **S100931451**

Facility Id 1510024
Status Certified

SWEEPS UST
Comp Number 4923

HIST CORTESE
Reg Id 01510024
Reg Id 01-0214

AX215
West
1/2-1
0.865 mi.
4566 ft.

Relative: Lower

LIPS PROPELLERS **ENVIROSTOR** **S100938943**
1899 7TH **VCP** **N/A**
OAKLAND, CA 94607 **HIST CORTESE**

Click here for full text details

ENVIROSTOR
Status No Further Action
Facility Id 1350121

VCP
Facility Id 1350121
Status No Further Action

HIST CORTESE
Reg Id 01350121

216
NNE
1/2-1
0.868 mi.
4582 ft.

Relative: Lower

MARSHALL STEEL CLEANERS **LUST** **S100179268**
1229 28TH **Alameda County CS** **N/A**
OAKLAND, CA 94608 **HIST CORTESE**
Notify 65
CERS

Click here for full text details

LUST
Status Completed - Case Closed
Global Id T0600100047

Alameda County CS
Record Id RO0000978
Status Case Closed

HIST CORTESE
Reg Id 01-0053

AZ217
North
1/2-1
0.870 mi.
4596 ft.

Relative:
Lower

B & P DISMANTLERS
2525 WOOD STREET
OAKLAND, CA 94607

ENVIROSTOR
VCP
HIST CORTESE

S103951589
N/A

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1750017

VCP
Facility Id 1750017
Status Certified

HIST CORTESE
Reg Id 01750017

AZ218
North
1/2-1
0.875 mi.
4622 ft.

Relative:
Lower

RUSS ELLIOT, INC.
2526 WOOD STREET
OAKLAND, CA 94607

ENVIROSTOR

S118757103
N/A

Click here for full text details

ENVIROSTOR
Status No Action Required
Facility Id 60000363

BA219
NNE
1/2-1
0.876 mi.
4624 ft.

Relative:
Lower

CUSTOM ALLOY SCRAP SALES INC
2730 PERALTA ST
OAKLAND, CA 94607

ENVIROSTOR
LUST
WDS

S102428545
N/A

Click here for full text details

ENVIROSTOR
Status Active
Facility Id 60000374

LUST
Facility Status Pollution Characterization
Facility Id 01-0471

WDS
Facility Id 2 01I007363
Facility Status Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.

BA220
NNE
1/2-1
0.879 mi.
4642 ft.

Relative:
Lower

ALAMEDA CHEMICAL AND SCIENTIFIC
2668 HANNAH STREET
OAKLAND, CA 94608

ENVIROSTOR
HIST Cal-Sites

S102008173
N/A

Click here for full text details

ENVIROSTOR
Status Certified
Facility Id 1280089

221
WNW
1/2-1
0.895 mi.
4726 ft.

Relative:
Lower

OAKLAND ARMY BASE-EARLY TRANSFER
700 MURMANSK STREET, SUITE 3
OAKLAND, CA 94607

RESPONSE
ENVIROSTOR
HIST Cal-Sites
DEED

S106568695
N/A

Click here for full text details

RESPONSE
Status Active
AWP Facility Id 01970016
Facility Id 1970016

ENVIROSTOR
Status Active
Facility Id 1970016

DEED
Envirostor ID 1970016
Status ACTIVE

222
North
1/2-1
0.912 mi.
4817 ft.

Relative:
Lower

SOUTHERN PACIFIC - DESERT RAILYARD
CYPRESS CORRIDOR
OAKLAND, CA 94607

RESPONSE
ENVIROSTOR
HIST Cal-Sites
DEED
HIST CORTESE

S101272671
N/A

Click here for full text details

RESPONSE
Status Certified O&M - Land Use Restrictions Only
AWP Facility Id 01400009
Facility Id 1400009

ENVIROSTOR
Status Certified O&M - Land Use Restrictions Only
Facility Id 1400009

DEED
Envirostor ID 1400009
Status CERTIFIED O&M - LAND USE RESTRICTIONS ONLY

HIST CORTESE
Reg Id 01400009

SOUTHERN PACIFIC - DESERT RAILYARD (Continued) **S101272671**

Reg Id 01400010

BB223 **LINDFORD AIR & REFRIGERATION** **Notify 65** **S100453871**
NNE **2850 POPLAR** **N/A**
1/2-1 **OAKLAND, CA 94608**
0.914 mi.
4828 ft.

Relative:
Lower

Click here for full text details

BB224 **LINDFORD AIR & REFRIGERATION** **LUST** **S100453834**
NNE **2850 POPLAR** **Alameda County CS** **N/A**
1/2-1 **OAKLAND, CA 94608** **HIST UST**
0.914 mi. **HIST CORTESE**
4828 ft. **Notify 65**
CERS

Relative:
Lower

Click here for full text details

LUST
Status Completed - Case Closed
Global Id T0600100839

Alameda County CS
Record Id RO0000902
Status Case Closed

HIST CORTESE
Reg Id 01-0913

BC225 **CALIFORNIA DEPARTMENT OF TRANSPORTATION** **ENVIROSTOR** **S112840194**
North **2601 WOOD STREET** **VCP** **N/A**
1/2-1 **OAKLAND, CA 94607** **DEED**
0.920 mi. **HAZNET**
4855 ft.

Relative:
Lower

Click here for full text details

ENVIROSTOR
Status Certified O&M - Land Use Restrictions Only
Facility Id 1280090

VCP
Facility Id 1280090
Status Certified O&M - Land Use Restrictions Only

DEED
Envirostor ID 1280090
Status CERTIFIED O&M - LAND USE RESTRICTIONS ONLY

HAZNET

CALIFORNIA DEPARTMENT OF TRANSPORTATION (Continued) **S112840194**

GEPAID CAC000721768

226
NW
1/2-1
0.931 mi.
4914 ft.

Relative:
Lower

BUILDING 331 EAST **Notify 65** **S100179524**
7 MERRITIME **N/A**
OAKLAND, CA 92626

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BC227
North
1/2-1
0.933 mi.
4925 ft.

Relative:
Lower

PACIFIC OVERSEAS AIR SERVICE COMMAND STAGING AREA **FUDS** **1010309831**
N/A

OAKLAND, CA

Click here for full text details

228
North
1/2-1
0.935 mi.
4936 ft.

Relative:
Lower

PAC OVERSEA AIR SVCCOM **ENVIROSTOR** **S121263898**
2801 MANDELA PKWY **N/A**
OAKLAND, CA 94608

Click here for full text details

ENVIROSTOR
Status Inactive - Needs Evaluation
Facility Id 80000689

229
NNE
1/2-1
0.942 mi.
4973 ft.

Relative:
Lower

PERALTA **ENVIROSTOR** **S112953979**
2847 PERALTA STREET **VCP** **N/A**
OAKLAND, CA 94608 **HAZNET**
NPDES

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ENVIROSTOR
Status No Further Action
Facility Id 1750038

VCP
Facility Id 1750038
Status No Further Action

HAZNET
GEPAID CAC002604404

230
ENE
1/2-1
0.947 mi.
4999 ft.

Relative:
Higher

CHRIS AND GEORGE'S AUTO REPAIR
2520 WEST STREET
OAKLAND, CA 94607

ENVIROSTOR **S102810340**
N/A

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ENVIROSTOR
Status Refer: Local Agency
Facility Id 60000362

231
East
1/2-1
0.963 mi.
5084 ft.

Relative:
Higher

OAKLAND CITY HALL
#1 CITY HALL PLAZA
OAKLAND, CA 94612

RCRA-SQG **1000277317**
LUST **CAD980892004**
Alameda County CS
HIST CORTESE
Notify 65
CERS

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RCRA-SQG
EPA Id CAD980892004

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 01-1069
Global Id T0600100986
date9 2/21/1995

Alameda County CS
Record Id RO0000954
Status Case Closed

HIST CORTESE
Reg Id 01-1069

232
NE
1/2-1
0.968 mi.
5111 ft.

Relative:
Higher

ABC DRY CLEANERS
2701 SAN PABLO AVENUE
OAKLAND, CA 94607

ENVIROSTOR **U001599572**
HIST UST **N/A**
DRYCLEANERS
EMI

Click here for full text details

ENVIROSTOR
Status Inactive - Needs Evaluation
Facility Id 60000359

HIST UST
Facility Id 00000012154

DRYCLEANERS
EPA Id CAL000278713

EMI

ABC DRY CLEANERS (Continued) **U001599572**

Facility Id 3659

233
SE
1/2-1
0.969 mi.
5117 ft.

Relative:
Lower

PG AND E GAS PLANT OAKLAND **EDR MGP** **1008407725**
FIRST AND WASHINGTON **N/A**
OAKLAND, CA 94607

Click here for full text details

234
NNW
1/2-1
0.984 mi.
5197 ft.

Relative:
Lower

CITY OF OAKLAND - SUBARU LOT **RESPONSE** **S109034296**
WAKE AVENUE AND WEST GRAND AVENUE STREET **ENVIROSTOR** **N/A**
OAKLAND, CA 94607 **DEED**

Click here for full text details

RESPONSE
Status Certified O&M - Land Use Restrictions Only
Facility Id 80001227

ENVIROSTOR
Status Certified O&M - Land Use Restrictions Only
Facility Id 80001227

DEED
Envirostor ID 80001227
Status CERTIFIED O&M - LAND USE RESTRICTIONS ONLY

235
North
1/2-1
0.989 mi.
5224 ft.

Relative:
Lower

AT & SF RAILROAD PROPERTY **ENVIROSTOR** **S116165221**
ALONG WOOD & 32ND STREET **VCP** **N/A**
OAKLAND, CA 94607

Click here for full text details

ENVIROSTOR
Status Inactive - Needs Evaluation
Facility Id 1400005

VCP
Facility Id 1400005
Status Inactive - Needs Evaluation

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	AST	Aboveground Petroleum Storage Tank Facilities	California Environmental Protection Agency	07/06/2016	07/12/2016	09/19/2016
CA	BROWNFIELDS	Considered Brownfieds Sites Listing	State Water Resources Control Board	09/23/2019	09/24/2019	11/06/2019
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	06/30/2018	07/16/2019	09/24/2019
CA	CERS	CalEPA Regulated Site Portal Data	California Environmental Protection Agency	08/14/2019	08/14/2019	08/21/2019
CA	CERS HAZ WASTE	CERS HAZ WASTE	CalEPA	08/14/2019	08/14/2019	08/21/2019
CA	CERS TANKS	California Environmental Reporting System (CERS) Tanks	California Environmental Protection Agency	08/14/2019	08/14/2019	08/21/2019
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	05/15/2019	06/24/2019	08/21/2019
CA	CIWQS	California Integrated Water Quality System	State Water Resources Control Board	09/03/2019	09/04/2019	11/05/2019
CA	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	09/23/2019	09/24/2019	11/06/2019
CA	CPS-SLIC	Statewide SLIC Cases (GEOTRACKER)	State Water Resources Control Board	09/09/2019	09/09/2019	11/06/2019
CA	CUPA LIVERMORE-PLEASANTON	CUPA Facility Listing	Livermore-Pleasanton Fire Department	05/01/2019	05/14/2019	07/17/2019
CA	CUPA SAN FRANCISCO CO	CUPA Facility Listing	San Francisco County Department of Environmen	08/01/2019	08/02/2019	10/09/2019
CA	DEED	Deed Restriction Listing	DTSC and SWRCB	09/03/2019	09/04/2019	11/05/2019
CA	DRYCLEAN AVAQMD	Antelope Valley Air Quality Management District Drycleaner L	Antelope Valley Air Quality Management Distri	08/28/2019	08/30/2019	10/29/2019
CA	DRYCLEAN SOUTH COAST	South Coast Air Quality Management District Drycleaner Listi	South Coast Air Quality Management District	09/27/2019	10/01/2019	11/07/2019
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	06/04/2019	06/28/2019	08/22/2019
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2017	06/24/2019	08/22/2019
CA	ENF	Enforcement Action Listing	State Water Resoruces Control Board	07/19/2019	07/22/2019	09/26/2019
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	07/29/2019	07/31/2019	10/08/2019
CA	Financial Assurance 1	Financial Assurance Information Listing	Department of Toxic Substances Control	07/19/2019	07/23/2019	09/30/2019
CA	Financial Assurance 2	Financial Assurance Information Listing	California Integrated Waste Management Board	08/16/2019	08/20/2019	10/18/2019
CA	HAULERS	Registered Waste Tire Haulers Listing	Integrated Waste Management Board	03/26/2019	03/27/2019	04/30/2019
CA	HAZNET	Facility and Manifest Data	California Environmental Protection Agency	12/31/2017	05/29/2019	07/22/2019
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
CA	HIST CORTESE	Hazardous Waste & Substance Site List	Department of Toxic Substances Control	04/01/2001	01/22/2009	04/08/2009
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	08/19/2019	08/20/2019	10/18/2019
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	10/07/2019	10/08/2019	11/07/2019
CA	ICE	ICE	Department of Toxic Subsances Control	08/19/2019	08/20/2019	10/18/2019
CA	LDS	Land Disposal Sites Listing (GEOTRACKER)	State Water Qualilty Control Board	09/09/2019	09/09/2019	11/05/2019
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	08/29/2019	08/30/2019	10/29/2019
CA	LUST	Leaking Underground Fuel Tank Report (GEOTRACKER)	State Water Resources Control Board	09/09/2019	09/09/2019	10/31/2019
CA	LUST REG 1	Active Toxic Site Investigation	California Regional Water Quality Control Boa	02/01/2001	02/28/2001	03/29/2001
CA	LUST REG 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004
CA	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
CA	LUST REG 4	Underground Storage Tank Leak List	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	LUST REG 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
CA	LUST REG 6L	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	09/09/2003	09/10/2003	10/07/2003
CA	LUST REG 6V	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	06/07/2005	06/07/2005	06/29/2005
CA	LUST REG 7	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	02/26/2004	02/26/2004	03/24/2004
CA	LUST REG 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
CA	LUST REG 9	Leaking Underground Storage Tank Report	California Regional Water Quality Control Boa	03/01/2001	04/23/2001	05/21/2001
CA	MCS	Military Cleanup Sites Listing (GEOTRACKER)	State Water Resources Control Board	09/09/2019	09/09/2019	11/05/2019
CA	MILITARY PRIV SITES	Military Privatized Sites (GEOTRACKER)	State Water Resources Control Board	09/09/2019	09/09/2019	11/01/2019
CA	MILITARY UST SITES	Military UST Sites (GEOTRACKER)	State Water Resources Control Board	09/09/2019	09/09/2019	11/01/2019

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	MINES	Mines Site Location Listing	Department of Conservation	09/09/2019	09/09/2019	11/05/2019
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	07/19/2019	09/04/2019	11/05/2019
CA	NON-CASE INFO	Non-Case Information Sites (GEOTRACKER)	State Water Resources Control Board	09/09/2019	09/09/2019	11/01/2019
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	09/16/2019	09/18/2019	11/06/2019
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	08/12/2019	08/13/2019	10/16/2019
CA	OTHER OIL GAS	Other Oil & Gas Projects Sites (GEOTRACKER)	State Water Resources Control Board	09/09/2019	09/09/2019	11/01/2019
CA	PEST LIC	Pesticide Regulation Licenses Listing	Department of Pesticide Regulation	09/03/2019	09/04/2019	11/05/2019
CA	PFAS	PFAS Contamination Site Location Listing	State Water Resources Control Board	09/09/2019	09/09/2019	11/05/2019
CA	PROC	Certified Processors Database	Department of Conservation	09/09/2019	09/09/2019	11/05/2019
CA	PROD WATER PONDS	Produced Water Ponds Sites (GEOTRACKER)	State Water Resources Control Board	09/09/2019	09/09/2019	11/01/2019
CA	PROJECT	Project Sites (GEOTRACKER)	State Water Resources Control Board	09/09/2019	09/09/2019	11/01/2019
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	07/29/2019	07/31/2019	10/08/2019
CA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Resources Recycling and Recover		07/01/2013	01/13/2014
CA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	State Water Resources Control Board		07/01/2013	12/30/2013
CA	SAMPLING POINT	Sampling Point ? Public Sites (GEOTRACKER)	State Water Resources Control Board	09/09/2019	09/09/2019	11/01/2019
CA	SAN FRANCISCO AST	Aboveground Storage Tank Site Listing	San Francisco County Department of Public Hea	08/01/2019	08/02/2019	10/11/2019
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	07/29/2019	07/31/2019	10/08/2019
CA	SLIC REG 1	Active Toxic Site Investigations	California Regional Water Quality Control Boa	04/03/2003	04/07/2003	04/25/2003
CA	SLIC REG 2	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board San Fran	09/30/2004	10/20/2004	11/19/2004
CA	SLIC REG 3	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	05/18/2006	05/18/2006	06/15/2006
CA	SLIC REG 4	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Region Water Quality Control Board Los Angele	11/17/2004	11/18/2004	01/04/2005
CA	SLIC REG 5	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board Central	04/01/2005	04/05/2005	04/21/2005
CA	SLIC REG 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victorv	05/24/2005	05/25/2005	06/16/2005
CA	SLIC REG 7	SLIC List	California Regional Quality Control Board, Co	11/24/2004	11/29/2004	01/04/2005
CA	SLIC REG 8	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Region Water Quality Control Board	04/03/2008	04/03/2008	04/14/2008
CA	SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	09/10/2007	09/11/2007	09/28/2007
CA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	06/06/2012	01/03/2013	02/22/2013
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
CA	SWF/LF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	08/12/2019	08/13/2019	10/09/2019
CA	SWRCY	Recycler Database	Department of Conservation	09/09/2019	09/09/2019	11/07/2019
CA	TOXIC PITS	Toxic Pits Cleanup Act Sites	State Water Resources Control Board	07/01/1995	08/30/1995	09/26/1995
CA	UIC	UIC Listing	Deaprtment of Conservation	04/27/2018	06/13/2018	07/17/2018
CA	UIC GEO	Underground Injection Control Sites (GEOTRACKER)	State Water Resource Control Board	09/09/2019	09/09/2019	11/01/2019
CA	UST	Active UST Facilities	SWRCB	09/09/2019	09/09/2019	10/31/2019
CA	UST CLOSURE	Proposed Closure of Underground Storage Tank (UST) Cases	State Water Resources Control Board	09/06/2019	09/09/2019	10/31/2019
CA	UST MENDOCINO	Mendocino County UST Database	Department of Public Health	08/20/2019	09/09/2019	10/31/2019
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	07/29/2019	07/31/2019	10/08/2019
CA	WASTEWATER PITS	Oil Wastewater Pits Listing	RWQCB, Central Valley Region	05/08/2018	07/11/2018	09/13/2018
CA	WDR	Waste Discharge Requirements Listing	State Water Resources Control Board	09/09/2019	09/09/2019	11/06/2019
CA	WDS	Waste Discharge System	State Water Resources Control Board	06/19/2007	06/20/2007	06/29/2007
CA	WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)	State Water Resources Control Board	09/09/2019	09/09/2019	11/01/2019
CA	WIP	Well Investigation Program Case List	Los Angeles Water Quality Control Board	07/03/2009	07/21/2009	08/03/2009
CA	WMUDS/SWAT	Waste Management Unit Database	State Water Resources Control Board	04/01/2000	04/10/2000	05/10/2000
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	ABANDONED MINES	Abandoned Mines	Department of Interior	09/10/2019	09/10/2019	10/17/2019
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2015	02/22/2017	09/28/2017

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	01/12/2017	03/05/2019	11/11/2019
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	06/30/2019	07/16/2019	10/02/2019
US	CORRACTS	Corrective Action Report	EPA	06/24/2019	06/26/2019	10/17/2019
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/31/2018	07/26/2018	10/05/2018
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/01/2019	07/31/2019	10/24/2019
US	Delisted NPL	National Priority List Deletions	EPA	07/19/2019	07/30/2019	09/03/2019
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	07/06/2019	07/09/2019	10/02/2019
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/09/2019	09/09/2019	09/23/2019
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	04/03/2019	04/05/2019	05/14/2019
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	04/02/2018	04/11/2018	11/06/2019
US	FEMA UST	Underground Storage Tank Listing	FEMA	08/27/2019	08/28/2019	11/11/2019
US	FINDS	Facility Index System/Facility Registry System	EPA	05/03/2019	06/05/2019	09/03/2019
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	05/15/2019	05/21/2019	08/08/2019
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	08/19/2019	08/20/2019	11/11/2019
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	08/08/2017	09/11/2018	09/14/2018
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	06/24/2019	06/26/2019	09/23/2019
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	04/11/2019	07/29/2019	10/17/2019
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	04/16/2019	07/29/2019	10/17/2019
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	04/12/2019	07/29/2019	10/17/2019
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	04/08/2019	07/30/2019	10/17/2019
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	05/01/2019	07/29/2019	10/17/2019
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	07/02/2019	10/16/2019	10/24/2019
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	05/02/2019	10/22/2019	11/11/2019
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	04/08/2019	07/29/2019	10/17/2019
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	04/11/2019	07/30/2019	10/17/2019
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	04/16/2019	07/30/2019	10/17/2019
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	04/12/2019	07/29/2019	10/17/2019
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	04/08/2019	07/29/2019	10/17/2019
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	05/01/2019	07/29/2019	10/17/2019
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	05/02/2019	07/29/2019	10/17/2019
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	05/02/2019	10/22/2019	11/11/2019
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	04/08/2019	07/29/2019	10/17/2019

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	07/19/2019	07/30/2019	09/03/2019
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	07/30/2019	07/30/2019	09/03/2019
US	LUCIS	Land Use Control Information System	Department of the Navy	08/13/2019	08/20/2019	08/26/2019
US	MINES MRDS	Mineral Resources Data System	USGS	04/06/2018	10/21/2019	10/24/2019
US	MINES VIOLATIONS	MSHA Violation Assessment Data	DOL, Mine Safety & Health Admi	06/06/2019	06/06/2019	10/24/2019
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	06/20/2019	06/20/2019	08/08/2019
US	NPL	National Priority List	EPA	07/19/2019	07/30/2019	09/03/2019
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	03/20/2019	04/10/2019	05/14/2019
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	05/24/2017	11/30/2017	12/15/2017
US	PRP	Potentially Responsible Parties	EPA	08/20/2019	09/05/2019	09/23/2019
US	Proposed NPL	Proposed National Priority List Sites	EPA	07/19/2019	07/30/2019	09/03/2019
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/01/2019	07/01/2019	09/23/2019
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	06/24/2019	06/26/2019	10/17/2019
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	06/24/2019	06/26/2019	10/17/2019
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	06/24/2019	06/26/2019	10/17/2019
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	06/24/2019	06/26/2019	10/17/2019
US	RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditionall	Environmental Protection Agency	06/24/2019	06/26/2019	10/17/2019
US	RMP	Risk Management Plans	Environmental Protection Agency	04/25/2019	05/02/2019	05/23/2019
US	ROD	Records Of Decision	EPA	07/19/2019	07/30/2019	09/03/2019
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	SEMS	Superfund Enterprise Management System	EPA	07/19/2019	07/30/2019	09/03/2019
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	07/19/2019	07/30/2019	09/03/2019
US	SSTS	Section 7 Tracking Systems	EPA	09/30/2018	04/24/2019	08/08/2019
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2016	01/10/2018	01/12/2018
US	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/21/2017	01/05/2018
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	08/01/2019	08/21/2019	11/11/2019
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	06/03/2019	06/04/2019	08/26/2019
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	06/11/2019	06/13/2019	09/03/2019
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	08/19/2019	08/20/2019	08/26/2019
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	06/24/2019	06/26/2019	09/23/2019
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	06/11/2019	06/13/2019	09/03/2019
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	08/19/2019	08/20/2019	08/26/2019
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	08/01/2019	08/27/2019	11/11/2019
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	12/05/2005	02/29/2008	04/18/2008
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	UXO	Unexploded Ordnance Sites	Department of Defense	12/31/2017	01/17/2019	04/01/2019

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	05/14/2019	05/14/2019	08/05/2019
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2018	04/10/2019	05/16/2019
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	01/01/2019	05/01/2019	06/21/2019
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	06/30/2018	07/19/2019	09/10/2019
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2017	02/23/2018	04/09/2018
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	05/31/2018	06/19/2019	09/03/2019
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
CA	Daycare Centers	Sensitive Receptor: Licensed Facilities	Department of Social Services			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
CA	State Wetlands	Wetland Inventory	Department of Fish and Wildlife			
US	Topographic Map		U.S. Geological Survey			
US	Oil/Gas Pipelines		Endeavor Business Media			
US	Electric Power Transmission Line Data		Endeavor Business Media			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

OUSD CENTRAL ADMINISTRATIVE CENTER
1011 UNION STREET
OAKLAND, CA 94607

TARGET PROPERTY COORDINATES

Latitude (North):	37.807958 - 37° 48' 28.65''
Longitude (West):	122.289605 - 122° 17' 22.58''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	562535.1
UTM Y (Meters):	4184540.2
Elevation:	20 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5641112 OAKLAND WEST, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

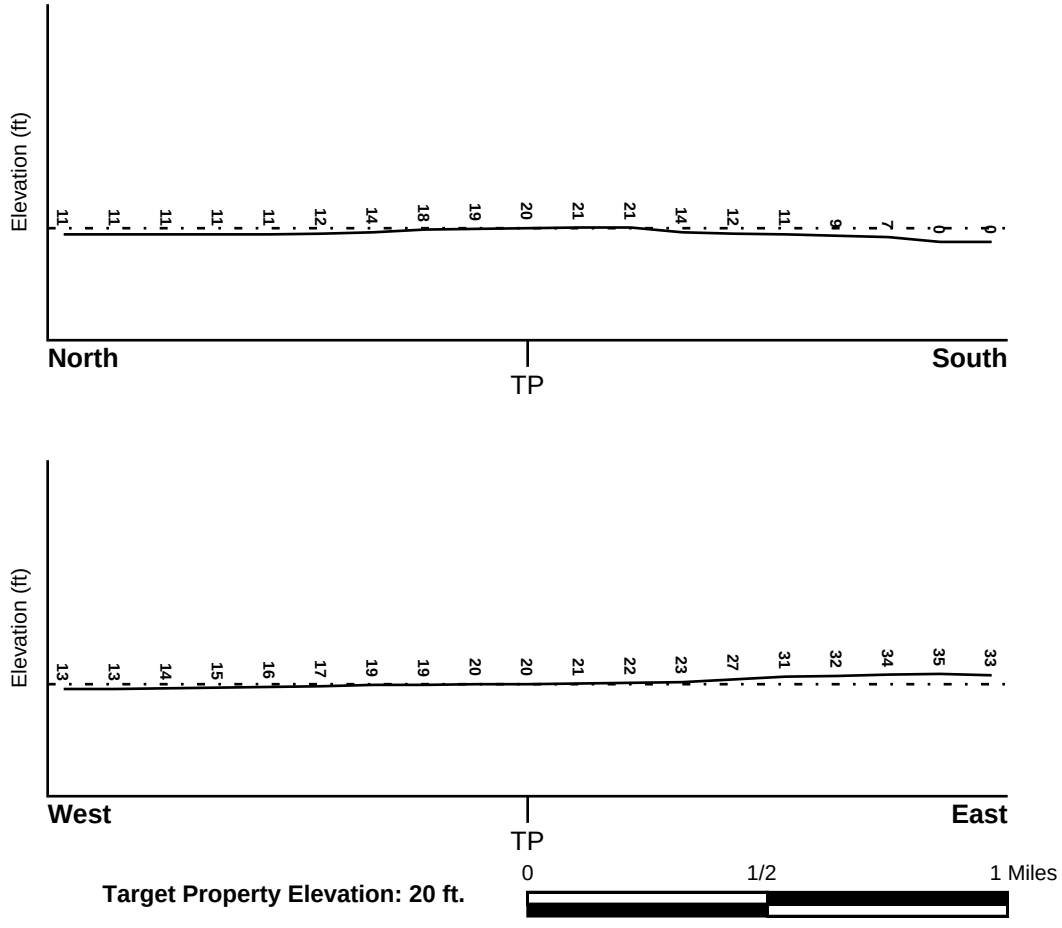
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06001C0066G	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06001C0058G	FEMA FIRM Flood data
06001C0059G	FEMA FIRM Flood data
06001C0067G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
OAKLAND WEST	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
A1	1/8 - 1/4 Mile NNE	Not Reported
A2	1/8 - 1/4 Mile NNE	Not Reported
A3	1/8 - 1/4 Mile North	N, S
A4	1/8 - 1/4 Mile North	NE
5	1/4 - 1/2 Mile NNW	SW
6	1/4 - 1/2 Mile WNW	NE, SE, S

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
B7	1/4 - 1/2 Mile SSE	S
B8	1/4 - 1/2 Mile SSE	SE,S,Varies
B9	1/4 - 1/2 Mile SSE	SE,S,Varies
C10	1/4 - 1/2 Mile North	W
C11	1/4 - 1/2 Mile North	W
C12	1/4 - 1/2 Mile North	W
D13	1/4 - 1/2 Mile North	SSW
D14	1/4 - 1/2 Mile North	N
15	1/4 - 1/2 Mile South	N
D16	1/4 - 1/2 Mile North	NW
D17	1/4 - 1/2 Mile North	NW
D18	1/4 - 1/2 Mile North	NW
19	1/2 - 1 Mile West	N, E, S, W
E20	1/2 - 1 Mile NNE	S
E21	1/2 - 1 Mile NNE	S
E22	1/2 - 1 Mile NNE	S
23	1/2 - 1 Mile NW	Not Reported
24	1/2 - 1 Mile SW	SW
F25	1/2 - 1 Mile South	SW
F26	1/2 - 1 Mile South	SW
27	1/2 - 1 Mile NNE	W
28	1/2 - 1 Mile North	SE
29	1/2 - 1 Mile NNE	NE
G30	1/2 - 1 Mile ENE	Varies
31	1/2 - 1 Mile North	E, W
32	1/2 - 1 Mile ESE	S
G33	1/2 - 1 Mile ENE	NE
34	1/2 - 1 Mile East	E
H35	1/2 - 1 Mile ENE	SW
H36	1/2 - 1 Mile ENE	SW
H37	1/2 - 1 Mile ENE	SW
I38	1/2 - 1 Mile North	SW
I39	1/2 - 1 Mile North	SE
40	1/2 - 1 Mile NNE	SW
41	1/2 - 1 Mile West	E
42	1/2 - 1 Mile North	S
1G	1/2 - 1 Mile North	S
2G	1/2 - 1 Mile North	SE
3G	1/2 - 1 Mile North	SW
4G	1/2 - 1 Mile NNE	SW
5G	1/2 - 1 Mile North	E, W
6G	1/2 - 1 Mile NNE	NE
7G	1/2 - 1 Mile North	SE
8G	1/2 - 1 Mile NNE	W
9G	1/2 - 1 Mile ENE	SW
10G	1/2 - 1 Mile ENE	SW
11G	1/2 - 1 Mile ENE	SW
12G	1/2 - 1 Mile NNE	S
13G	1/2 - 1 Mile NNE	S
14G	1/2 - 1 Mile NNE	S
15G	1/4 - 1/2 Mile North	NW
16G	1/4 - 1/2 Mile North	NW
17G	1/4 - 1/2 Mile North	NW
18G	1/4 - 1/2 Mile North	SSW
19G	1/4 - 1/2 Mile North	N
20G	1/4 - 1/2 Mile North	W

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
21G	1/4 - 1/2 Mile North	W
22G	1/4 - 1/2 Mile North	W
23G	1/2 - 1 Mile NW	Not Reported
24G	1/2 - 1 Mile ENE	NE
25G	1/2 - 1 Mile ENE	Varies
26G	1/4 - 1/2 Mile NNW	SW
27G	1/8 - 1/4 Mile North	N, S
28G	1/8 - 1/4 Mile North	NE
29G	1/8 - 1/4 Mile NNE	Not Reported
30G	1/8 - 1/4 Mile NNE	Not Reported
31G	1/4 - 1/2 Mile WNW	NE, SE, S
32G	1/2 - 1 Mile West	N, E, S, W
33G	1/2 - 1 Mile West	E
34G	1/2 - 1 Mile East	E
35G	1/2 - 1 Mile ESE	S
36G	1/2 - 1 Mile SW	SW
37G	1/4 - 1/2 Mile SSE	S
38G	1/4 - 1/2 Mile SSE	SE,S,Varies
39G	1/4 - 1/2 Mile SSE	SE,S,Varies
40G	1/4 - 1/2 Mile South	N
41G	1/2 - 1 Mile South	SW
42G	1/2 - 1 Mile South	SW

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

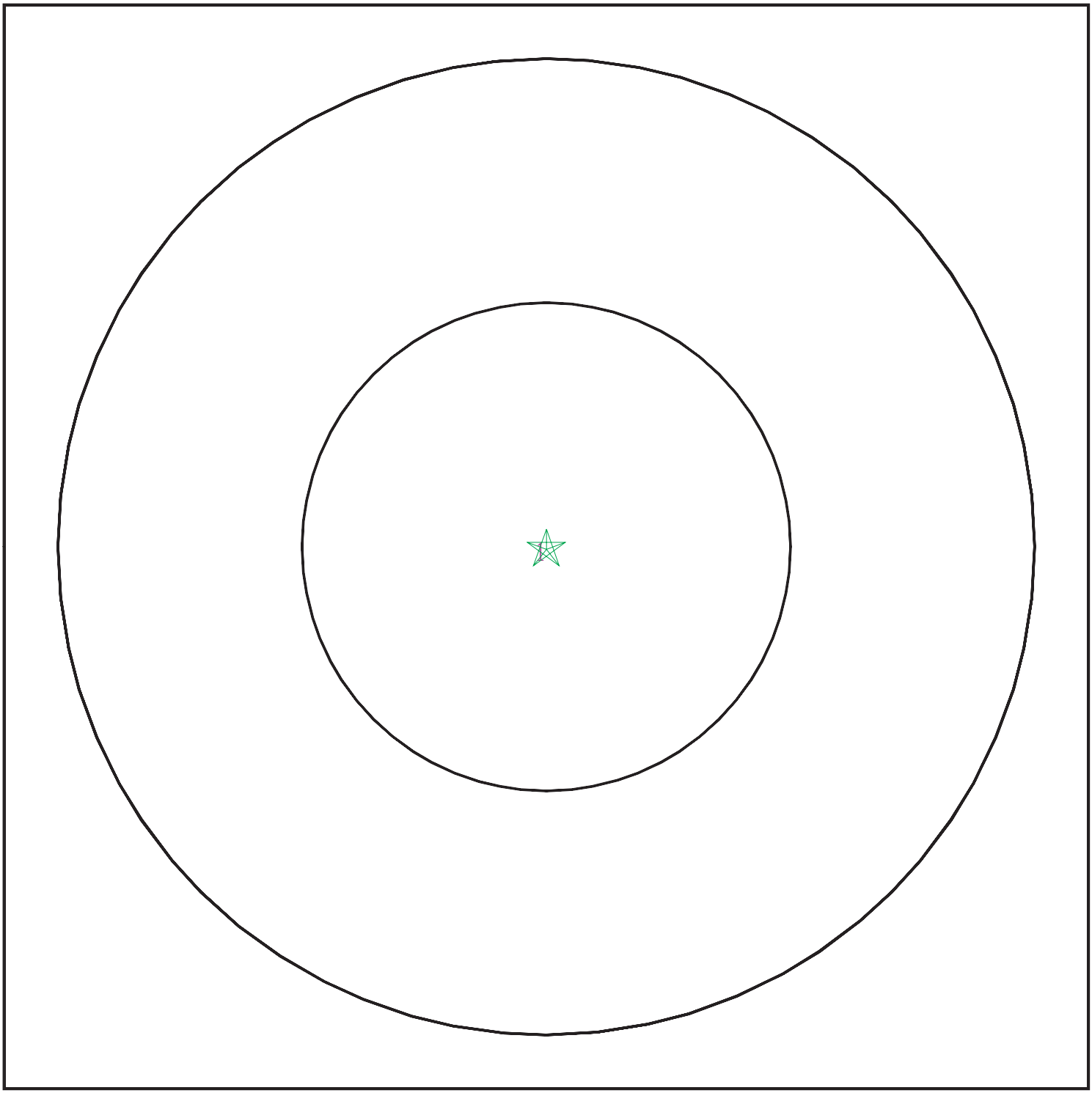
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5871762.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	OUSD Central Administrative Center	CLIENT:	Ninyo & Moore
ADDRESS:	1011 Union Street Oakland CA 94607	CONTACT:	Luke Swickard
LAT/LONG:	37.807958 / 122.289605	INQUIRY #:	5871762.2s
		DATE:	November 15, 2019 1:50 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Urban land

Soil Surface Texture:
Hydrologic Group: Not reported

Soil Drainage Class:
Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

No PWS System Found

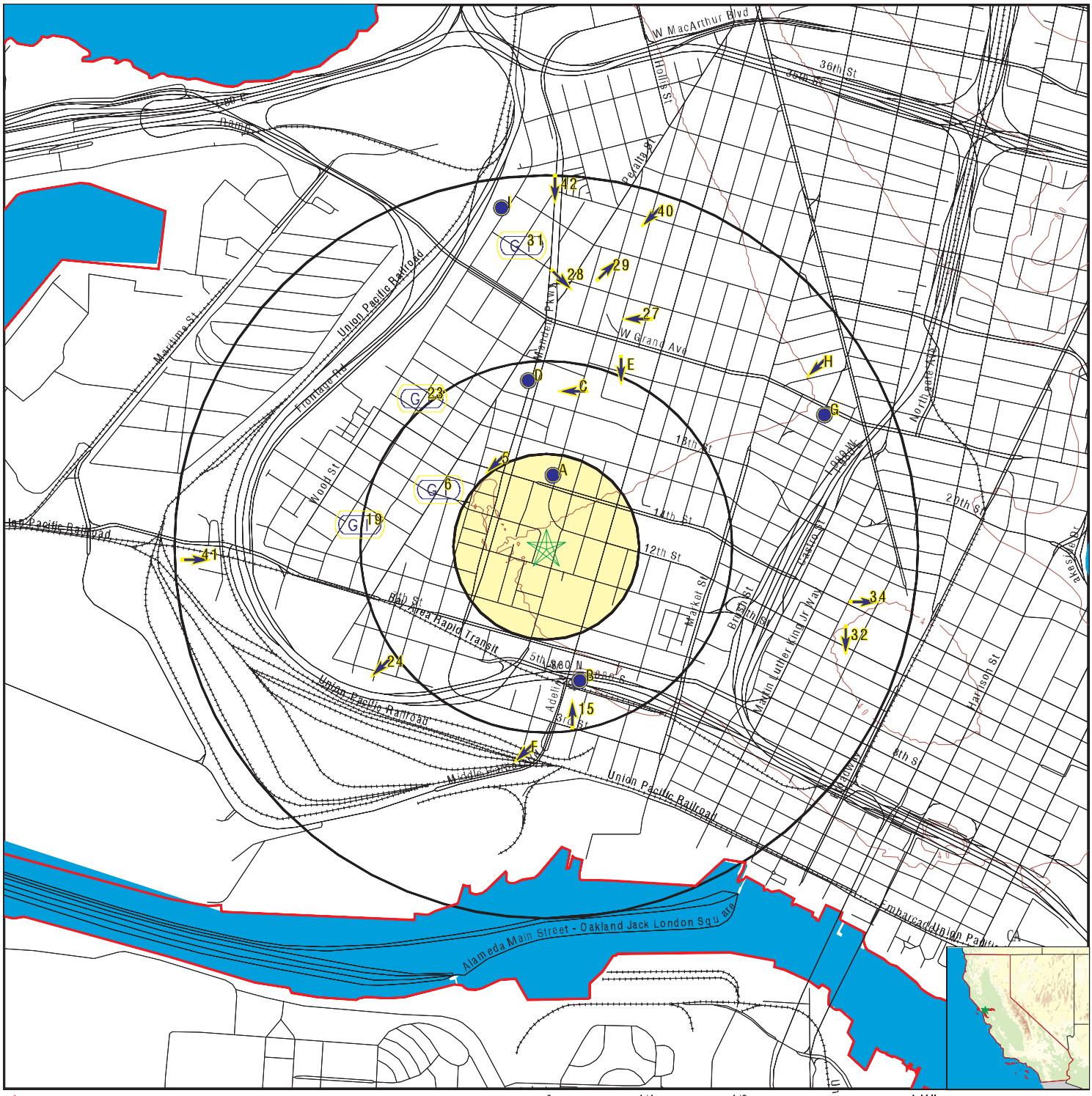
Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

No Wells Found

PHYSICAL SETTING SOURCE MAP - 5871762.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	OUSD Central Administrative Center	CLIENT:	Ninyo & Moore
ADDRESS:	1011 Union Street Oakland CA 94607	CONTACT:	Luke Swickard
		INQUIRY #:	5871762.2s
LAT/LONG:	37.807958 / 122.289605	DATE:	November 15, 2019 1:49 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **NNE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55972**
A2 **NNE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55973**
A3 **North** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55976**
A4 **North** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55977**
5 **NNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55988**
6 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55880**
B7 **SSE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**AQUIFLOW**	**55794**
B8 **SSE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**AQUIFLOW**	**55795**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B9 **SSE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**AQUIFLOW**	**55793**
C10 **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55823**
C11 **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55821**
C12 **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55822**
D13 **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55941**
D14 **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55940**
15 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**63819**
D16 **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55981**
D17 **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55982**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D18 **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55983**
19 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55917**
E20 **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55953**
E21 **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55954**
E22 **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55955**
23 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55883**
24 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55989**
F25 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55984**
F26 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55985**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
27 **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**63895**
28 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**63941**
29 **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**64082**
G30 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**AQUIFLOW**	**51332**
31 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55923**
32 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**AQUIFLOW**	**55975**
G33 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**AQUIFLOW**	**51546**
34 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**AQUIFLOW**	**51544**
H35 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**AQUIFLOW**	**51336**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
H36 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**AQUIFLOW**	**51337**
H37 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**AQUIFLOW**	**51338**
I38 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**63936**
I39 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**64099**
40 **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55970**
41 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**67911**
42 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**63624**
1G **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**63624**
2G **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**64099**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
3G **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**63936**
4G **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55970**
5G **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55923**
6G **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**64082**
7G **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**63941**
8G **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**63895**
9G **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**51336**
10G **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**51337**
11G **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**51338**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
12G **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55953**
13G **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55954**
14G **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55955**
15G **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55981**
16G **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55982**
17G **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55983**
18G **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55941**
19G **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55940**
20G **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55823**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
21G **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55821**
22G **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55822**
23G **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55883**
24G **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**51546**
25G **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**51332**
26G **NNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55988**
27G **North** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55976**
28G **North** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55977**
29G **NNE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55972**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
30G **NNE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55973**
31G **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55880**
32G **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55917**
33G **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**67911**
34G **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**51544**
35G **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55975**
36G **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55989**
37G **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55794**
38G **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**55795**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
39G **SSE** **1/4 - 1/2 Mile** **Lower**	**Click here for full text details**	**AQUIFLOW**	**55793**
40G **South** **1/4 - 1/2 Mile** **Lower**	**Click here for full text details**	**AQUIFLOW**	**63819**
41G **South** **1/2 - 1 Mile** **Lower**	**Click here for full text details**	**AQUIFLOW**	**55984**
42G **South** **1/2 - 1 Mile** **Lower**	**Click here for full text details**	**AQUIFLOW**	**55985**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94607	3	0

Federal EPA Radon Zone for ALAMEDA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for ALAMEDA COUNTY, CA

Number of sites tested: 49

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.776 pCi/L	100%	0%	0%
Living Area - 2nd Floor	-0.400 pCi/L	100%	0%	0%
Basement	1.338 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Appendix D:

SITE DOCUMENTATION AND REGULATORY RECORDS

A·C·C
ENVIRONMENTAL
CONSULTANTS

October 12, 1998

Mr. Tadashi Nakadegawa
Oakland Unified School District
Facilities Management
955 High Street
Oakland, California 94601

Re: Underground Storage Tank Closure Report
Cole Elementary School, 1011 Union Street, Oakland, California
School No 109, *ACC Project No. 97-6287-006.01* 94607

Dear Mr. Nakadegawa:

Enclosed please find one original and one copy of the underground storage tank (UST) closure report for the former heating oil UST located at Cole Elementary School, Oakland, California (Figure 1B). A copy of this report is being forwarded to Mr. Leroy Griffin of the Oakland Fire Services Agency (OFSA) on your behalf.

BACKGROUND

One 2,000-gallon heating oil UST was located beneath the concrete pavement adjacent to 10th Street, next to the sidewalk. The UST was previously used to store heating oil for the boilers on site. The UST was removed because it is no longer used and not in compliance with current regulations. Upon inspection, the UST contained a minimum of 2,000 gallons of heating oil. Figure 2C illustrates the location of the former UST.

OBSERVATIONS

Before performing any field activities, appropriate permits were obtained and the OFSA was notified. The UST removal and backfill work was performed by state licensed contractor Accutite Environmental Engineering (Accutite) under contractor's license number 643881, in accordance with regulatory requirements. ACC documented the subsurface work during the UST removal and closure procedures. The work was observed by Mr. Leroy Griffin of the OFSA.

FIELD ACTIVITIES

Prior to the UST removal, approximately 2,000 gallons of product were pumped from the UST. The top of the UST and product lines were found approximately 6.0 feet below ground surface (bgs). The bottom of the UST sat at a depth of approximately 11.0 feet bgs.

On August 21, 1998, personnel from Accutite added approximately 40 pounds of dry ice to inert the UST prior to removal. The lower explosion limit and the percent oxygen of the UST were determined using a GasTech combustible gas indicator calibrated to Hexane. Mr. Griffin of the

OFSA witnessed the GasTech inspection. When the vapors within the UST were less than 10 percent of the lower explosion limit and upon OFSA approval, the UST was removed with the use of an excavator.

Upon removal, the UST was found to be constructed of single-walled riveted steel and in poor condition. The UST was observed to be rusty with multiple, small holes. The UST was loaded onto a truck and hauled by Erickson, Inc., Richmond, California under manifest number 96633311 for disposal. A copy of the UST manifest is attached. Once transported to the Erickson facility, the UST was cleaned and rendered harmless.

The soil observed within the excavation consisted of sand. During removal of the UST, no indications of impact (i.e., odor or discoloration) were observed in the soil in the excavation.

After removal of the UST, two soil samples were collected at the approximate location of the UST fill port at 11.0 feet bgs, the approximate elevation of the bottom of the former UST. Sample 109-T1F-11.0 was collected from the sidewall of the tank, as was sample 109-T1-11.0. During the UST removal, approximately 100 cubic yards of soil were generated and stockpiled on site and covered with plastic sheeting. Samples 109-SP (A,B) and 109-SP (C,D) were taken from the stockpiled soil. The samples were submitted to Chromalab, Inc. (Chromalab), a state-certified analytical laboratory following chain of custody protocol.

After collection, all samples were immediately covered with Teflon® tape and tight fitting plastic end caps, labeled, and submitted to Chromalab, Inc. The soil samples were analyzed in accordance with the sampling protocol approved by the OFSA. The analyses included total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015M and benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method SW846 8020A Nov 1990 . Laboratory analytical results are summarized in Table 1. A copy of the laboratory analytical results and chain of custody record is attached.

TABLE 1 - SOIL SAMPLE ANALYTICAL RESULTS

Sample No.	TPHd (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)
109-T1F-11.0	1.4	<0.005	<0.005	<0.005	<0.005
109-T1-11.0	<1.0	<0.005	<0.005	<0.005	<0.005
109-SP (A-D)	<1.0	<0.005	<0.005	<0.005	0.016

Notes: mg/kg = milligrams per kilogram = ppm = parts per million

CONCLUSIONS

ACC observed that existing concrete sidewalk adjacent to the UST was thin (approximately 2 inches), of poor quality, and easily damaged. Concrete damage occurred during UST removal work that could not have been anticipated and was not due to negligence by the Contractor. Consequently, additional concrete pavement required replacement to properly restore the site.

During removal, the UST was found to be in poor condition with numerous visible holes; however, indications of petroleum hydrocarbons were not observed in the soil. Analytical results of the soil samples collected from under the former UST and from soil removed from the excavation indicated low detectable concentrations of petroleum hydrocarbons above the reporting limits.

Due to field observations and the lack of significant concentrations of constituents reported in the soil samples, no subsurface impact from underground storage of petroleum hydrocarbons is apparent. Based on the findings, observations, and analytical results, no further investigation with regards to the former UST is warranted.

If you have any questions, please feel free to contact me at (510) 638-8400.

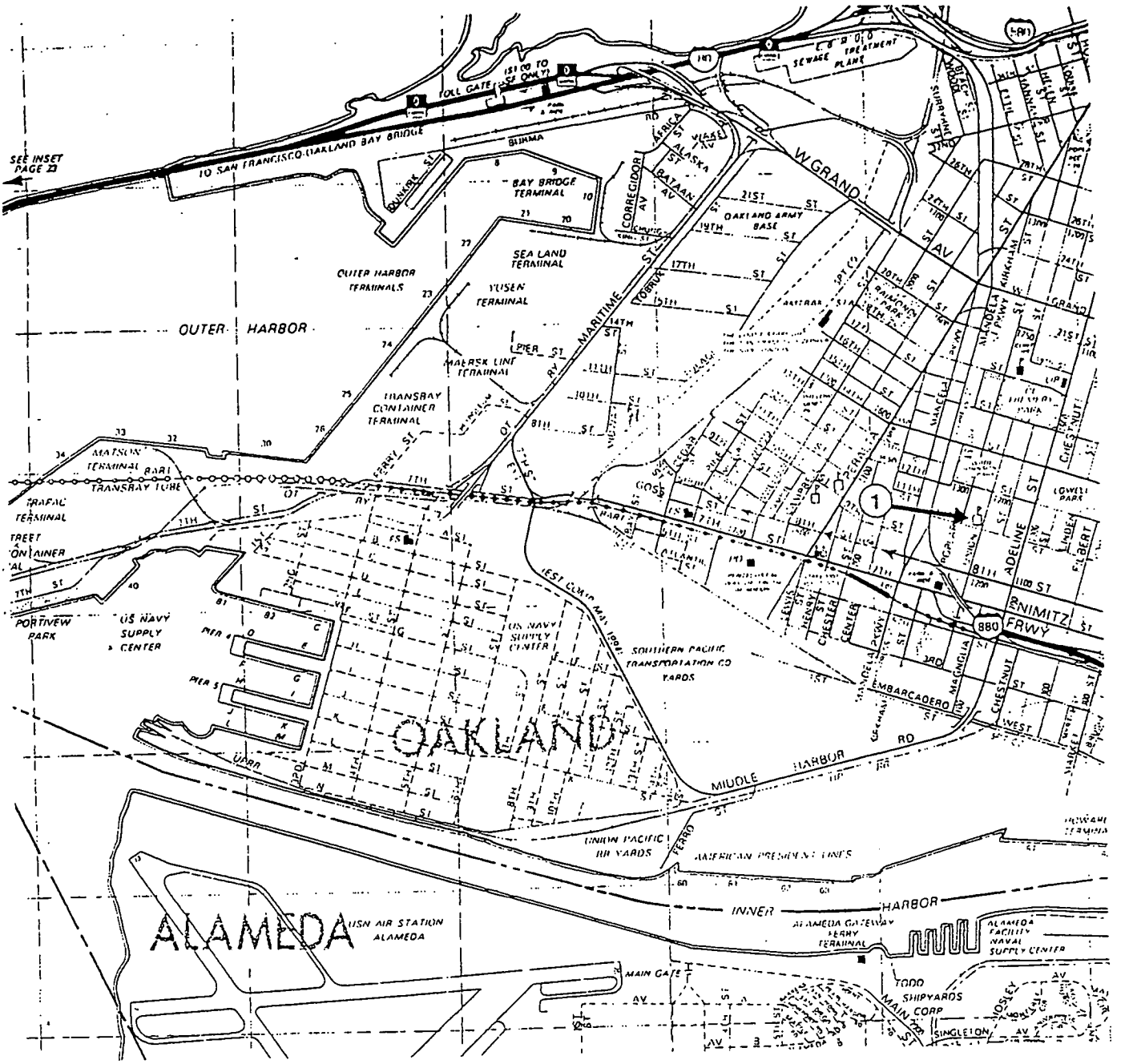
Sincerely,

David R. DeMent, RG
Senior Geologist

/abp:drd

Attachments

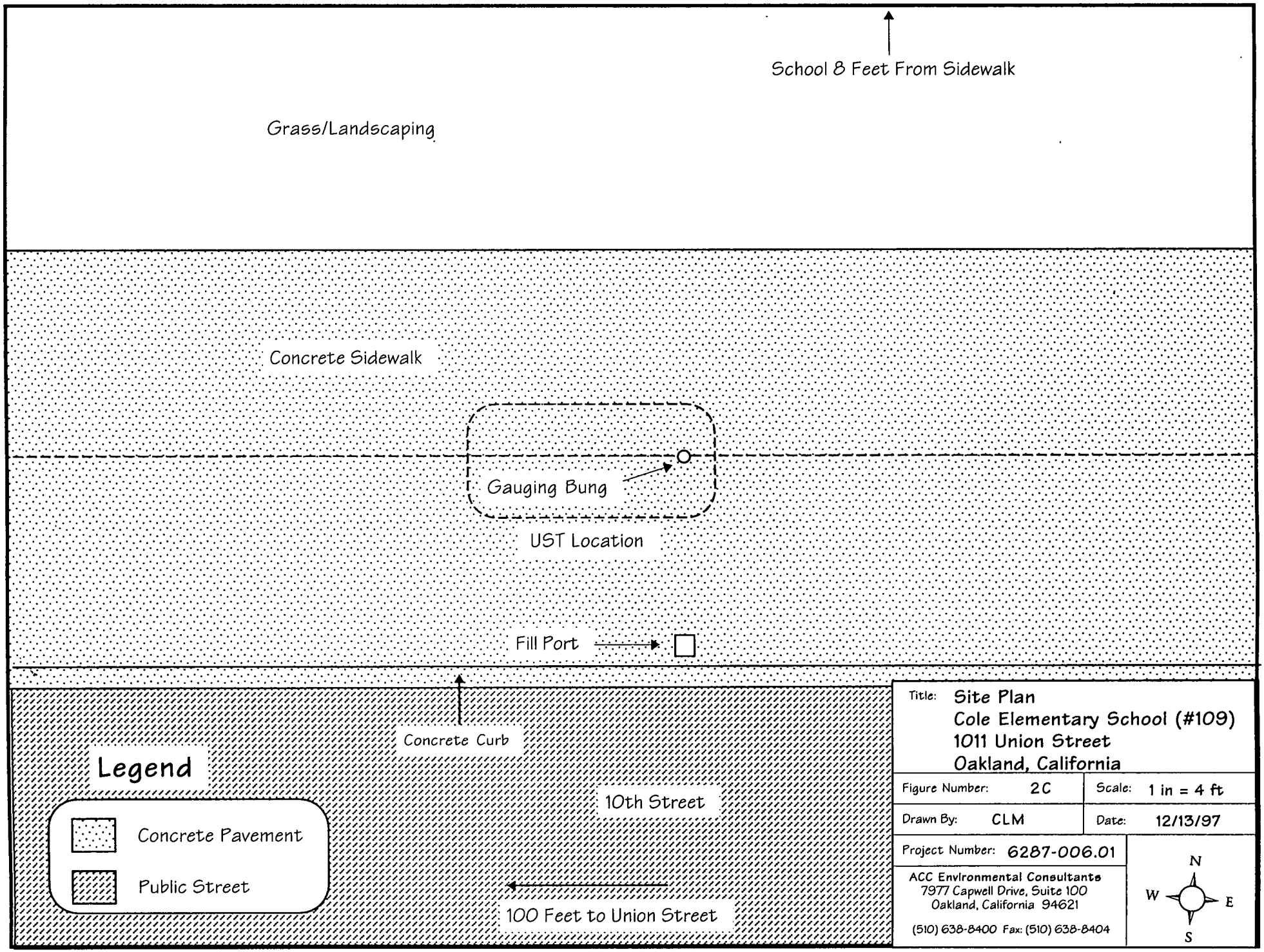
cc: Mr. Leroy Griffin, OFSA



LEGEND

(1) - Cole Elementary School

Title: Location Map Various Schools Oakland Unified School District Oakland, California	
Figure Number: 1B	Scale: 1 in = 1/2 mile
Project Number: 6287-006.01	Drawn By: CLM
A·C·C ENVIRONMENTAL CONSULTANTS	Date: 12/22/97
7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax: (510) 638-8404	N W E S


School 8 Feet From Sidewalk
Grass/Landscaping
Concrete Sidewalk
Gauging Bung
UST Location
Fill Port
Concrete Curb
Legend
Concrete Pavement
Public Street
10th Street
100 Feet to Union Street
Title: Site Plan
Cole Elementary School (#109)
1011 Union Street
Oakland, California
Figure Number: 2C
Scale: 1 in = 4 ft
Drawn By: CLM
Date: 12/13/97
Project Number: 6287-006.01
ACC Environmental Consultants
7977 Capwell Drive, Suite 100
Oakland, California 94621
(510) 638-8400 Fax: (510) 638-8404
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CHROMALAB, INC.

Environmental Services (SDB)

August 31, 1998 *Submission #:* 9808349

ACC ENVIRONMENTAL CONSULTANTS

Attn: David DeMent

Project: OAKLAND SCHOOLS *Project#:* 6287-006.00
Received: August 24, 1998

Re: 9 samples for TPH - Diesel analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* August 27, 1998
Sampled: August 21, 1998 *Run#:* 14538 *Analyzed:* August 27, 1998

Spl#	CLIENT SPL ID	DIESEL (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
202560	109-SP-A,B,C,D	N.D.	1.0	N.D.	80.6	1
202561	151-SP-A,B	N.D.	1.0	N.D.	80.6	1
202562	151-T1F-8.0	N.D.	1.0	N.D.	80.6	1

Matrix: SOIL *Extracted:* August 27, 1998
Sampled: August 21, 1998 *Run#:* 14538 *Analyzed:* August 28, 1998

Spl#	CLIENT SPL ID	DIESEL (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
202555	139-T1F-12.0	N.D.	1.0	N.D.	80.6	1
202558	109-T1-11.0	N.D.	1.0	N.D.	80.6	1

Matrix: SOIL *Extracted:* August 27, 1998
Sampled: August 21, 1998 *Run#:* 14538 *Analyzed:* August 29, 1998

Spl#	CLIENT SPL ID	DIESEL (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
202556	109-T1F-11.0	1.4	1.0	N.D.	80.6	1
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.					
202559	139-SP-A,B,C,D	5.1	1.0	N.D.	80.6	1
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.Surrogate Recoveries biased high due to Hydrocarbon co-elution.					

Matrix: SOIL *Extracted:* August 27, 1998
Sampled: August 21, 1998 *Run#:* 14538 *Analyzed:* August 31, 1998

Spl#	CLIENT SPL ID	DIESEL (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
202557	139-T1-12.0	27	1.0	N.D.	80.6	1
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.Surrogate Recoveries biased high due to Hydrocarbon co-					

CHROMALAB, INC.

Environmental Services (SDB)

August 31, 1998

Submission #: 9808349

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: OAKLAND SCHOOLS
Project#: 6287-006.00
Received: August 24, 1998

re: One sample for BTEX analysis.
Method: SW846 8020A Nov 1990

Client Sample ID: 109-T1F-11.0
Sol#: 202556 *Matrix:* SOIL
Sampled: August 21, 1998 *Run#:*14508 *Analyzed:* August 25, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BENZENE	N.D.	0.0050	N.D.	99	1
TOLUENE	N.D.	0.0050	N.D.	95	1
ETHYL BENZENE	N.D.	0.0050	N.D.	99	1
XYLENES	N.D.	0.0050	N.D.	97	1

Vincent Vancil
Analyst

Michael Verona
Operations Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

PM V132 O:BTEXQC0220
VINCE 10:24

CHROMALAB, INC.

Environmental Services (SDB)

August 31, 1998 *Submission #:* 9808349

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: OAKLAND SCHOOLS *Project#:* 6287-006.00
Received: August 24, 1998

re: One sample for BTEX analysis.
Method: SW846 8020A Nov 1990

Client Sample ID: **109-SP-A,B,C,D**
Sol#: 202560 *Matrix:* SOIL
Sampled: August 21, 1998 *Run#:*14508 *Analyzed:* August 25, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BENZENE	N.D.	0.0050	N.D.	99	1
TOLUENE	N.D.	0.0050	N.D.	95	1
ETHYL BENZENE	N.D.	0.0050	N.D.	99	1
XYLENES	0.016	0.0050	N.D.	97	1

Vincent Vancil
Analyst

Michael Verona
Operations Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1098
Federal ID #68-0140157

PM V132 Q:BTEXQC0220
VINCE 10:24

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
	7710473056		

GENERATOR

3. Generator's Name and Mailing Address	A. State Manifest Document Number
455 [illegible] Street [illegible], CA 4. Generator's Phone ( )	96633311
	B. State Generator's ID
5. Transporter 1 Company Name / 6. US EPA ID Number	C. State Transporter's ID
TRIDENT TRUCK LINE / CAD982484370	D. Transporter's Phone 510 783 2881
7. Transporter 2 Company Name / 8. US EPA ID Number	E. State Transporter's ID
	F. Transporter's Phone
9. Designated Facility Name and Site Address / 10. US EPA ID Number	G. State Facility's ID
ERICKSON INC. 255 PARR BLVD RICHMOND, CA 94801 / CAD009466392	H. Facility's Phone 510-235-1393

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. WASTE EMPTY STORAGE TANK Non-RCRA hazardous waste solid	001	TP	023504	P	State 512 EPA/Other NONE
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above

QTY. 1 EMPTY STORAGE TANK(S) # 23642

_____ TANK(S) HAVE BEEN INERTED WITH

15 LBS DRY ICE PER 1000 GALLONS CAPACITY.

K. Handling Codes for Wastes Listed Above

a. | b. | c. | d.

15. Special Handling Instructions and Additional Information

Wear appropriate protective clothing when handling. SITE LOCATION: Cole Elementary

24 Hour Emergency Telephone Number:

24 Hour Emergency Contact: ERG 171

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
				98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name: SB SCHMA	Signature: [signature]	Month: 08	Day: 21	Year: 98
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

96633311

DTSC 8022A (4/97)
EPA 8700—22

Yellow: GENERATOR RETAINS

-- Attach a non-image file and/or reply ABOVE THIS LINE with a message, and it will be sent to staff on this request. --

Oakland, CA Public Records

Hi there

A message was sent to you regarding record request #19-6040:

Please contact Alameda County Dept. of Environmental Health regarding hazardous materials (CUPA) records at http://www.acgov.org/aceh/hazard/cupa-file-review-request.htm On 6/30/15, Oakland Fire Dept. regulation of hazardous materials facilities and CUPA records were transferred to Alameda County.

The Fire Prevention Bureau will search for tank records.

View Request 19-6040

http://oaklandca.nextrequest.com/requests/19-6040

Site Name: Cole

Site Address: 1011 Union Street, Oakland CA 94607

Type of Business: Education

Current Owner: Oakland Unified School District

Dates of Ownership: 1875(1 thru 16) to present

Previous Owner: John and Ellen Scott (initial parcels (1 thru 16))

Dates of Ownership: unknown to 1875

Type(s) of Business: unknown

Date of Original Construction of Site Building(s): 1878 (demolished); 1925 (rebuilt 1936)

BACKGROUND & USE

What is the current use of the property?

	Hotel/Motel		Industrial/Storage/Warehouse: Type:
	Warehouse (type):		Vacant Land/Farming/Agricultural/Cattle Grazing
X	Office		Multi-Family Residential
	Retail	X	Other: Educational

What is the intended future use of the property? Office and Educational

Site Tenant History

Year(s)	Tenant / Type of Business
1875 to 2019	Oakland Unified School District / school site

Please fill in the following information regarding the site utilities, as appropriate and indicate the date service was originally initiated/installed:

Water Provider: East Bay Municipal Utility District

Sewer Provider: East Bay Municipal Utility District

Electrical Provider: Pacific Gas & Electric Company

Natural Gas Provider: Pacific Gas & Electric Company

Is the property currently used, or previously been used, for an industrial or manufacturing operation, as a gasoline station, a motor repair facility, a commercial printing facility, a dry cleaners, a photo developing laboratory, a junkyard or a landfill, or as a waste treatment, storage, disposal, processing or recycling facility?

___ Yes Type: _____

_X_ No

___ Unknown

Has the facility or the property ever generated, treated, stored, transported or disposed of hazardous waste or hazardous substances other than on an incidental basis? Are waste manifest forms available?

___ Yes Description:_____
_X_ No
___ Unknown

Have any demolition debris, hazardous substances, petroleum products, unidentified waste materials, automotive or industrial batteries, tires, trash or refuse been dumped, buried and/or burned on the property?

___ Yes Description:_____
_X_ No
___ Unknown

TANKS (fuel tanks, oil tanks, etc)

Are there currently, or have there been previously, any underground storage tanks on the property such as gasoline/diesel fuel tanks, waste oil tanks?

___Yes ____ No _X_Unknown

If YES, please provide number, size, age of tanks

Tanks_____ Size_____ Contents_____ Age_____
Tanks_____ Size_____ Contents_____ Age_____
Tanks_____ Size_____ Contents_____ Age_____
Tanks_____ Size_____ Contents_____ Age_____

Has there ever been a reported or unreported release or spill (including failed leak tests) from the tank? (If YES, provide details).

___Yes _X_ No ___Unknown

Are there currently, or have there been previously, any above ground storage tanks on the property?

_X_Yes ____ No ___Unknown

If YES, please provide number, size, age of tanks

Tanks 1 Size unknown Contents fuel for generator Age 9
Tanks_____ Size_____ Contents_____ Age_____
Tanks_____ Size_____ Contents_____ Age_____
Tanks_____ Size_____ Contents_____ Age_____

Has there ever been a reported or unreported release or spill (including failed leak tests) from the tank? (If YES, provide details).

___Yes _X_ No ___Unknown

Has there ever been a reported or unreported release or spill from the tank? (If YES, provide details).

___Yes _X_ No ___Unknown

Details:_____

_____

UTILITIES/DISCHARGES

Is the property served, or has the property been served, by a private water well?

___Yes __X__ No ___Unknown

If yes, is groundwater under the property used as a source of drinking water?

___Yes __X__ No ___Unknown

Has the water from the well ever been tested? (If YES, please provide test results)

___Yes __X__ No ___Unknown

Has the well water been identified as contaminated by any governmental agency?

___Yes __X__ No ___Unknown

Are there any groundwater monitoring wells or irrigation wells on the property?

___Yes __X__ No ___Unknown

If Yes, how many____ and when were they installed?_____

Does the property discharge waste water, or storm water into a municipal sanitary sewer system? If Yes, does the facility discharge under an NPDES Permit or Waste Discharge Permit?

___Yes __X__ No ___Unknown Permit Number/Agency:_____

Are there any current or previous sumps used for waste-water collection/treatment on the property?

___Yes __X__ No ___Unknown

Are there any septic systems, dry wells or leach fields on the property?

___Yes __X__ No ___Unknown If Yes, Where?:_____

ENVIRONMENTAL COMPLIANCE

Is there knowledge of environmental liens or governmental notification or involvement relating to past or current use or disposal of hazardous substances?

___Yes __X__ No ___Unknown

Is there any environmental litigation, administrative action or cleanup action involving the property related to a release or threatened release of any hazardous substance or petroleum product?

___Yes __X__ No ___Unknown

Has the property or related facilities or operations ever been the subject of enforcement actions by governmental authorities resulting in penalties of any kind?

___Yes __X__ No ___Unknown

ENVIRONMENTAL CONDITIONS

Has groundwater or soils on the property ever been tested?

___Yes __X__ No ___Unknown

If Yes, provide details:

_____

Have any contaminants been identified which exceed standards or guidelines levels?

___Yes __X__ No ___Unknown

If Yes, provide details:

_____

BUILDING CONDITIONS

What is/are the age of the structure(s)? 94yrs(Main Bldg).

Have any major renovations been completed and if so, describe type and when completed:

1949 New Cafeteria; 1973 Main Building Modernization; 2011 New Portable

Has an asbestos and/or lead-based paint survey been performed on the site structure(s)?

_X_Yes ____ No ___Unknown

If Yes, was asbestos containing materials identified?

_X_Yes ____ No

If Yes, was lead-based paint present identified?

_X_Yes ____ No

THIS QUESTIONNAIRE WAS COMPLETED BY

Name (Print) TADASHI Nakadegawa

Signature _____

Title Acting Deputy Chief Facilities, OUSD

Address 955 High Street, Oakland, CA 94601

Phone Number 510 535-7038

Date November 18, 2019

Please return the completed questionnaire (by email or fax) to Ninyo & Moore at the following address:

Randy L. Wheeler, Senior Geologist
Ninyo & Moore
1401 Halyard Drive, Suite 110
West Sacramento, California 95691
916-373-9858 (office)
916-373-9792 (fax)
916-317-3284 (cell)
rlwheeler@ninyoandmoore.com

PHASE I ESA/AAI REQUIREMENTS

According to the All Appropriate Inquiry (AAI, 40 CFR 312) requirements and ASTM (E 1527-05) guidance on conducting Phase I Environmental Site Assessments, the "user" of the assessment must provide the following information, if available, to the environmental professional in order to qualify for Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001. Please check yes or no and provide any additional information you may have regarding the site. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

(1) Environmental cleanup liens that are filed or recorded against the site (40 CFR 132.25).
Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state, or local law?

☐ Yes ☑ No

If yes, please explain:

(2) Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).
Are you aware of any activity use limitations (AULs), such as engineering controls, land use restrictions, or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

☐ Yes ☑ No

If yes, please explain:

(3) Specialized knowledge or experience of the person/department requesting the Phase I ESA and seeking to qualify for the landowner liability protections (40 CFR 312.28).
As the user of this ESA, do you have any specialized knowledge or experience related to the property or adjoining properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

☐ Yes ☑ No

If yes, please explain:

(4) Relationship of the purchase price to the fair market value of the property, if it were not contaminated (40 CFR 312.29).
Does the purchase price offered for this property reasonably reflect the fair market value of the property? If there is a difference between the purchase price and the fair market value, have you considered whether the lower purchase price is because contamination is known or believed to be at the property?

Please discuss: not applicable

(5) Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).
Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,
(a) Do you know the past uses of the property? no
(b) Do you know of specific chemicals that are present or once were present at the property? no
(c) Do you know of spills or other chemical releases that have taken place at the property? no
(d) Do you know of any environmental cleanups that have taken place or are ongoing at the property?

☐ Yes ☑ No

If yes, please explain:

(6) The degree of obviousness of the presence or likely presence of contamination at the property and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).
As the user of this ESA, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

☐ Yes ☑ No

If yes, please explain:

Tadashi Nakadegawa — Print Name

Signature

11/25/15 — Date

OUSD Central Administrative Center

1011 Union Street

Oakland, CA 94607

Inquiry Number: 5871762.3

November 17, 2019

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

11/17/19

Site Name:

OUSD Central Administrative C
1011 Union Street
Oakland, CA 94607
EDR Inquiry # 5871762.3

Client Name:

Ninyo & Moore
1401 Halyard Drive, Suite 110
West Sacramento, CA 95691
Contact: Luke Swickard

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Ninyo & Moore were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # A1EC-4ACA-961A

PO # NA

Project 403668001

Maps Provided:

1970	1902
1967	1889
1961	
1958	
1957	
1952	
1951	
1912	

Sanborn® Library search results

Certification #: A1EC-4ACA-961A

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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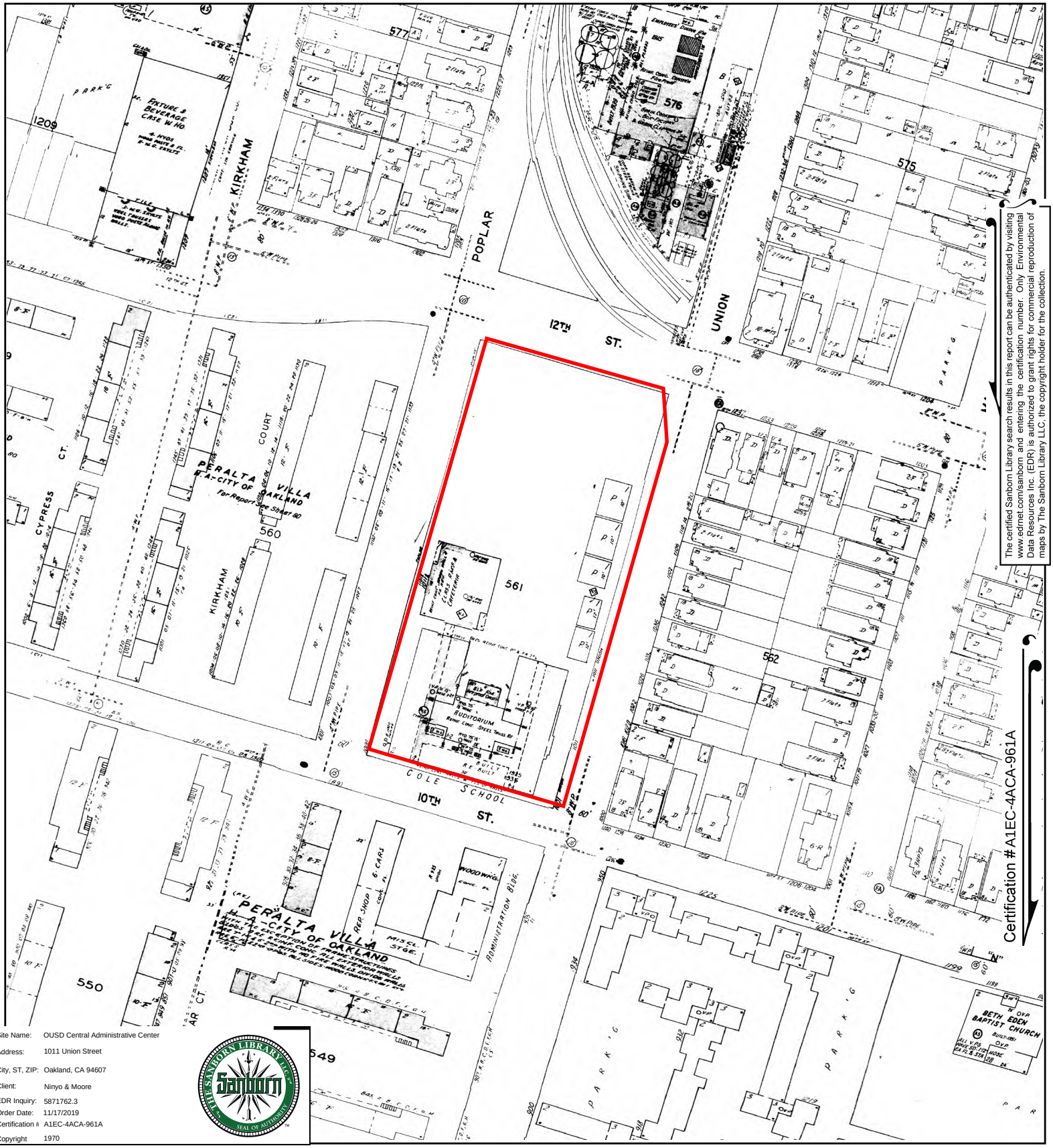
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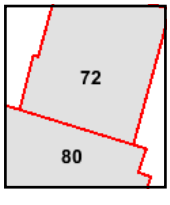
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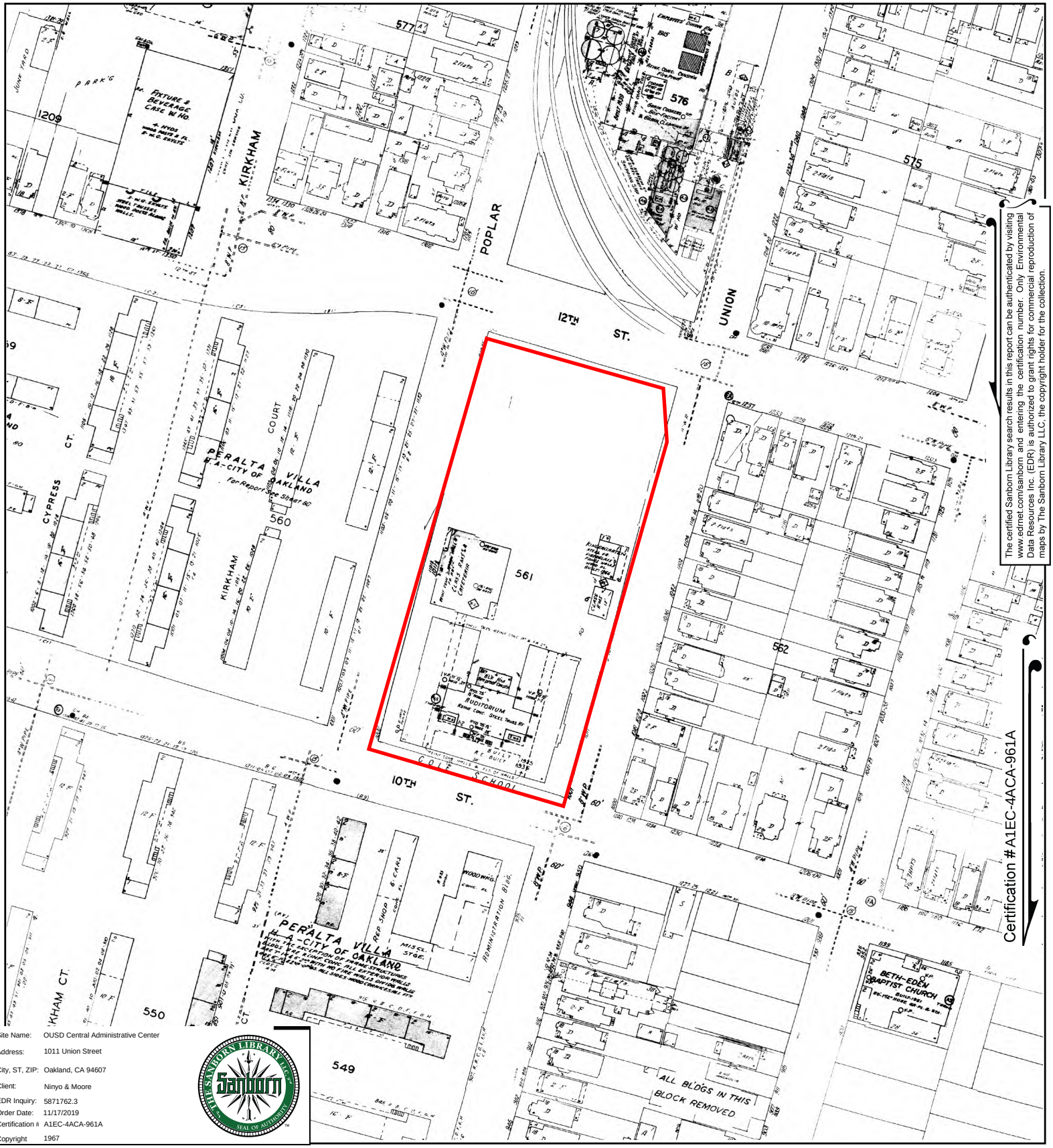
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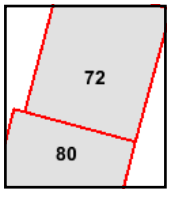
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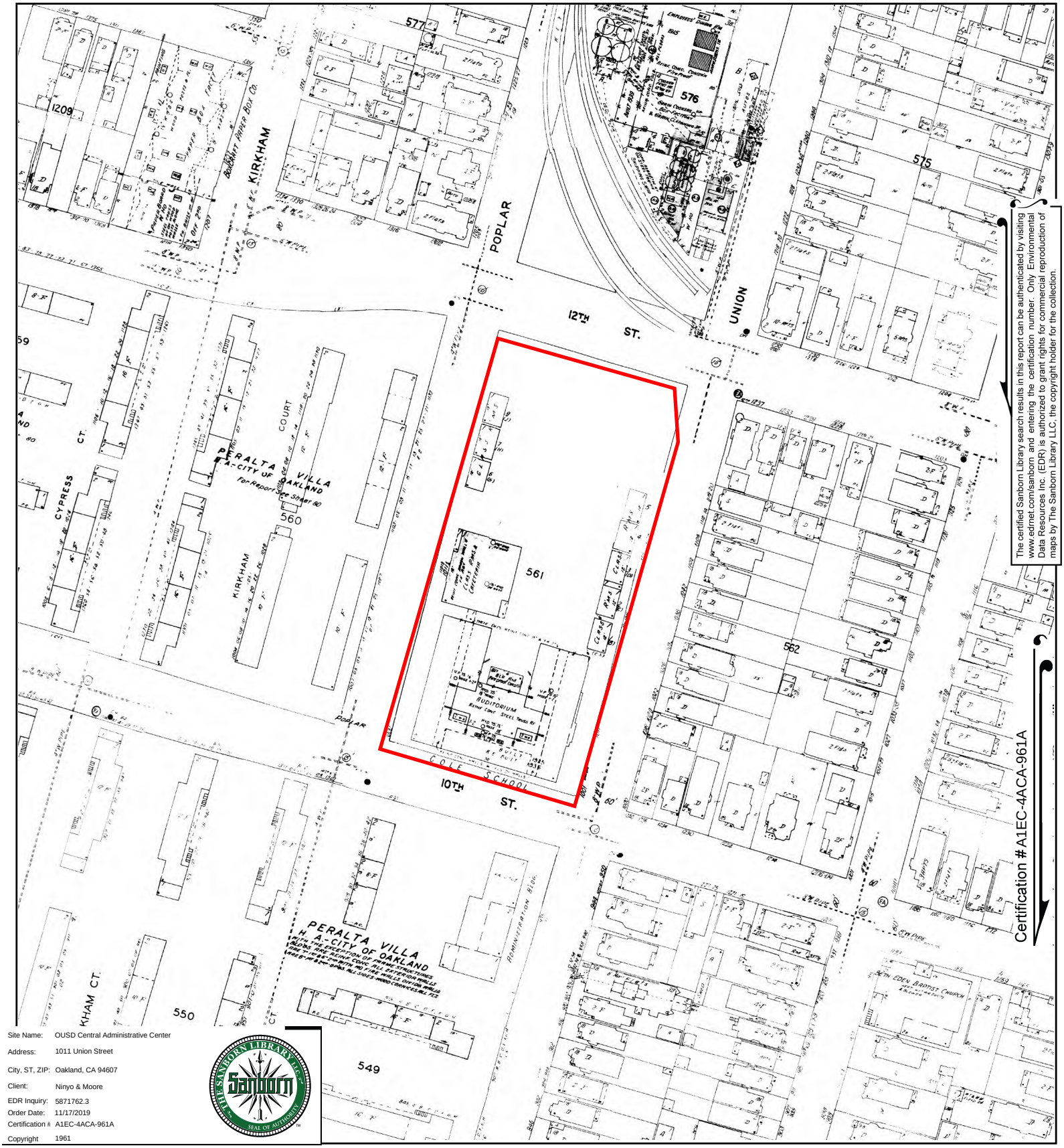
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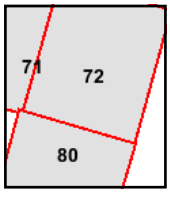
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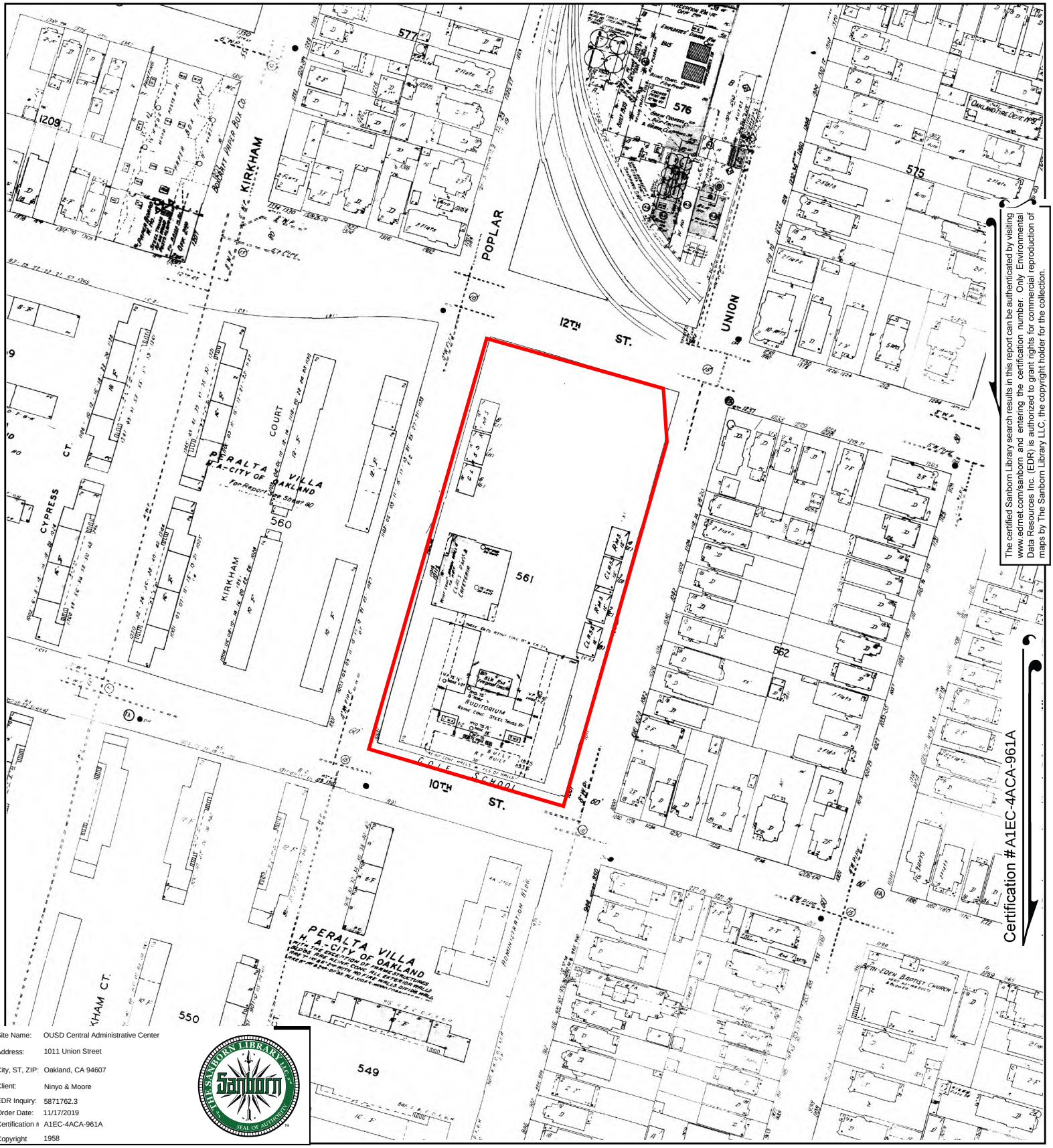




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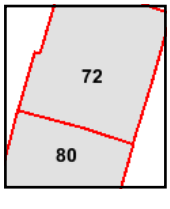
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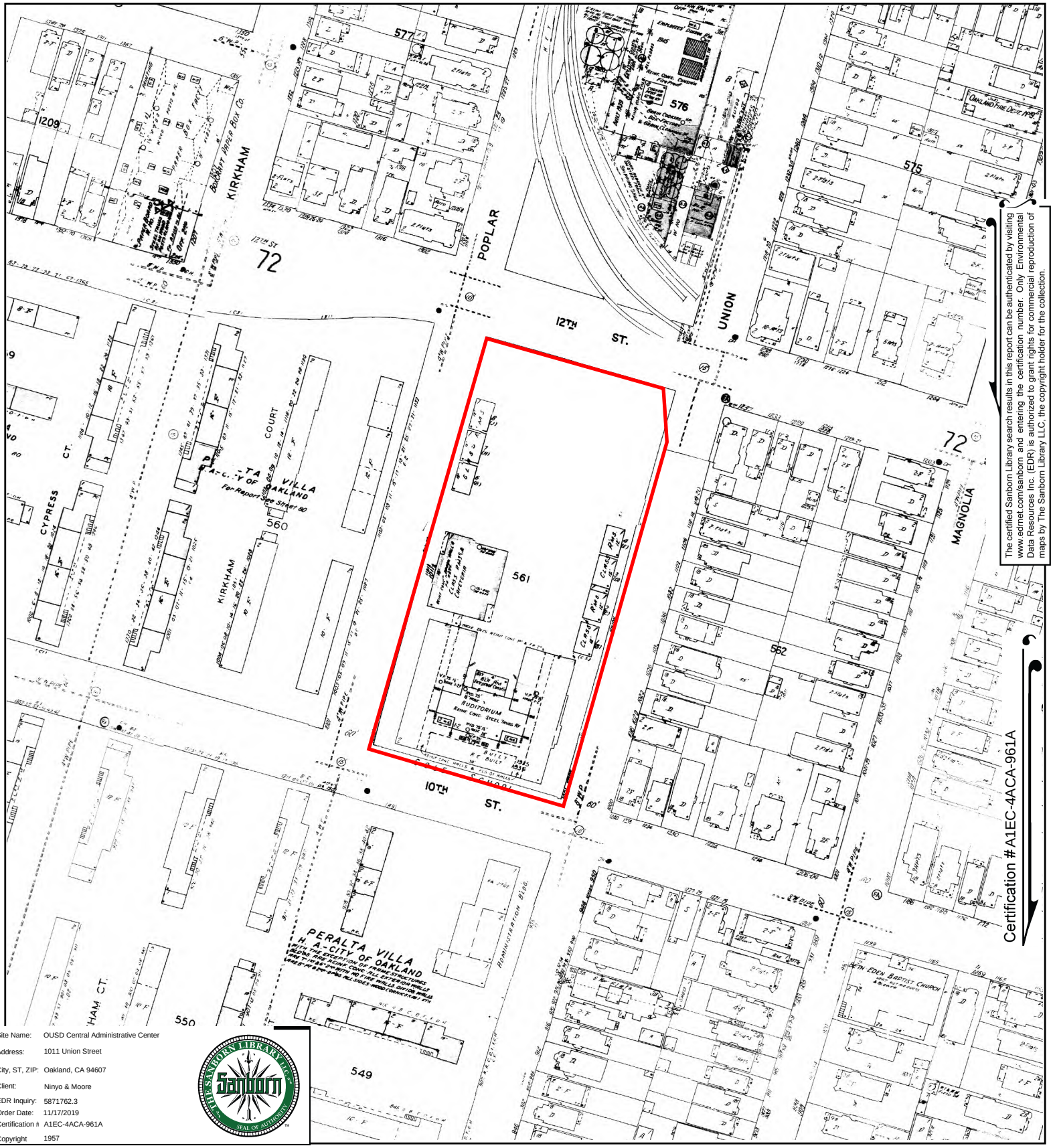
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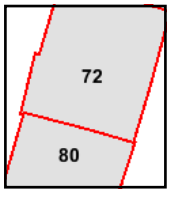
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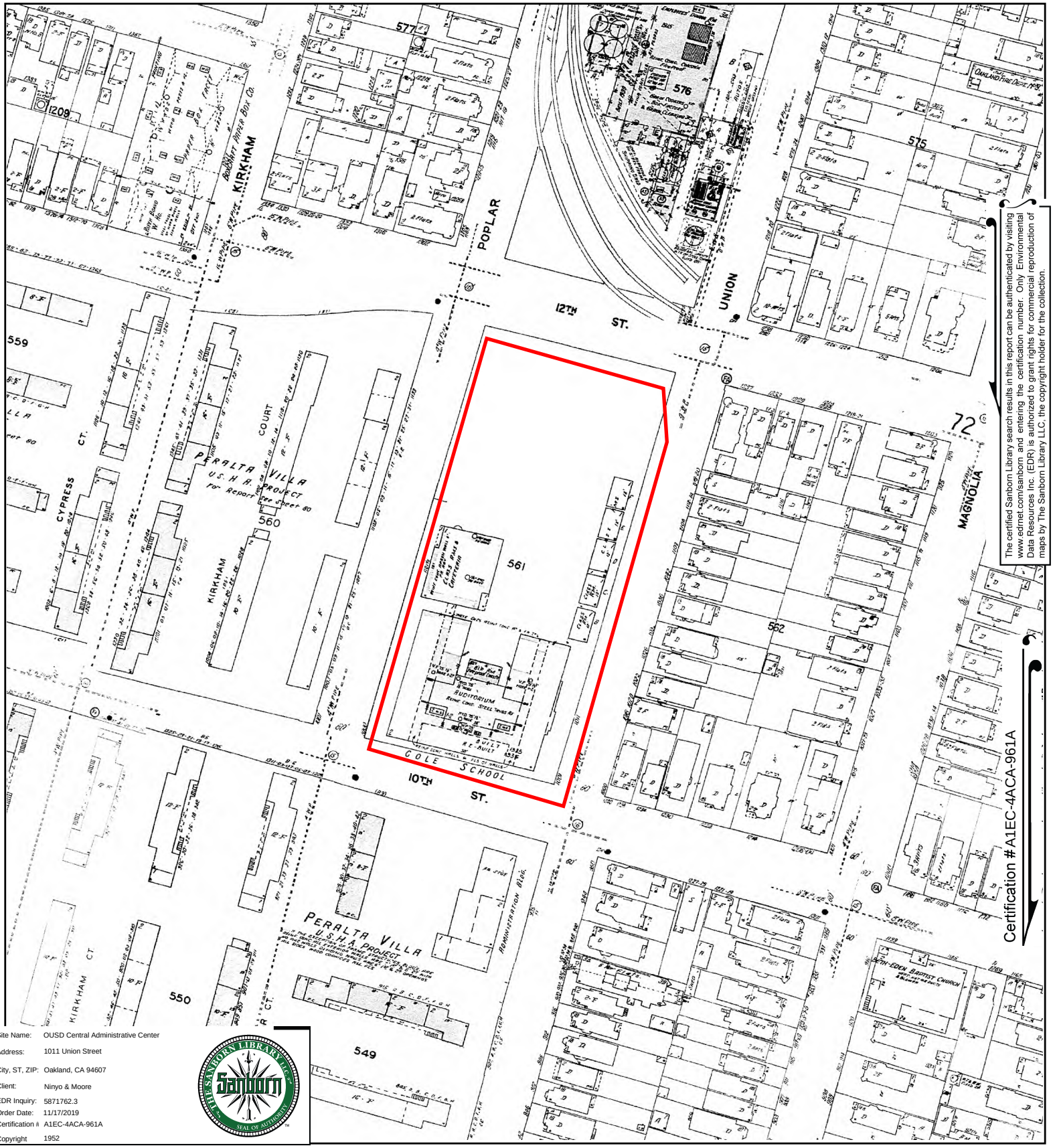
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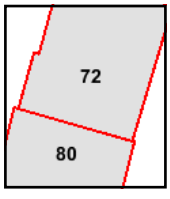
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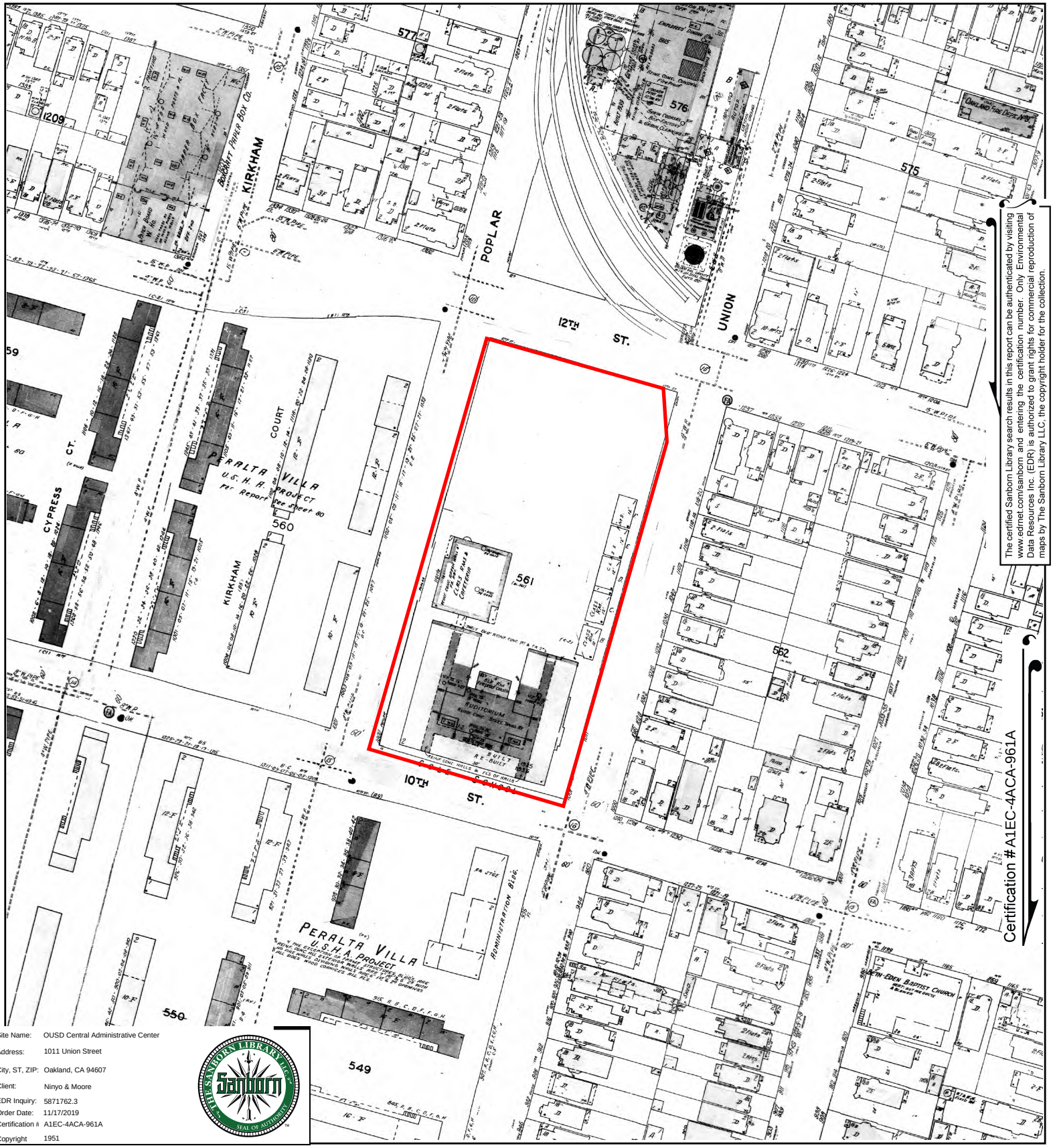
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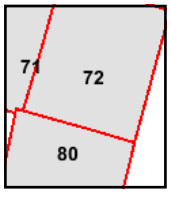
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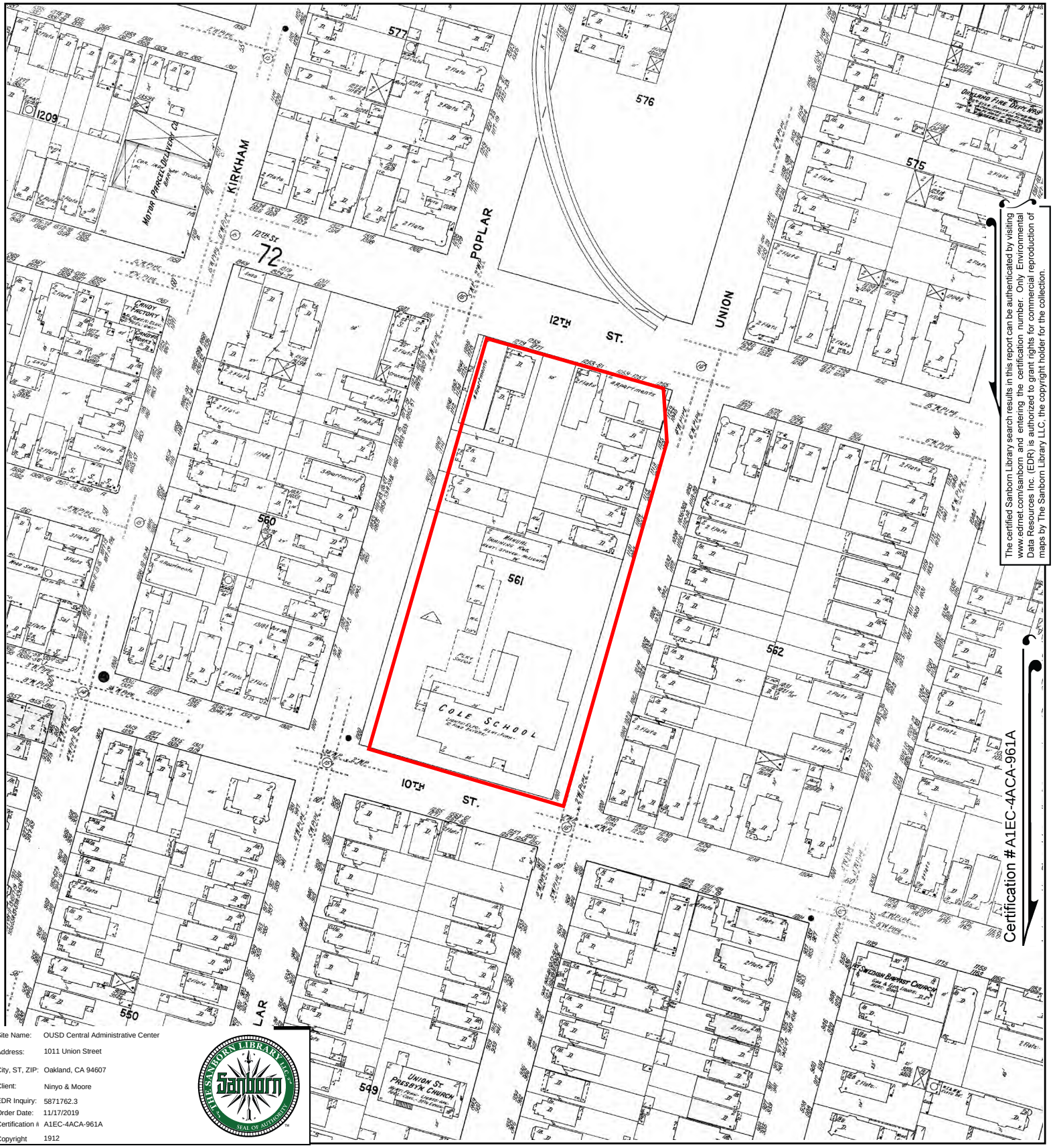


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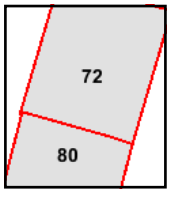


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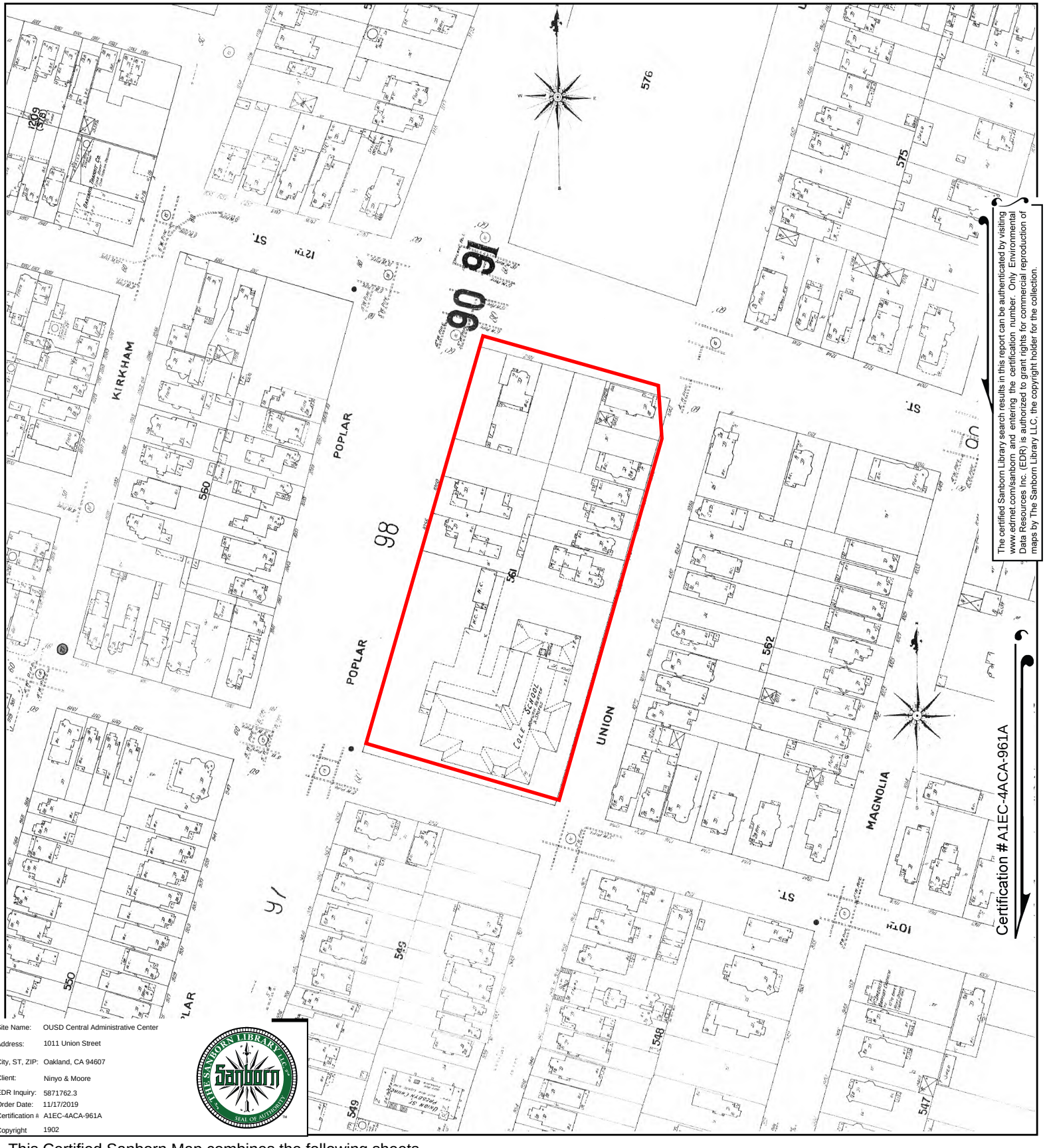




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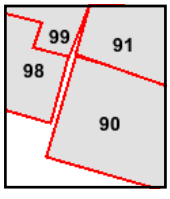
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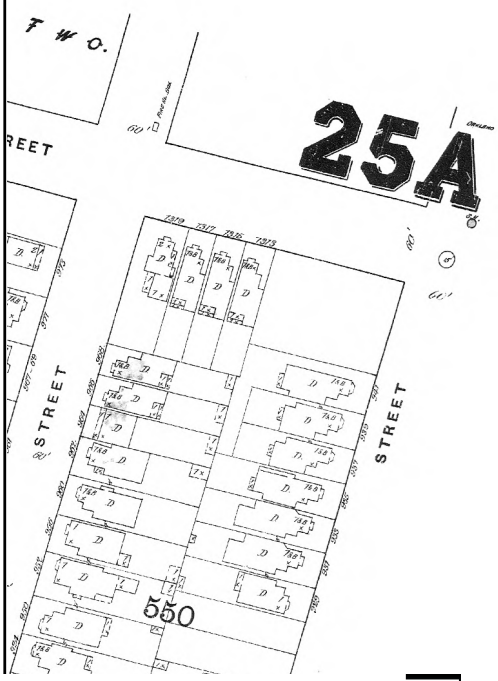
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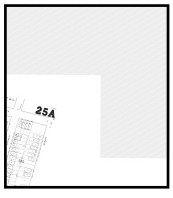


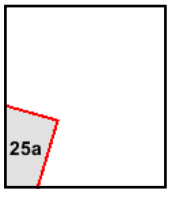
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Appendix F:

VAPOR ENCROACHMENT SCREENING MATRIX

Phase I ESA Vapor Encroachment Conditions (VEC) matrix includes a (1) Search Radius Test, (2) Chemicals of Concern Test (COC), and (3) a Critical Distance Test [1].

(1) Search Radius Test: Are there any known or suspect contaminated properties in the primary area of concern within the corresponding search radii (including the site)?

☐ Yes ☒ No — If ***No***, then screening for a VEC is complete and no VEC *currently* exists, go to #4. If ***Yes***, then:

(2) Chemicals of Concern Test: Are COC likely to be present within the area of concern for those known or suspect contaminated sites identified based on the Search Distance Test?

☐ Yes ☒ No — If ***No***, then screening for a VEC is complete and no VEC *currently* exists, go to #4. If ***Yes***, then:

(3) Critical Distance Test*: A plume test to determine whether or not COC in the contaminated plume(s) may be within the critical distance.

☐ Yes ☒ No — (3a) Is information related to the contaminated(s) plume available (i.e. isoconcentration maps, site drawings, etc.)?
(3b) If ***No***, then a VEC cannot be ruled out; check ***Yes*** in #4 below indicating it is likely a VEC exists. If ***Yes***, then:

☐ Yes ☒ No — (3c) Is the site less than 100 feet to the nearest edge of a contaminated [non-petroleum hydrocarbon] plume(s)? If ***Yes***, then check ***Yes*** in #4 below indicating it is likely a VEC exists.

☐ Yes ☒ No — (3d) Is the site less than 30 feet to the nearest edge of a dissolved petroleum hydrocarbon plume(s)? If ***Yes***, then check ***Yes*** in #4 below indicating it is likely a VEC exists.

*If the distance from the nearest edge of a contaminated plume to the nearest existing or planned structure on the site is less than 100 feet for non-petroleum hydrocarbon COC, or less than 30 feet for dissolved petroleum hydrocarbons, then it is presumed that a VEC *currently* exists beneath the site. If the distance from the nearest edge of the contaminated plume is greater than or equal to 100 feet for non-petroleum hydrocarbons, or 30 feet for dissolved petroleum hydrocarbon chemicals of concern, then it is presumed unlikely that a VEC *currently* exists beneath the site.

(4) Is it likely that a VEC *currently* exists beneath the site?

☐ Yes ☒ No — If ***No***, then the VEC screening is complete and no further investigation is recommended at this time. If ***Yes***, Ninyo & Moore recommends performing additional assessment, such as a Tier 2 VEC assessment according to ASTM E 2600-10.

[1] Based on guidance presented in the ASTM E 2600-10 Standard.

Appendix H

Preliminary Endangerment Assessment for the Cole Administration Center at Cole Campus, prepared for Oakland Unified School District and DTSC

Ninyo & Moore, December 30, 2021

Preliminary Endangerment Assessment

Cole Administration Center at Cole Campus

1011 Union Street

Oakland, California

Oakland Unified School District

955 High Street | Oakland, California 94601

December 30, 2021 | Project No. 403668001



Ninyo & Moore

Geotechnical & Environmental Sciences Consultants

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Geotechnical & Environmental Sciences Consultants

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Preliminary Endangerment Assessment

Central Administration Center at Cole Campus
1011 Union Street
Oakland, California

Mr. Tadashi Nakadegawa
Director, Facilities Planning and Management Department
Oakland Unified School District
955 High Street | Oakland, California 94601

December 30, 2021 | Project No. 403668001

Nathan Diem
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PROFESSIONAL GEOLOGIST BRANDON S. WILKEN No. 7564 STATE OF CALIFORNIA

Daysi Nemecio Rodriguez
Project Geologist

DNR/NDD/BSW/gvr/cas

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EXECUTIVE SUMMARY

Ninyo & Moore Geotechnical and Environmental Sciences Consultants (Ninyo & Moore) prepared this Preliminary Endangerment Assessment (PEA) Report for the Oakland Unified School District (OUSD) and the Department of Toxic Substances Control (DTSC) for the property located at 1011 Union Street in Oakland, California (Site, Figure 1). The PEA work was conducted across the property in consideration for Site redevelopment into a central administration building and parking lot. Ninyo & Moore developed a scope of work included in the PEA Work Plan (Ninyo & Moore, 2021) based on the findings of the Phase I ESA Report and discussions with the DTSC. The PEA evaluated soil and soil gas for potential environmental concerns.

Constituents of Potential Concern (COPCs)	
Media	**Potential Environmental Concern**
Soil	Title 22 Metals, OCPs, PCBs, SVOCs, dioxin/furans, VOCs, TPHg, TPHd, TPHmo and PAHs
Soil Gas	VOCs, Methane, Oxygen, Carbon Dioxide

Notes:
OCPs – organochlorine pesticides
PCBs – polychlorinated biphenyls
SVOCs - semi volatile organic compounds
VOCs – volatile organic compounds
TPHd – total petroleum hydrocarbons as diesel
TPHmo – total petroleum hydrocarbons as motor oil
TPHg - total petroleum hydrocarbons as gasoline
PAHs – polynuclear aromatic hydrocarbons

Metals and dioxin/furans concentrations exceeding screening levels were identified in soil.

- The upper limit arsenic background concentration for the Site was estimated to be 14.20 mg/kg. Only 5 of the 124 soil samples collected at the Site contained arsenic at concentrations higher than the estimated local background concentration. Therefore, the distribution of arsenic contamination at the Site appears to be limited and localized. The estimated 95% UCL for arsenic using all available data was estimated to be 7.52 mg/kg (Appendix E).

- Relatively high concentrations of lead were detected in soil at the Site. The estimated 95UCL for lead was estimated to be 181.3 mg/kg (Appendix E). This value exceeds the DTSC (2020) soil screening value for lead of 80 mg/kg. Therefore, it is concluded lead in soil could pose a potential health hazard to future on-Site receptors.

- Using maximum detected soil chemical concentrations, the hazard indices estimated to result from soil exposure or indoor air exposure were estimated to be lower than 1 (Tables 13 and 14). Both estimated hazard indices were within levels considered acceptable to California health and environmental protection agencies.

Ninyo & Moore recommends:

- Evaluate mitigation and/or remediation options with respect to the proposed improvement plans (i.e., building locations, hardscape).

- Prepare a Site-Specific Health and Safety Plan and a Soil Management Plan for any work where contractors shall be working in or excavating soil.

- Delineate lead vertically in AOC 3. Grading is expected during development of the Administration building and soil will be removed and disposed of off-Site. Vertical delineation will determine the distribution of elevated lead concentrations in soil that may be excavated during grading.

- Delineate dioxin/furans in soil vertically and laterally near the boring S4 on the west side of the current two-story building (AOC 1).

1 INTRODUCTION

Ninyo & Moore Geotechnical and Environmental Sciences Consultants (Ninyo & Moore) prepared this Preliminary Endangerment Assessment (PEA) Report for the Oakland Unified School District (OUSD) and the Department of Toxic Substances Control (DTSC) for the property located at 1011 Union Street in Oakland, California (Site, Figure 1). Ninyo & Moore conducted this investigation based our Preliminary Environmental Assessment Work Plan dated October 21, 2021 (Work Plan) and approved by the DTSC in a letter dated October 21, 2021.

2 SITE DESCRIPTION

The Cole Campus Site is developed with a two-story former elementary school building, a former cafeteria building, a storage building, a playground, and two parking lots. The Site is occupied by the District administration personnel and the District Police Department. The Site is situated on one parcel totaling approximately 2.59 acres of land designated by Alameda County Assessor's Parcel Number (APN) 004 005300700. The Site location is presented on Figure 1. Additional Site details, geology, and hydrology are presented below.

2.1 Site Identification

Site Name:	Central Administration Center at Cole Campus
Contact Person:	Elena Comrie
Site Address:	1011 Union Street, Oakland, California
Mailing Address:	1111 Broadway, Suite 300, Oakland, CA 94607
Phone Number:	510.906.2123
Other Site Names:	Not applicable
USEPA Identification Number:	Not applicable
Property Location:	Between 10th Street, 12th Street, and Poplar Street in Oakland, California

2.2 Regional Geology

The Site is located in the Coast Range geomorphic province of California. The Coast Ranges are northwest-trending mountain ranges (2,000 to 4,000, occasionally 6,000 feet elevate above sea level), and valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. Strata dip beneath alluvium of the Great Valley. To the west is the Pacific Ocean. The coastline is uplifted, terraced, and wave-cut. The Coast Ranges are composed of thick Mesozoic and Cenozoic sedimentary strata. The northern and southern ranges are separated by a depression containing the San Francisco Bay. The northern Coast Ranges are dominated by irregular, knobby landslide-topography of the Franciscan Complex. The eastern border is characterized by strike-ridges and valleys in Upper Mesozoic strata. In several areas, Franciscan rocks are overlain by volcanic cones and flows of the Quien Sabe, Sonoma and

Clear Lake volcanic fields. The Coast Ranges are subparallel to the active San Andreas Fault. The San Andreas is more than 600 miles long, extending from Pt. Arena to the Gulf of California. West of the San Andreas is the Salinian Block, a granitic core extending from the southern extremity of the Coast Ranges to the north of the Farallon Islands (CGS, 2002).

The Site is located east of San Francisco Bay in the Coast Ranges Geomorphic Province of California. The Coast Ranges are comprised of several mountain ranges and structural valleys formed by tectonic processes commonly found around the Circum-Pacific belt. Basement rocks have been sheared, faulted, metamorphosed, and uplifted, and are separated by thick blankets of Cretaceous and Cenozoic sediments that fill structural valleys and line continental margins. The San Francisco Bay Area has several ranges that trend northwest, parallel to major strike-slip faults such as the San Andreas, Hayward, and Calaveras faults. Major tectonic activity associated with these and other faults within this regional tectonic framework consists primarily of right-lateral, strike-slip movement (Norris and Webb, 1990).

2.3 Site Geology

Review of available geologic maps and reports indicates that the Site is located in the flatlands west of the base of the Oakland Hills, which is proximal to the San Francisco Bay structural depression to the west. Bedrock underlying the Oakland-San Leandro area and exposed in the hills to the east primarily consists of gabbro and basalt of the Jurassic Coast Range Ophiolite, Late Jurassic-Early Cretaceous Franciscan rocks, Jurassic silicic volcanics and Late Jurassic-Early Cretaceous Knoxville Formation.

The 1977 California Division of Mines and Geology, *Geologic Map of California: (Jennings C.W.)*, shows the Site to be underlain by Quaternary Marine and Non-marine Sand Deposits (Qs). Based on our review of the EDR Radius Map report during preparation of our Phase I ESA, the primary soil type beneath the Site is mapped as Urban Land (Ninyo & Moore, 2019).

2.4 Subsurface Conditions

The following sections provide a generalized description of the subsurface conditions encountered during this 2021 investigation.

Fill in the northern portion of the Site was encountered in all 75 borings to 2.5 feet below ground surface (bgs). The fill consisted of two distinct layers; 1) From below asphalt to 1-foot bgs consisted of gravel, silt, with pockets of sand and traces of wood, glass, and brick fragments: 2) from 1 foot to 2.5 feet bgs consisted of gravel, fine sand and silt (Figure 2 and Appendix A). Soil below two feet at borings SG3 and SG4 along the north

perimeter consisted of silty sand from 0.5-feet to 10-feet bgs. In the southern portion of the site, soil consisted of silty sand with clay to approximately 4.5-feet bgs and clayey sand with silt to 10 and 15 feet in borings SG2 and SG1, respectively.

According to Consolidated Engineering Laboratories' 2019 geotechnical investigation, soil consist of Merritt sands, consisting of dark brown sand to silty sand layers with frequent lenses of medium dense to very dense, clayey to silty sand to a depth of about 27 feet, below which primarily clean, fine sand is encountered to a depth of about 50 feet.

2.5 Site Hydrology

The following sections discuss the Site hydrology in terms of both surface waters and groundwater:

2.5.1 Surface Waters

There are no surface waters, including ponds, streams, creeks, lagoons, and other naturally-occurring bodies of water at the Site. The nearest water body in the San Francisco Bay approximately 4,600 feet to the south of the Site.

2.5.2 Groundwater

During implementation of the PEA Work Plan, groundwater was not observed in any of the borings which were advanced to a depth of up to 15 feet bgs. According to the State Water Resources Control Board's GeoTracker website (GeoTracker), groundwater information reported in a Second Half 2018 groundwater monitoring report for the former Shell-branded service station located at 1230 14th Street (approximately 750 feet northeast of the Site), the groundwater flow in the Site vicinity was reported to be towards the northeast and the depth to groundwater was reported to be approximately 11 to 13 feet bgs. Groundwater depths and flow directions can vary due to seasonal variations, groundwater withdrawal or injection, tidal influences, and other factors.

During a geotechnical investigation performed for the Site in November 2019, free groundwater was reportedly encountered at a depth of 18 to 19 feet bgs (CEL, 2019).

3 BACKGROUND

3.1 Site Status/Historical Site Information

The Site was developed in the late 1870s with the Cole Grammar School on the southern portion of the Site and several residential houses on the northern portion of the Site. During the 1920s the original school building was burned down and the residential houses were demolished and were replaced with a two-story elementary school building, a cafeteria building, five temporary classrooms, and a parking lot. In the 1950s several temporary classrooms were added and removed. In the late 1960s a Kindergarten building was constructed on the eastern portion of the Site. In the early 1970s the Kindergarten building was removed and replaced with five portable buildings, which were later removed in the late 1970s. In the early 2010s the eastern portion of the parking lot on the Site was fenced-off and used as the restricted parking of the Oakland School Police Department, and a storage building was constructed in the northeastern corner of the Site.

3.2 Current Use(s) of Surrounding Properties

The north-adjacent properties (located across 12th Street) include the California Cereal Products/Nabisco Brands Inc. property and a playground. The south-adjacent properties (located across 10th Street) include the Oakland Housing Authority and several row houses. The west-adjacent properties (located across Poplar Street) include several row houses. The east-adjacent properties (located across Union Street) are residences.

3.3 Records Review Information

A records review was completed in conjunction with the 2019 Phase I ESA (Ninyo & Moore, 2019).

3.4 Site Reconnaissance

A Site reconnaissance was completed as part of the Phase I ESA field assessment activities.

3.5 Interviews

Interviews were completed in conjunction with the Phase I ESA.

4 APPARENT PROBLEM

As identified in the PEA Work Plan Constituents of potential concern (COPC) in soil and soil gas at the Cole Central Administration Site include metals, TPHs, OCPs, PCBs, SVOCs, VOCs, PAHs, and dioxins/furans. The COPCs may be from the current structures, former structures, fill material, natural occurring constituents, or former burned structures.

5 ENVIRONMENTAL SETTING

5.1 Conceptual Site Model

Based on Phase I ESA and the scoping meeting with the DTSC, Ninyo & Moore created a summary of the Areas of Concern (AOCs) with regard to potential soil and soil gas impacts. The AOC are presented in Figure 2 and summarized in Table 1 below. The PEA assessment results are summarized in Section 6.

Table 1 – Areas of Concern

Areas of Concern	Period of operation	Sample Media	Sample Depths (feet bgs)	Potential Environmental Concern
AOC1–Elementary School Building (current building)	1936 to present	soil	Surface and 2	lead, arsenic, OCPs, and PCBs
AOC2- Cafeteria Building (current building)	1949 to present	soil	Surface and 2	lead, arsenic, OCPs, and PCBs
AOC3-Former Buildings (northern portion of the Site)	1902 to 1950s	soil	Surface and 2	lead, arsenic, OCPs, PCBs, and CAM 17 metals.
AOC4-Former Heating Oil UST	Removed in 1998. Installation date is unknown	Soil and soil gas	Soil -5,10, and 15 Soil gas-5 and 10	soil - TPHd/mo, TPHg, VOCs, metals soil gas - VOCs
AOC5-Waste Incinerator (currently on-Site)	1936 to unknown (no longer operational)	soil	Surface, 2 and 5	SVOC, metals, and dioxins/furans
AOC6-Hydraulic Elevator (currently on-Site)	unknown	soil	5 and 10	TPHd/mo and PCBs
AOC7–Pad Mounted Transformer (if contained PCBs)[1] (currently on-Site)	unknown	soil	Surface and 2	PCBs
AOC8-Burned Structures	1923	soil	Surface and 2	dioxins/furans
AOC9-Off-Site Northern and Southern Boundaries	Not Applicable	soil and soil gas	Soil -5,10, and 15 Soil gas-5 and 10	soil - TPHd/mo, TPHg, VOCs, metals soil gas - VOCs
AOC10- Off-Site Railroad Lines	Unknown	soil	Surface and 2	metals, SVOCs, and PAHs

5.2 Factors Related to Soil Pathways

The Site is a former school currently used as offices for district employees. The Site is situated at an elevation of 20 feet above mean sea level. The topography of the Site generally slopes towards the northwest. The Site surface completion includes asphalt, concrete, and buildings on concrete slab as summarized in the above table.

6 SAMPLING ACTIVITIES

6.1 Pre-Field Activities

Ninyo & Moore conducted the following pre-field activities prior to conducting the field investigation.

6.1.1 Utility Locating

Ninyo & Moore marked the vicinity of proposed boring locations with white paint and/or stakes and notified Underground Service Alert (USA) at least 72 hours prior to the start of subsurface disturbance activities, as required by California law. USA notified utility companies of the planned activities and requested that they mark their subsurface utilities within the proposed boring locations by the proposed date. Prior to drilling, Ninyo & Moore contracted Ground Penetrating Radar Systems, LLC (GPRS), a private utility company, of San Jose, California to verify the presence of the underground utilities and to identify any previously unmarked utilities.

6.1.2 Health and Safety Plan

Ninyo & Moore prepared a Site-specific health and safety plan (HASP) to protect Site workers and the general public from the potential hazards associated with hand augering and drilling, dust generated by sampling activities, and associated work being performed during field activities. The HASP included a map to the closest medical emergency facility. Ninyo & Moore reviewed the HASP with field personnel prior to the start of field work and field personnel signed the acknowledgement form attached to the HASP, indicating they understood and would abide by its provisions.

6.1.3 Permitting

Ninyo & Moore obtained a drilling permit from Alameda County Public Works Agency (ACPWA) for the two soil borings extending deeper than 5 feet bgs and for the permanent dual-nested soil vapor wells.

6.2 Sampling Methods and Procedures

6.2.1 Sample Identifications

Boring locations are identified referencing the AOC that they are targeting. Borings are identified with the letter 'S' and are followed by a unique number for each boring location. For example, a boring labeled 'AOC1-S1' is a boring advanced within AOC1. Boring locations that target more than one AOC will be identified referencing all relevant AOCs. For example, a boring labeled 'AOC1/AOC4-S1' is a boring advanced to assess the current on-Site building (AOC1) as well as the former UST (AOC4).

Boring locations for AOC3 – Former Buildings are identified by a grid pattern. Borings are identified with the letter 'S' followed by a column number and row letter. For example, a boring labeled 'AOC3-S1A' is a boring advanced within AOC3 in column 1 row A.

Soil sample identifications consist of the boring identification followed by the depth of the sample collected. For example, the sample 'AOC1-SG1-5 indicates a soil gas sample collected from boring AOC1 from soil gas probe SG1 at 5 feet bgs.

Duplicate samples are identified by adding DUP at the end of the sample ID. For example, the duplicate for sample 'AOC1-S1-0.5' will be 'AOC1-S1-0.5 DUP'. Equipment blanks are identified by 'EB' followed by the date. For example, the equipment blank 'EB01012021' indicates an equipment blank collected on January 1, 2021. Trip blanks are identified by 'TB' followed by the date. For example, the trip blank 'TB01012021' indicates an equipment blank collected on January 1, 2021.

6.2.2 Soil Gas Probe Installation

In order to evaluate subsurface Site conditions, Ninyo and Moore advanced duel-nested soil gas probes at four locations (SG1 through SG4). Each of the locations included a nested probe at depths of 5 and 10 feet bgs.

Soil gas probes were installed using a hand auger and direct push (DP) drilling rig equipped with 2.75-inch diameter drill casing. Prior to drilling, the borings were cleared by hand auger to at least 5 ft bgs. Each soil gas probe consisted of a soil vapor sampling probe tip, constructed of either a stainless-steel screen or ceramic air-stone, connected to 0.25-inch Teflon or Teflon lined tubing. The boring was advanced using a direct push drill rig at least six inches deeper than the intended probe depths and filled with sand up to the depth of the probes. The probe was lowered into the boring and sand was added to a depth of six inches above the probe. The sand pack was topped with a transition seal of 6-inches of dry

bentonite followed by hydrated bentonite up to the bottom of the next sand interval for the shallow probe or up to ground surface. A tremie pipe was used to avoid bridging or segregation during the placement of the sand pack and annular seal at depths greater than five feet. The bentonite was hydrated in the annulus of the boring to further prevent bridging.

6.2.3 Soil Vapor Probe Sampling

On November 15 and 16, 2021, Ninyo & Moore collected soil vapor samples from soil gas probes (SG1 through SG4). One duplicate sample was collected from soil gas probe SG1-5. During the November sampling, water was observed in the sampling tubing while purging the 5-foot sample at location AOC9-SG2 and a vacuum was not established while purging the 10-foot sample at location AOC9-SG3. Ninyo & Moore attempted to sample AOC9-SG2 and ACO9-SG3 a second time on December 3, 2021. Ninyo & Moore was unable to collect the samples because of the same issues as the November sampling event.

The soil vapor probes were allowed to stabilize for a period of at least 72 hours before samples were collected in 1-liter batch certified Summa canisters. Soil gas samples were collected in accordance with the procedures described in DTSC's "Advisory: Active Soil Gas Investigations," dated July 2015 (DTSC 2015), including procedures for collecting samples in low flow, high vacuum conditions. In addition, an ambient air sample (OA-1) was collected at an up-gradient location during soil gas sample collection.

Prior to sample collection, a shut-in test was conducted on each sample train, consisting of the sample canister and sampling manifold (including an in-line filter and flow regulator) as a leak check to ensure the sampling assembly is free from leaks before purging and sampling. Each manifold and canister were placed under a minimum vacuum of 10 inches of mercury and sealed. Before use, each canister/manifold set was observed to ensure that the vacuum was retained for a minimum of five minutes prior to use. If there was any observable loss of vacuum, the fittings were adjusted until the vacuum in the sample train was retained indicating the absence of leaks.

Each probe was purged of three well volumes of vapor prior to sampling. The well volume was calculated using the internal volume of the tubing and manifold, the void space of the sand pack around the probe tip, and the void space of dry bentonite in the annular space. Purging was conducted using a separate 6-liter Summa canister. A flow rate of approximately 100 to 200 milliliters per minute and a vacuum of no more than 100 inches of

water was maintained during purging. During purging of probe SG2-5, water was observed being drawn into the sampling apparatus from the soil vapor probe. Groundwater had not been observed in this soil boring during installation of the probe, and groundwater was not observed in any of the other soil borings at similar depths (approximately 5.5 feet bgs) during our sampling activities. Additionally, during purging of probe SG3-10, the gauge reading on the purge canister and the gauge reading on the soil gas manifold equilibrated at an approximate reading of 5 inches of mercury and the purge canister was no longer pulling gas from the probe. As a result, no samples were collected from probes SG2-5 and SG3-10.

Following the shut-in test and well purging, samples were collected in the Summa canisters within a fully encapsulating shroud using helium as the leak detection compound. The atmosphere within the shroud was enriched to, and maintained at, a minimum of 20 percent helium during sampling. A flow rate of approximately 150 milliliters per minute was maintained by the laboratory-provided flow controller. Each canister was filled until a vacuum of approximately five inches of mercury remained in the sample canister.

For each sample canister, the sample ID, well purge volume, canister number manifold number, initial and final vacuum readings, sample collection time, shroud helium concentrations, and location were documented on field forms. Samples were properly labeled and transported under strict COC procedures to Eurofins TestAmerica of Sacramento, California, a California-certified analytical laboratory, for analysis.

6.2.4 Soil Sampling Procedures

Ninyo & Moore collected soil samples using hand-sampling equipment (a hand auger) or a direct push sampling rig. Where a hand auger was used, samples were collected from the auger tool and soil placed directly into laboratory-supplied, pre-cleaned glass jars and labeled properly. The hand auger was decontaminated between each sampling location.

Where a direct-push sampling rig was used, 1.5-inch-diameter acetate sample tubes were advanced beneath the subsurface inside a stainless-steel sample probe using hydraulic rams. Soil samples were collected from the desired interval at each boring location and placed into laboratory-supplied, pre-cleaned glass jars or stainless-steel liners and labeled properly. Each soil boring was abandoned using a Portland types I to IV cement and concrete, applied from the bottom of the borehole to the surface.

After labeling, the soil samples were logged onto chain-of-custody (COC) forms, sealed in plastic bags and placed in an ice-chilled cooler for transportation to the laboratory under proper chain-of-custody protocols.

Each boring location was located using a handheld Trimble R1 global positioning system unit (or similar device) during field activities. The unit is capable of providing an accuracy of less than one meter in the field.

7 SAMPLING RATIONAL

Soil and soil-gas samples were collected from borings across the Site within areas identified as AOC. Ranges of concentrations that exceeded their respective DTSC screening levels (SL) are summarized below by AOC and media. Soil-gas samples were collected from dual-nested soil vapor wells installed at a depth of 5 and 10 feet bgs. Any deviations from the Work Plan are discussed under each AOC below.

A sample matrix presenting AOC sample IDs, sample depths, analysis for soil and soil gas is presented in Table 2. Soil results are included in Tables 3 through 6 and soil-gas results are presented in Table 7. Duplicate sample results are included for each media in their respective table. Lab reports and data validation reports are included in Appendices B and C, respectively. Soil exceedances are presented on Figures 3 through 5.

8 SAMPLING RESULTS

8.1 AOC1 – Elementary School Building (current building)

Eleven borings (S1 through S11) were advanced adjacent to the Former Elementary School Building located in the southern portion of the Site to assess AOC1. Soil samples were collected from all 11 borings at depths of 0.0 to 0.5 feet below ground surface (bgs) and 2.0 to 2.5 feet bgs. Both sample depths were analyzed for OCPs; shallow soil samples were analyzed for arsenic, lead and PCBs. If the shallow result exceeded ESLs or SLs then the 2-foot sample was analyzed for the same constituent. Some of these borings were also part of other overlapping AOC assessments. Boring S7 was collected near both the waste incinerator and adjacent to the Elementary School Building but soil samples were not labeled with AOC1 in addition to AOC5. The samples form boring S7 were analyzed for overlapping constituents from AOC1 and AOC5. The sample locations are shown on Figures 3 through 5.

Constituent	Exceedance - (Quantity of Samples Exceeding SLs) and Range of Detections Exceeding SLs
Soil (mg/Kg)	
Lead	(8) 140 – 730

8.2 AOC2 – Cafeteria Building (current building)

Five borings (S5 and S12 through S14) were advanced adjacent to the cafeteria building located on the western boundary of the Site to assess potential impacts from building construction materials and application of pesticides. Soil samples were collected from all five borings at depths of 0.0 to 0.5 feet below ground surface (bgs) and 2.0 to 2.5 feet bgs. Both sample depths were analyzed for OCPs; shallow soil samples were analyzed for arsenic, lead and PCBs. Some of these borings were also part of other overlapping AOC assessments. The sample locations are shown on Figure 2.

Constituent	Exceedance - (Quantity of Samples Exceeding SLs) and Range of Detections Exceeding SLs
Soil (mg/Kg)	
Arsenic	(1) 18

8.3 AOC3 – Former Buildings

A total of 75 borings were advanced within the footprint of the former buildings to assess potential impacts to soil from building construction materials, application of pesticides, and fill material from unknown sources. The sample locations were based on a grid overlain onto the area of the former buildings. Soil samples were collected from all 75 borings at depths of 0.0 to 0.5 feet below ground surface (bgs) and 2.0 to 2.5 feet bgs. Both sample depths were analyzed for OCPs; shallow soil samples were analyzed for arsenic, lead and PCBs with one of every fourth sample location analyzed for full CAM-17 metals. Some of these borings were also part of other overlapping AOC assessments. The approximate location of the former buildings and sample locations are shown on Figure 3.

Constituent	Exceedance - (Quantity of Samples Exceeding SLs) and Range of Detections Exceeding SLs
Soil (mg/Kg)	
Arsenic	(12) 11 – 45
Lead	(60) 80 – 990

8.4 AOC4 – Former Heating Oil UST

One soil boring (S1) was advanced to a depth of 15 feet bgs adjacent to the location of the Former Heating Oil UST on the southern boundary of the Site to assess potential impacts of the former UST. Soil samples were collected at a depth of 5, 10 and 15 feet bgs. In addition, a dual nested soil gas probe was installed in the same boring in accordance with Section 6.2.2. Soil samples were analyzed for TPHd, TPHmo, TPHg, VOCs and metals. Soil gas samples were

analyzed for VOCs and helium (tracer gas compound). Helium was detected in the soil gas sample at 10 feet bgs (SG-1-10) at 18%. A second sample was collected with helium below 1%. The sample location is shown on Figure 2.

Constituent	Exceedance - (Quantity of Samples Exceeding SLs) and Range of Detections Exceeding SLs	
Soil Gas (µg/m^3)		
	Shallow (5 feet)	Deep (10 feet)
Chloroform	(1) 15	(1) 6.9

8.5 AOC5 – Waste Incinerator

One soil boring (S7) was advanced adjacent to the waste incinerator located in the basement near the Elementary School Building. The boring was advanced to a depth of 5 feet and samples were collected at a depth of 0.5, 2, and 5 feet bgs and analyzed for SVOCs, CAM 17 Metals, and dioxins/furans. The toxic equivalency value (TEQ) for dioxins/furans was calculated to be 0.156 picograms per gram (pg/g) in the 0.5-foot sample and 1.4 pg/g in the 2-foot sample. The sample location is shown on Figure 3. No exceedances were detected in the three samples collected near the waste incinerator.

8.6 AOC6 – Hydraulic Elevator

Three borings (S9A, S9B, and S9C) were advanced adjacent to the elevator located along the northeast end of the Elementary School Building. During field activities, refusal was encountered in the boreholes which appeared to consist of a concrete pad at a depth of approximately 4.0 to 4.5 feet bgs. A soil sample was collected from a depth of 4 feet bgs from boring S9B and analyzed for TPHd/mo and PCBs. In addition, PCBs were analyzed from boring S9A as part of the AOC1 assessment. During sampling activities Ninyo & Moore visually inspected the elevator shaft and did not find evidence of hydraulic fuel leaks. No exceedances for TPHd/mo and PCBs were detected in the samples collected from S9A and S9B.

8.7 AOC7 – Pad-Mounted Transformer

One boring (S8) was advanced adjacent to the pad-mounted transformer located in the northeast area of the Elementary School Building in order to assess potential PCB impacts to soils. Soil samples were collected at 0.0 to 0.5 and 2.0 to 2.5 feet bgs and analyzed for PCBs. The sample location is shown on Figure 3. During sampling activities, the area around the transformer was visually inspected and no evidence of oil staining or leaks were observed. No exceedances were detected in soil samples collected from boring S8.

8.8 AOC8 – Burned Structures

The location of the burned buildings is unknown and samples were collected throughout the Site. Dioxins/furans were analyzed in three soil borings (S4, S7 and S10) around current buildings and in nine borings (S1A, S5B, S8C, S2D, S6E, S1E, S3G, S6H and S9I) advanced within the grid as part of AOC3. Samples from boring S2 were not analyzed for dioxin/furans as stated in the Work Plan due to a lab error. Soil samples were collected at 0.0 to 0.5 and 2.0 to 2.5 feet bgs. Ash material was encountered in boring S9A and S9B advanced as part of the AOC1 and AOC6 assessment. Samples AOC1-S9A and AOC6-S9B were additionally analyzed for dioxins/furans in order to evaluate the impact of the ash burned material and no dioxins/furans were detected above the laboratory reporting. The only dioxin with a SL is 2,3,7,8-TCDD and no sample was found above the SL of 4.8 pg/g. The highest concentrations of dioxins/furans (TEQ of 9.6) was detected in the 0.5-foot sample in boring S4 (AOC1/AOC8-S4-0.5) on the west side of the current two-story building. All other TEQ calculations were below 4.8 pg/g. The sample locations are shown on Figure 3.

8.9 AOC9 – Northern and Southern Boundaries

To assess potential impacts from off-Site properties to the north and south of the Site and for general up-gradient/background soil and soil gas assessment, soil and soil gas samples were collected along the northern (SG3 and SG4) and southern (SG2/S2) boundaries. Borings were advanced to a depth of 10.5 feet bgs and soil samples were collected from 5 and 10 feet bgs. In addition, dual nested soil gas probes were installed in the same boring in accordance with Section 5.2.2. Ninyo & Moore attempted to collect soil gas samples at the 5-foot probe in SG2 and 10-foot probe in SG-3 during two separate Site visits on November 15 and December 3. Water was observed in the sampling tubing of SG2 while purging during both sampling attempts and a sample was not collected. Both sampling attempts were well after or before rain events. Irrigation lines were observed in the vicinity but no irrigation water was observed in the area. The 10-foot sample at SG3 was not collected due to low permeability soils inhibiting soil gas flow.

Soil samples were analyzed for TPHd, TPHmo, TPHg, VOCs, and CAM 17 Metals. Soil gas samples were analyzed for VOCs, fixed gases (oxygen, carbon dioxide and methane) and helium (tracer gas compound). Some of these borings were also part of other overlapping AOC assessments. The sample locations are shown on Figure 3. No exceedances were detected in any of the soil samples collected from borings SG3, SG4, and SG2/S2. The only exceedance is soil gas samples was chloroform in SG2-10 at a concentration of 19 µg/m3.

8.10 AOC10 – Railroad Lines

To assess potential impacts from the railroad tracks adjacent to the northeast corner of the Site, soil samples were collected from the northeast borings (S8A, S8B and S9C) within the grid sampling advanced as part of AOC3. Soil samples were collected at 0.0 to 0.5 and 2.0 to 2.5 feet bgs. Soil samples were analyzed for CAM 17 metals, SVOCs, and PAHs. Only exceedances of lead were detected in S8A, S8B and S9C and are discussed in Section 8.3. SVOCs and PAHs were not detected above the laboratory reporting limits. The sample locations are shown on Figure 3.

9 STATISTICAL ANALYSES OF SOIL ARSENIC DATA

The statistical methods used in the data evaluation were taken directly from DTSC's policy for selecting COPCs at hazardous waste sites and permitted facilities (https://dtsc.ca.gov/assessing-risk/). The first objective of the statistical analysis is to determine if the soil arsenic data are likely to be drawn from the same population (i.e., all samples collected from a non-contaminated site). For this type of analysis, the DTSC recommends to "construct a table showing for each metal the frequency of detection, range of detected values, range of sample quantitation limits, arithmetic means, and standard deviations, and coefficients of variation. Typically, data drawn from just one population will display a range of detected values of no more than 2 orders of magnitude and a coefficient of variation of no greater than 1. When either of these conditions is not met, one must suspect that values representative of contamination have been included in the population." (DTSC 1997, Section 4.3, page 4). The table recommended by the DTSC is presented below.

Statistical Parameter	Arsenic
Number of Samples	124
Number of Non-Detected	19
Detection Frequency	85 %
Minimum detected value	1.9 mg/kg
Maximum detected value	45 mg/kg
Mean concentration	5.43 mg/kg
First quartile (Q1)	2.70 mg/kg
Median	4.00 mg/kg
Third quartile (Q3)	7.30 mg/kg
Standard deviation	5.12
Coefficient of variation	0.94
Order or magnitude difference between minimum and maximum value	1.68

For purposes of determining background concentrations, all soil arsenic data collected (regardless of depth) were included in the evaluation. In accordance with DTSC (1997) guidance, non-detected values were included in the evaluation as one-half the reported detection limit.

The next step in the analysis of soil metal data is the definition of the "Upper Bound Background Concentration." The Upper Background metal concentration was obtained using a "Fourth Spread" analysis as recommended by DTSC (2009). The Fourth Spread (Fs) of the soil metal data was obtained using the following formula:

$$Fs = (Q3 - Q1)$$

Where:

Fs	=	Fourth spread (mg/kg)
Q3	=	Third quartile (mg/kg)
Q1	=	First quartile (mg/kg)

The estimated Fs for the soil arsenic data is 4.60 mg/kg.

Outliers for the upper bound of the Site-specific soil arsenic concentration are defined as:

All data points greater than Q3 + [1.5 x Fs]

or

7.30 mg/kg + [1.5 x 4.60 mg/kg] = 14.20 mg/kg

According to these calculations, any soil arsenic concentration higher than 14.20 mg/kg are considered to be outliers. The samples containing arsenic at concentrations higher than 14.20 mg/kg were:

Sample ID	Arsenic Concentration (mg/kg)
AOC-S3C-0.5	15
AOC3-S2G-0.5	16
AOC3-S3E-0.5	16
AOC2/AOC3-S13/S3I-0.5	18
AOC3-S5G-0.5	45

In an effort to evaluate whether metal concentrations in soils are, in fact, derived from more than one distinct population, outliers were also labeled by constructing a cumulative probability plot. The plot was constructed by plotting the cumulative probability vs. soil arsenic concentration. Non-detected values were assigned a value equal to one-half the reported detectable concentration (DTSC, 1997).

According to the DTSC (1997) guidance, inflections or breaks in the cumulative plot line generally indicate the potential presence of soil metal contamination. Probability plot for arsenic detected in soil at the Site is presented in Figure 7. As can be seen in the figure, there are breaks in the line at arsenic concentrations of about 12 and 15 mg/kg. The observed breaks correlate well with the estimated, Site-specific upper background concentrations.

Now that the presence and concentration of outliers has been labeled, a statistically derived background soil arsenic concentration can be calculated by estimating the 95 percent upper confidence limit of the 99th quartile of the data set (DTSC 2009). For this exercise, all outlier values were removed, and only soil data considered to be representative of ambient, background concentrations were included.

The upper limit of the data set can be estimated according to the following equation (DTSC 2009):

$$UL_{1-\alpha}\ (x_p) = x + sK_{1-\alpha,\ p}$$

Where,

$UL_{1-\alpha}\ (x_p)$	=	The upper limit of the data set
x	=	Mean of the data set
s	=	Standard deviation of the mean
$K_{1-\alpha,\ p}$	=	Statistical tolerance factor for estimating and upper 100(1-α) confidence limit on the pth quartile (2.649, from Table A3, Gilbert 1987).

The statistical parameters obtained for the data once the outliers were removed and the estimated 95 percent upper confidence limit of the 99th quartile concentrations are presented below.

Statistical Parameter	Arsenic
Number of Samples	119
Minimum detected value	1.9 mg/kg
Maximum detected value	14.00 mg/kg
Mean concentration	4.73 mg/Kg
Standard deviation	3.10
95 Percent Upper Confidence Limit of the 99th Quartile	12.93 mg/kg

Based on this analysis, it is recommended confirmation samples be compared to the 95 percent upper confidence limit of the 99th quartile concentration of 12.93 mg/kg.

10 HUMAN HEALTH SCREENING EVALUATION

The PEA screening evaluation for human health effects involves identifying chemicals of potential concern (COPCs), evaluating exposure pathways and media of concern, assessing chemical toxicity, and then characterizing risk. Estimated health risks are based on a calculated dose, which integrates exposure parameters for the receptors of concern with chemical specific toxicity criteria. The calculated risks are then compared to health-based guidelines developed by the EPA and DTSC. For the purpose of the PEA screening evaluation, the potential dose is calculated for a resident (adult and child) occupying the Site.

Exposure to COPCs can only occur if there is a complete pathway by which the COPCs in soil, water, or air can be contacted by humans. Therefore, the evaluation of exposure pathways is the first step in the human health screening evaluation. Potential health hazards and risk are then calculated based on an evaluation of potential exposure concentrations and the toxicity of the COPCs. The findings of the human health screening evaluation are summarized in the risk characterization summary.

10.1 Exposure Pathways and Media of Concern

For the purpose of this PEA it is assumed that hypothetical residents at the Site may be exposed to Site chemicals through incidental ingestion, dermal contact, inhalation of soil particulates containing COPCs, and inhalation of soil vapor containing COPCs. In accordance with PEA guidelines, exposures to COPCs were evaluated assuming hypothetical residential exposure. Figure 6 presents the Conceptual Site Model (CSM) that links soil COPCs with hypothetical receptors at the Site.

10.1.1 Soil Exposure Pathways

COPCs discovered at the Site include metals, trace 4,4'-DDE, anthracene, phenanthrene, DRO, and MRO. These chemicals were detected in surficial- and subsurface soil; therefore, the potential exists for exposure to humans by dermal contact and incidental soil ingestion. All organic chemicals detected in soil were retained as COPCs in this risk evaluation.

In a conventional risk assessment, metal elements detected in soil at concentrations deemed to be within natural, background concentrations are excluded from the risk evaluation (USEPA, 1989 and DTSC, 2015). For this evaluation, the background metal data set was obtained from soil metal data collected from California Air Force facilities (Hunter, Davis, and Roach, 2004). Maximum detected soil metal concentrations were compared to the 95th percentile concentration obtained from the Air Force facilities. The comparison to background concentrations is presented in Table 8. In addition, maximum

detected soil metal concentrations were compared to soil screening levels. In an effort to be conservative, screening levels selected were taken from published soil screening levels deemed to be protective of residential receptors. Any metal detected in soil at concentrations higher than either the background concentration or the established screening levels for residential land use were retained in this HHRA as COPCs. Only arsenic and lead detected in soil at the Site exceeded both, their background concentration or their screening value. Therefore, only the metals arsenic and lead were selected as COPCs in this HHRA. The selection of metal COPCs is presented in Table 8.

10.1.2 Water Exposure Pathways

Groundwater was not encountered during the PEA. On-Site receptors will receive their drinking water from municipal water suppliers and would not depend on on-Site groundwater wells for their water needs. Therefore, the groundwater exposure pathway is not considered to be a complete exposure pathway. In addition, permanent surface water bodies do not occur on, or near the Site, therefore, surface water is not expected to be a consideration.

10.1.3 Air Exposure Pathways

The following sections discuss the air exposure pathways.

Fugitive Dust Inhalation

Metals, dioxins/furans, a few pesticides and DRO, and MRO were detected in soil at the Site (see Tables 3 through 6). Exposure to these chemicals may occur via inhalation of contaminated fugitive dust. Inhalation exposure to non-volatile compounds is typically minor in fugitive dust when compared to direct ingestion exposure (DTSC, 2015b). Nevertheless, a relationship must be estimated between the chemical concentration in soil and the concentration in air due to fugitive dust emissions from surface soil.

The EPA (2002) and DTSC (2015b) recommend using a particulate emission factor (PEF) to model COPC concentrations in airborne dust. The PEF represents an annual average emission rate based on wind erosion. Default PEF values for residential exposure scenarios published by the DTSC (2019a) were used in this risk evaluation. The residential PEF value of 1.316E+09 cubic meters per kilogram (m^3/kg) was used to estimate dust emissions for the recreational receptors. The ambient chemical air concentration due to dust emissions was obtained by dividing the soil chemical concentrations by the PEF. The estimated ambient air exposure point concentrations were used to estimate dust inhalation exposures for on-Site receptors.

Indoor Vapor Inhalation

Screening-level models were used to predict indoor air concentrations that may result from the chemical vapors potentially released from soil vapor under the Site. The estimated vapor flux and indoor air concentrations were then used to estimate potential health risks that may result from on-Site exposures. For purposes of this evaluation, it was assumed the land use would be residential now and into the foreseeable future.

In this evaluation, maximum detected soil vapor chemical concentrations (Table 9) were considered representative of chemical concentrations present in soil vapor under the Site.

The DTSC guidance recommends that multiple lines of evidence be used when evaluating the potential risk and hazards posed by vapor intrusion. DTSC recommends that the indoor air chemical concentrations that can result from vapor intrusion be estimated using the following equation:

$$AF = \frac{C_{indoor}}{C_{soil\ vapor}}$$

Where:

AF	=	Attenuation factor (unitless)
C_{indoor}	=	Indoor air concentration (micrograms per cubic meter [µg/m^3])
$C_{soil\ vapor}$	=	Soil vapor concentration (µg/m^3)

Using the above equation, the indoor air chemical concentration can be estimated by multiplying the known soil vapor concentration by the default attenuation factor (AF).

In accordance with DTSC (2020a) guidance, the default AF of 0.03 was used in the evaluation for chemicals detected in soil vapor at a depth of 5 and 10 feet bgs. Estimated indoor air chemical concentrations that might result from vapor intrusion are presented in Table 9.

10.1.4 Summary of Selected Exposure Pathways

For the purpose of this PEA screening evaluation, the hypothetical resident was assumed to be exposed to COPCs through direct dermal contact, incidental ingestion, and inhalation of volatiles and airborne particulates. Exposure to groundwater and surface water is deemed to be an incomplete pathway; therefore, is not a consideration. Exposure parameters used to characterize hypothetical on-Site residential receptors are presented in Table 10.

10.2 Exposure Concentrations and Chemicals

Tables 3 through 7 present the chemicals detected in soil at the Site. In accordance with the DTSC (2015) guidance, the maximum detected COPC concentrations were evaluated as potential exposure point concentrations (EPCs). These EPCs were used in the risk calculations. Soil data collected from surface and subsurface soils were combined in the evaluation of risks. That is, all soil samples collected at the Site were included in the calculation of risks regardless of the depth where the samples were collected. An assumption was made that an individual may come in contact with the entire soil profile if the Site was re-graded.

10.3 Toxicity Values

The toxicity assessment characterizes the relationship between the magnitude of exposure to a COPC and the nature and magnitude of adverse health effects that may result from such exposure. For the purposes of calculating exposure criteria to be used in risk assessments, adverse health effects are classified into two broad categories, carcinogens and non-carcinogens. Toxicity values/exposure criteria are generally developed based on the threshold approach for non-carcinogenic effects and the non-threshold approach for carcinogenic effects. Toxicity values may be based on epidemiological studies, short-term human studies, and sub-chronic or chronic animal data.

In this assessment, chronic toxicity criteria were selected in accordance with the DTSC's "Toxicity Criteria for Human Health Risk Assessment" (effective September 2018) (https://dtsc.ca.gov/LawsRegsPolicies/Regs/Toxicity-Criteria-for-Human-Health-Risk-Assessment). Toxicity information was obtained from the DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 10, Toxicity Criteria (DTSC, 2019b).

10.3.1 Carcinogenic Effects

Certain chemicals are regulated as carcinogens based on the likelihood that exposure may cause cancer in humans. Numerical estimates of cancer potency for these chemicals are presented as cancer slope factors (CSFs). The CSF defines the cancer risk due to constant lifetime exposure to one unit of a carcinogen (units of risk per mg/kg-day). CSFs are derived by calculating the 95% UCL on the slope of the linearized portion of the dose-response curve using the multistage cancer model on the study data. Use of the 95%UCL of the slope means that there is only a 5% chance that the probability of a response could be greater than the estimated value for the experimental data used. This is a conservative approach and may overestimate the actual risk given that the actual risk is expected to be between zero and the calculated value. Carcinogenic slope factors assume no threshold for effect, i.e., all exposures to a chemical are assumed to be associated with some risk.

For inhalation exposures cancer slope factors are expressed as inhalation unit risk (IUR) for a chemical. The IUR, which is expressed in units of inverse micrograms per cubic meter $(ug/m^3)^{-1}$, is the 95% UCL of the probability of carcinogenic response per unit daily exposure to a given chemical concentration over a lifetime. The IUR multiplied by the lifetime exposure concentration of the chemical provides an estimate of the 95% UCL of the theoretical cancer risk for the specific chemical. Cancer slope factors and IUR used in this evaluation are summarized in Table 11.

10.3.2 Noncarcinogenic Effects

For the purpose of assessing risk associated with non-carcinogenic effects, the EPA has adopted a science policy position that protective mechanisms such as repair, detoxification, and compensation must be overcome before an adverse health effect is manifested. Therefore, a range of exposures exists from zero to some finite value (a threshold) that can be tolerated by the organism without appreciable risk of adverse effects occurring.

Noncarcinogenic effects were evaluated using reference doses (RfDs) developed by the EPA. The RfD is a health-based criterion based on the assumption that thresholds exist for noncarcinogenic toxic effects. In general, the RfD is an estimate (with uncertainty) of a daily exposure to the human population that is likely to be without appreciable risk of chronic effects during a lifetime of exposure. RfDs are expressed as acceptable daily doses in milligrams of compound per kilogram of body weight per day (mg/kg-day). Most RfDs are based on oral exposure data.

A reference concentration (RfC) is an exposure concentration in air that is not expected to cause adverse health effects over a lifetime of daily exposure in the most sensitive population. RfD and RfC used in this evaluation are summarized in Table 11.

10.3.3 Health Risk Evaluation for Lead Exposure

The carcinogenic and non-carcinogenic toxicity criteria described above do not apply to inorganic lead. RfD, RfC, IUR and CSF are not applicable because of incomplete knowledge of the complex physiological dynamics of lead in the body (DTSC, 2020). Alternative methods have been developed to evaluate potential health risks from exposures to inorganic lead. These methods are based on establishing a target blood-lead level that is not expected to result in toxicity. The target level approach is considered appropriate because lead toxicity effects are typically only observed above certain blood-lead levels.

10.4 Risk Characterization Summary

Risk characterization involves estimating the magnitude of the potential adverse health effects of the hazardous chemicals under study and making judgments about the nature of the health threat to the defined receptor populations. It combines the results of the dose-response (toxicity) and exposure assessment.

Excess cancer risks were estimated by multiplying the lifetime-average daily dose (LADD) by the chemical carcinogenic toxicity criteria. The equation used to estimate the excess cancer risk is:

$$Excess\ Cancer\ Risk\ =\ LADD\ x\ CSF$$

The excess cancer risks are then compared to the risk level considered acceptable by the DTSC (1E-06).

Hazard quotients were estimated by calculating the ratio of the average daily dose (ADD) to the corresponding chronic reference dose for noncarcinogenic effects. The equation used to estimate the hazard quotient is:

$$Hazard\ Quotient\ =\ \frac{ADD}{RfD}$$

The hazard quotients are then compared to an acceptable hazard level. Hazard quotients less than the benchmark hazard level of 1 indicate that no adverse health effects are predicted from exposure to COPCs at the Site.

The chemical-specific and pathway-specific cancer risks and hazard index estimated for soil COPCs are presented in Tables 12. Supporting calculations are presented in Appendix D. The chemical-specific and pathway-specific cancer risks and hazard index for VOCs detected in soil gas are summarized in Tables 13. Supporting calculations are presented in Appendix D.

Using maximum detected concentrations for COPCs detected in soil at the Site, the total incremental cancer risk for hypothetical residential exposure to Site-related chemicals was estimated to be 4E-06 (Table 12). The total cancer risk exceeds the acceptable cancer risk of 1E-06. The chemicals responsible for the exceedance were total dioxins as dioxin TEQ and, to a lesser extent, Dieldrin (Table 12).

Using the maximum VOC concentrations detected in soil vapor, the cancer risks estimated to result from vapor intrusion was 5E-06 (Table 13). This estimated cancer risk exceeds the acceptable cancer risk of 1E-06. The chemical responsible for the exceedance was chloroform.

is known to be formed from the reaction of chlorinated water with soil organic matter. Free chlorine can react with organic matter in soil to form chloroform and other trihalomethanes. Thus, it is highly likely that the chloroform detected in soil gas could have originated from chlorinated water in the subsurface. Using maximum detected soil chemical concentrations, the total hazard index for hypothetical residential exposure to COPCs in soil was estimated to be 0.2 (Table 13). The estimated hazard index is below the acceptable hazard index of 1.

Using the maximum VOC concentrations detected in soil vapor, the hazard index estimated to result from vapor intrusion was 0.03 (Table 13). The hazard index estimated to result from VOCs intrusion is lower than the acceptable hazard index of 1 (Table 13)

10.5 Lead Exposure Health Hazards

Given the unique toxicological and pharmacological properties of lead, the Hazard Quotient method is inappropriate for this chemical. For lead, the DTSC (2020) recommends comparing detected soil lead concentrations to published soil screening levels. For this evaluation, the soil screening levels published by the DTSC (2020) was used as the soil screening concentration. The soil lead screening level for residential exposure scenarios has been set at 80 mg/kg (DTSC, 2020). The 95-percent upper confidence limit (95UCL) of the arithmetic mean concentration for lead was estimated to be 181.3 mg/kg (Appendix E). This value exceeds the DTSC's screening level of 80 mg/kg, it is concluded that lead in soil could pose a health threat to hypothetical on-Site occupants.

10.6 Uncertainty Analysis

It is important to fully specify the assumptions and uncertainties inherent in the risk assessment for two reasons: (1) to place the risk estimates in proper perspective, and (2) to identify key Site-related variables and assumptions that contribute most to the conclusions reached in the risk assessment. The focus of this section is also to highlight parameters and Site conditions that contribute most to the predicted risks. The frequency and duration of soil contact activities would be a significant factor affecting the potential for adverse human health impacts from the Site.

This health risk evaluation was based on the application of conservative methods and assumptions in all phases of the assessment. Because EPCs were derived from maximum detected concentrations, conservative assumptions and methodology were necessarily employed to minimize the possibility of underestimating risks. This practice, although commonly used in the risk assessment process, necessarily introduces a significant level of conservatism in the conclusions derived from the assessment. Examples of some of the conservatism in this assessment include:

- It was assumed that future receptors at the Site would be exposed to chemicals in soil and dust 100 percent of the time while at the Site. In reality, receptors at the Site are not likely to be there for more than eight hours a day, five days a week.

- It was assumed that future occupants of the Site would have contact with soil. However, it is known that most, if not all, the Site surface area is and will be occupied by buildings, asphalt, or landscaped. Thus, future contact with soil will be minimal.

- Carcinogenic risks for all pathways were based on a residential exposure of 350 days per year for 26 years. A more realistic exposure scenario for a school Site would be to assume an exposure frequency of 250 days per year for a duration of 6 years, representing a typical school exposure scenario.

10.7 Human Health Screening Evaluation Conclusions

Based on the results of this investigation, Ninyo & Moore provides the following conclusions and recommendations:

- The upper limit arsenic background concentration for the Site was estimated to be 14.20 mg/kg. Only 5 of the 124 soil samples collected at the Site contained arsenic at concentrations higher than the estimated local background concentration. Therefore, the distribution of arsenic contamination at the Site appears to be limited and localized. The estimated 95% UCL for arsenic using all available data was estimated to be 7.52 mg/kg (Appendix E).

- Relatively high concentrations of lead were detected in soil at the Site. The estimated 95% UCL for lead was estimated to be 181.3 mg/kg (Appendix E). This value exceeds the DTSC (2020) soil screening value for lead of 80 mg/kg. Therefore, it is concluded lead in soil could pose a potential health hazard to future on-Site receptors.

- Using maximum detected concentrations for all organic chemicals detected in soil at the Site, the total incremental cancer risk for hypothetical residential exposure to Site-related chemicals was estimated to be 4E-06. This value exceeds the acceptable cancer risk of 1E-06. The “risk drivers” were found to be dioxins/furans and Dieldrin (Table 12).

- Using maximum VOC concentrations detected in soil gas, the total incremental cancer risk for hypothetical residential exposure to indoor air was estimated to be 5E-06. This value exceeds the acceptable cancer risk of 1E-06. The “risk driver” was found to be chloroform (Table 13). It should be noted that chloroform is known to be formed from the reaction of chlorinated water with soil organic matter. Free chlorine can react with organic matter in soil to form chloroform and other trihalomethanes. Thus, it is highly likely that the chloroform detected in soil gas could have originated from chlorinated potable irrigation water in the subsurface. Furthermore, chloroform was only found above the SL in soil gas samples collected on along southern perimeter of the site in a landscaped area where irrigation lines were observed.

- Using maximum detected soil chemical concentrations, the hazard indices estimated to result from soil exposure or indoor air exposure were estimated to be lower than 1 (Tables 13 and 14). Both estimated hazard indices were within levels considered acceptable to California health and environmental protection agencies.

11 ECOLOGICAL SCREENING EVALUATION

An ecological screening evaluation was not completed.

12 CONCLUSIONS AND RECOMMENDATIONS

Conclusions and recommendations are presented below.

12.1 Conclusions

AOCs 1 through 10 of the OUSD Cole Central Administration Center Project were assessed in October through December 2021. Lead, arsenic, and dioxin/furans impacts were identified in soil. Remaining data gaps identified are:

- Vertical delineation of lead concentrations that exceed SLs.
- Vertical and lateral delineation of dioxins/furans concentrations that exceed SLs.

12.2 Recommendations

- Evaluate mitigation and/or remediation options with respect to the proposed improvement plans (i.e., building locations, hardscape).
- Prepare a Site-Specific Health and Safety Plan and a Soil Management Plan for any work where contractors shall be working in or excavating soil.
- Delineate lead vertically in AOC 3. Grading is expected during development of the Administration building and soil will be removed and disposed of off-Site. Vertical delineation will determine the distribution of elevated lead concentrations in soil that may be excavated during grading.
- Delineate dioxin/furans in soil vertically and laterally near the boring S4 on the west side of the current two-story building (AOC 1).

13 LIMITATIONS

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in Site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities. Please also note that this study did not include an evaluation of geotechnical conditions or potential geologic hazards.

Ninyo & Moore's opinions and recommendations regarding environmental conditions, as presented in this report, are based on limited subsurface assessment and chemical analysis. Further assessment of potential adverse environmental impacts from past on-Site and/or nearby use of hazardous materials may be accomplished by a more comprehensive assessment. The samples collected and used for testing, and the observations made, are believed to be representative of the area(s) evaluated; however, conditions can vary significantly between sampling locations. Variations in soil and/or groundwater conditions will exist beyond the points explored in this evaluation.

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject Site. The testing and analyses have been conducted by an independent laboratory which is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

Our conclusions, recommendations, and opinions are based on an analysis of the observed Site conditions. It should be understood that the conditions of a Site could change with time as a result of natural processes or the activities of man at the subject Site or nearby Sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

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This report is intended exclusively for use by the Oakland Unified School District. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than those noted is undertaken at said parties' sole risk.

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TABLES

Table 2 – Sample and Analysis Matrix

AOC	Sample ID	Sample Depth (feet bgs)	Soil											
			Lead and Arsenic (EPA Method 6010B)	OCPs (EPA Method 8081)	PCBs (EPA Method 8082)	TPHd and TPHmo (EPA Method 8015)	TPHg	VOCs (EPA Method 8260B)	SVOCs (EPA Method 8270C SIM)	PAHs (EPA Method 8270)	Dioxins/Furans (EPA Method 8290A)	Title 22 Metals (EPA Method 6010B)	Hold	Notes
AOC1 - Elementary School Building (current building)	AOC1-S1-0.5	0.5	1	1	1									
	AOC1-S1-0.5DUP	0.5	1	1	1									
	AOC1-S1-2	2.0		1										
	AOC1-S1-2DUP	2.0		1										
	AOC1-S2-0.5	0.5	1	1	1						1			
	AOC1-S2-2	0.5		1							1			
	AOC1-S3-0.5	0.5	1	1	1									
	AOC1-S3-2	2.0		1										
	AOC1/AOC8-S4-0.5	2.0	1	1	1						1			
	AOC1/AOC8-S4-0.5 DUP	0.5	1	1	1						1			
	AOC1/AOC8-S4-2	2.0		1							1			
	AOC1/AOC2-S5-0.5	0.5	1	1	1									
	AOC1/AOC2-S5-2	2.0		1										
	AOC1-S6-0.5	0.5	1	1	1									
	AOC1-S6-2	2.0		1										
	AOC1/AOC5/AOC8-S7-0.5	0.5		1	1				1		1	1		
	AOC1/AOC5/AOC8-S7-2	2.0		1					1		1	1		
	AOC1/AOC7-S8-0.5	0.5	1	1	1									
	AOC1/AOC7-S8-2	2.0		1	1									
	AOC1/AOC7-S8-2DUP	2.0		1	1									
	AOC1/AOC8-S10-0.5	0.5	1	1	1						1			
	AOC1/AOC8-S10-2	2.0		1							1			
	AOC1-S9A-0.5	0.5	1	1	1									
	AOC1-S9A-0.5 DUP	0.5	1	1	1									
	AOC1-S9A-2	2.0		1										
	AOC1/AOC8-S10-0.5	0.5	1	1	1						1			
	AOC1/AOC8-S10-2	2.0		1							1			
	AOC1-S11-0.5	0.5	1	1	1									
	AOC1-S11-2	2.0		1										
AOC2 - Cafeteria (current building)	AOC2-S12-0.5	0.5	1	1	1									
	AOC2-S12-0.5DUP	0.5	1	1	1									
	AOC2-S12-2	2.0		1										
	AOC2-S12-2DUP	2.0		1										
	AOC2/AOC3-S13/S3I-0.5	0.5	1	1	1									
	AOC2/AOC3-S13/S3I-2	2.0		1										
	AOC2-S14-0.5	0.5	1	1	1									
	AOC2-S14-2	2.0		1										
	AOC3/AOC8-S1A-0.5	0.5		1	1						1	1		
	AOC3/AOC8-S1A-2	2.0		1							1			
	AOC3-S1B-0.5	0.5	1	1	1									
	AOC3-S1B-2	2.0		1										

Table 2 – Sample and Analysis Matrix

AOC	Sample ID	Sample Depth (feet bgs)	Soil											
			Lead and Arsenic (EPA Method 6010B)	OCPs (EPA Method 8081)	PCBs (EPA Method 8082)	TPHd and TPHmo (EPA Method 8015)	TPHg	VOCs (EPA Method 8260B)	SVOCs (EPA Method 8270C SIM)	PAHs (EPA Method 8270)	Dioxins/Furans (EPA Method 8290A)	Title 22 Metals (EPA Method 6010B)	Hold	Notes
	AOC3-S1C-0.5	0.5	1	1	1									
	AOC3-S1C-2	2.0		1										
	AOC3-S1D-0.5	0.5	1	1	1									
	AOC3-S1D-2	2.0		1										
	AOC3/AOC8-S1E-0.5	0.5	1	1	1									
	AOC3/AOC8-S1E-2	2.0		1										
	AOC3-S1F-0.5	0.5	1	1	1									
	AOC3-S1F-2	2.0		1										
	AOC3-S1G-0.5	0.5	1	1	1									
	AOC3-S1G-2	2.0		1										
	AOC3-S1H-0.5	0.5	1	1	1									
	AOC3-S1H-2	2.0		1										
	AOC3-S1I-0.5	0.5		1	1							1		
	AOC3-S1I-2	2.0		1										
	AOC3-S2A-0.5	0.5	1	1	1									
	AOC3-S2A-2	2.0		1										
	AOC3-S2B-0.5	0.5	1	1	1									
	AOC3-S2B-2	2.0		1										
	AOC3-S2C-0.5	0.5	1	1	1									
	AOC3-S2C-2	2.0		1										
	AOC3/AOC8-S2D-0.5	0.5	1	1	1									
	AOC3/AOC8-S2D-2	2.0		1										
	AOC3-S2E-0.5	0.5	1	1	1									
	AOC3-S2E-2	2.0		1										
	AOC3-S2F-0.5	0.5	1	1	1									
	AOC3-S2F-0.5DUP	0.5	1	1	1									
	AOC3-S2F-2	2.0		1										
	AOC3-S2G-0.5	0.5	1	1	1									
	AOC3-S2G-2	2.0		1										
	AOC3-S2H-0.5	0.5	1	1	1									
	AOC3-S2H-2	2.0		1										
	AOC3-S2I-0.5	0.5	1	1	1									
	AOC3-S2I-2	2.0		1										
	AOC3-S3A-0.5	0.5	1	1	1									
	AOC3-S3A-2	2.0		1										
	AOC3-S3B-0.5	0.5	1	1	1									
	AOC3-S3B-2	2.0		1										
	AOC3-S3C-0.5	0.5	1	1	1									
	AOC3-S3C-2	2.0		1										
	AOC3-S3D-0.5	0.5	1	1	1									
	AOC3-S3D-2	2.0		1										

Table 2 – Sample and Analysis Matrix

AOC	Sample ID	Sample Depth (feet bgs)	Soil										Hold	Notes
			Lead and Arsenic (EPA Method 6010B)	OCPs (EPA Method 8081)	PCBs (EPA Method 8082)	TPHd and TPHmo (EPA Method 8015)	TPHg	VOCs (EPA Method 8260B)	SVOCs (EPA Method 8270C SIM)	PAHs (EPA Method 8270)	Dioxins/Furans (EPA Method 8290A)	Title 22 Metals (EPA Method 6010B)		
AOC3 - Former Buildings (northern portion of the Site)	AOC3-S3E-0.5	0.5	1	1	1									
	AOC3-S3E-2	2.0		1										
	AOC3-S3F-0.5	0.5	1	1	1									
	AOC3-S3F-2	2.0		1										
	AOC3/AOC8-S3G-0.5	0.5	1	1	1						1			
	AOC3/AOC8-S3G-2	2.0		1							1			
	AOC3-S3H-0.5	0.5	1	1	1									
	AOC3-S3H-2	2.0		1										
	AOC3-S4A-0.5	0.5	1	1	1									
	AOC3-S4A-2	2.0		1										
	AOC3-S4B-0.5	0.5	1	1	1									
	AOC3-S4B-2	2.0		1										
	AOC3-S4C-0.5	0.5	1	1	1									
	AOC3-S4C-2	2.0		1										
	AOC3-S4D-0.5	0.5	1	1	1									
	AOC3-S4D-2	2.0		1										
	AOC3-S4E-0.5	0.5	1	1	1									
	AOC3-S4E-2	2.0		1										
	AOC3-S4F-0.5	0.5	1	1	1									
	AOC3-S4F-2	2.0		1										
	AOC3-S4G-0.5	0.5	1	1	1									
	AOC3-S4G-2	2.0		1										
	AOC3-S4H-0.5	0.5	1	1	1									
	AOC3-S4H-2	2.0		1										
	AOC3-S4I-0.5	0.5	1	1	1									
	AOC3-S4I-2	2.0		1										
	AOC3-S5A-0.5	0.5	1	1	1									
	AOC3-S5A-2	2.0		1										
	AOC3/AOC8-S5B-0.5	0.5	1	1	1						1			
	AOC3/AOC8-S5B-2	2.0		1							1			
	AOC3-S5C-0.5	0.5	1	1	1									
	AOC3-S5C-2	2.0		1										
	AOC3-S5D-0.5	0.5	1	1	1									
	AOC3-S5D-2	2.0		1										
	AOC3-S5E-0.5	0.5	1	1	1									
	AOC3-S5E-2	2.0		1										
	AOC3-S5F-0.5	0.5	1	1	1									
	AOC3-S5F-2	2.0		1										
	AOC3-S5G-0.5	0.5	1	1	1									
	AOC3-S5G-2	2.0		1										
	AOC3-S5G-2DUP	2.0		1										

Table 2 – Sample and Analysis Matrix

AOC	Sample ID	Sample Depth (feet bgs)	Soil										Hold	Notes
			Lead and Arsenic (EPA Method 6010B)	OCPs (EPA Method 8081)	PCBs (EPA Method 8082)	TPHd and TPHmo (EPA Method 8015)	TPHg	VOCs (EPA Method 8260B)	SVOCs (EPA Method 8270C SIM)	PAHs (EPA Method 8270)	Dioxins/Furans (EPA Method 8290A)	Title 22 Metals (EPA Method 6010B)		
	AOC3-S5H-0.5	0.5	1	1	1									
	AOC3-S5H-2	2.0		1										
	AOC3-S5I-0.5	0.5	1	1	1									
	AOC3-S5I-2	2.0		1										
	AOC3-S6A-0.5	0.5	1	1	1									
	AOC3-S6A-2	2.0		1										
	AOC3-S6B-0.5	0.5	1	1	1									
	AOC3-S6B-2	2.0		1										
	AOC3-S6C-0.5	0.5	1	1	1									
	AOC3-S6C-2	2.0		1										
	AOC3-S6D-0.5	0.5	1	1	1									
	AOC3-S6D-2	2.0		1										
	AOC3/AOC8-S6E-0.5	0.5	1	1	1						1			
	AOC3/AOC8-S6E-2	2.0		1							1			
	AOC3-S6F-0.5	0.5	1	1	1									
	AOC3-S6F-2	2.0		1										
	AOC3-S6G-0.5	0.5	1	1	1									
	AOC3-S6G-2	2.0		1										
	AOC3/AOC8-S6H-0.5	0.5	1	1	1						1			
	AOC3/AOC8-S6H-2	2.0		1							1			
	AOC3-S6I-0.5	0.5		1	1							1		
	AOC3-S6I-0.5DUP	0.5		1	1							1		
	AOC3-S6I-2	2.0		1										
	AOC3-S7A-0.5	0.5	1	1	1									
	AOC3-S7A-2	2.0		1										
	AOC3-S7B-0.5	0.5	1	1	1									
	AOC3-S7B-2	2.0		1										
	AOC3-S7C-0.5	0.5	1	1	1									
	AOC3-S7C-2	2.0		1										
	AOC3-S7D-0.5	0.5	1	1	1									
	AOC3-S7D-2	2.0		1										
	AOC3-S7E-0.5	0.5	1	1	1									
	AOC3-S7E-2	2.0		1										
	AOC3-S7F-0.5	0.5	1	1	1									
	AOC3-S7F-2	2.0		1										
	AOC3-S7G-0.5	0.5	1	1	1									
	AOC3-S7G-2	2.0		1										
	AOC3-S7H-0.5	0.5	1	1	1									
	AOC3-S7H-2	2.0		1										
	AOC3-S7I-0.5	0.5	1	1	1									
	AOC3-S7I-2	2.0		1										

Table 2 – Sample and Analysis Matrix

AOC	Sample ID	Sample Depth (feet bgs)	Soil	OCPs (EPA Method 8081)	PCBs (EPA Method 8082)	TPHd and TPHmo (EPA Method 8015)	TPHg	VOCs (EPA Method 8260B)	SVOCs (EPA Method 8270C SIM)	PAHs (EPA Method 8270)	Dioxins/Furans (EPA Method 8290A)	Title 22 Metals (EPA Method 6010B)	Hold	Notes
			Lead and Arsenic (EPA Method 6010B)											
	AOC3/AOC10-S8A-0.5	0.5		1	1				1	1		1		
	AOC3/AOC10-S8A-2	2.0		1					1	1		1		
	AOC3/AOC10-S8B-0.5	0.5		1	1				1	1		1		
	AOC3/AOC10-S8B-2	2.0		1					1	1		1		
	AOC3/AOC8-S8C-0.5	0.5	1	1	1						1			
	AOC3/AOC8-S8C-2	2.0		1							1			
	AOC3-S8D-0.5	0.5	1	1	1									
	AOC3-S8D-2	2.0		1										
	AOC3-S8E-0.5	0.5	1	1	1									
	AOC3-S8E-2	2.0		1										
	AOC3-S8F-0.5	0.5	1	1	1									
	AOC3-S8F-2	2.0		1										
	AOC3-S8G-0.5	0.5	1	1	1									
	AOC3-S8G-2	2.0		1										
	AOC3-S8H-0.5	0.5	1	1	1									
	AOC3-S8H-2	2.0		1										
	AOC3-S8I-0.5	0.5	1	1	1									
	AOC3-S8I-2	2.0		1										
	AOC3-S9A-0.5	0.5	1	1	1									
	AOC3-S9A-0.5DUP	0.5	1	1	1									
	AOC3-S9A-2	2.0		1										
	AOC3-S9B-0.5	0.5	1	1	1									
	AOC3-S9B-2	2.0		1										
	AOC3/AOC10-S9C-0.5	0.5		1	1				1	1		1		
	AOC3/AOC10-S9C-0.5DUP	0.5		1	1				1	1		1		
	AOC3/AOC10-S9C-2	2.0		1					1	1		1		
	AOC3-S9E-0.5	0.5	1	1	1									
	AOC3-S9E-0.5DUP	0.5	1	1	1									
	AOC3-S9E-2	2.0		1										
	AOC3-S9G-0.5	0.5	1	1	1									
	AOC3-S9G-2	2.0		1										
	AOC3/AOC8-S9I-0.5	0.5		1	1						1	1		
	AOC3/AOC8-S9I-0.5DUP	0.5		1	1						1	1		
	AOC3/AOC8-S9I-2	2.0		1							1			

Table 3 – Title 22 Metals

Sample ID	Depth (feet bgs)	Date Collected	Arsenic	Lead	Antimony	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Molybdenum	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			(mg/Kg)																
AOC1-S1-0.5	0.5	11/01/21	6.7	**430**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1-S1-0.5 DUP	0.5	11/01/21	4.0	**480**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1-S1-2	2.0	11/01/21	--	32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1-S2-0.5	0.5	10/26/21	9.0	**450**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1-S2-2	2.0	10/26/21	--	7.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1-S3-0.5	0.5	10/26/21	3.3	**250**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1-S3-2	2.0	10/26/21	--	59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1/AOC8-S4-0.5	0.5	10/26/21	7.4	**730**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1/AOC8-S4-0.5 DUP	0.5	10/26/21	9.2	**620**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1/AOC8-S4-2	2.0	10/26/21	--	46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1/AOC2-S5-0.5	0.5	10/26/21	3.4	9.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1-S6-0.5	0.5	10/26/21	3.8	**140**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1-S6-2	2.0	10/26/21	--	8.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1/AOC7-S8-0.5	0.5	10/26/21	ND<2.0	56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1-S9A-0.5	0.5	10/26/21	5.1	60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1-S9A-0.5 DUP	0.5	10/26/21	4.7	72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1/AOC8-S10-0.5	0.5	10/26/21	2.7	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1-S11-0.5	0.5	10/26/21	4.1	**450**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1-S11-2	2.0	10/26/21	--	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC2-S12-0.5	0.5	10/26/21	3.4	54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC2-S12-0.5 DUP	0.5	10/26/21	3.1	52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC2/AOC3-S13/S3I-0.5	0.5	10/26/21	**18**	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC2-S14-0.5	0.5	10/26/21	2.9	69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3/AOC8-S1A-0.5	0.5	10/26/21	**12**	60	ND<3.0	78	ND<0.25	ND<0.50	16	7.6	26	0.46 J	0.14	15	2.4 J	ND<1.0	ND<5.0	25	84
AOC3-S1B-0.5	0.5	10/26/21	5.6	**120**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S1C-0.5	0.5	10/26/21	4.0	**180**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S1D-0.5	0.5	10/27/21	ND<2.5	6.2	1.9 J	150	0.33	0.81	7.1	9.9	18	ND<0.51	0.13	13	ND<5.1	ND<1.0	ND<5.1	19	67
AOC3/AOC8-S1E-0.5	0.5	10/27/21	6.8	7.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S1F-0.5	0.5	10/28/21	4.4	7.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S1G-0.5	0.5	10/26/21	3.2	13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S1H-0.5	0.5	10/26/21	8.4	79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S1I-0.5	0.5	10/29/21	3.7	**260**	--	--	--	--	--	--	--	--	--	--	--	--	--	46	131
AOC3-S1I-2	2.0	10/29/21	--	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S2A-0.5	0.5	10/27/21	6.5	55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S2B-0.5	0.5	10/26/21	2.7	**160**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S2C-0.5	0.5	10/26/21	5.2	**640**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3/AOC8-S2D-0.5	0.5	10/27/21	9.0	**100**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S2E-0.5	0.5	10/27/21	10	**100**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S2F-0.5	0.5	10/28/21	8.9	5.9	2.1	84	0.29	0.11 J	8.8	6.6	13	0.86 J	ND<0.083	14	ND<1.2	ND<0.29	ND<1.2	23	58
AOC3-S2F-0.5 DUP	0.5	10/28/21	**13**	12	1.8 J	140	0.46	0.20	12	11	29	1.2 J	ND<0.085	19	ND<1.9	ND<0.47	ND<1.9	33	96
AOC3-S2F-2	2.0	10/28/21	1.9 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S2G-0.5	0.5	10/28/21	**16**	13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S2G-2	2.0	10/28/21	1.9 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S2H-0.5	0.5	10/28/21	10	71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S2I-0.5	0.5	10/29/21	5.1	65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S3A-0.5	0.5	10/27/21	6.1	**110**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S3B-0.5	0.5	10/27/21	7.3	**130**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S3B-2	2.0	10/27/21	--	49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S3C-0.5	0.5	10/27/21	**15**	54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S3C-2	2.0	10/27/21	3.7	**230**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S3D-0.5	0.5	10/27/21	10	**100**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S3D-2	2.0	10/27/21	--	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S3E-0.5	0.5	10/27/21	**16**	65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S3E-2	2.0	10/27/21	2.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S3F-0.5	0.5	10/28/21	6.4	**180**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S3F-2	2.0	10/28/21	--	4.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3/AOC8-S3G-0.5	0.5	10/28/21	**14**	**88**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3/AOC8-S3G-2	2.0	10/28/21	1.9 J	49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 3 – Title 22 Metals

Sample ID	Depth (feet bgs)	Date Collected	Arsenic	Lead	Antimony	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Molybdenum	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			(mg/Kg)																
AOC3-S3H-0.5	0.5	10/28/21	9.7	**150**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S3H-2	2.0	10/28/21	--	8.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S4A-0.5	0.5	10/27/21	2.1	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S4B-0.5	0.5	10/27/21	4.5	**290**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S4B-2	2.0	10/27/21	--	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S4C-0.5	0.5	10/27/21	**12**	65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S4C-2	2.0	10/27/21	1.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S4D-0.5	0.5	10/27/21	6.2	**140**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S4D-2	2.0	10/27/21	--	17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S4E-0.5	0.5	10/27/21	ND<2.6	78	ND<3.1	36	ND<0.26	ND<0.52	2.6	1.4	3.3	ND<0.52	0.2	5.3	ND<5.2	ND<1	ND<5.2	0.96 J	25
AOC3-S4F-0.5	0.5	10/28/21	4.1	**96**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S4F-2	2.0	10/28/21		6.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S4G-0.5	0.5	10/28/21	4.5	**130**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S4G-2	2.0	10/28/21	--	4.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S4H-0.5	0.5	10/28/21	2.7	**94**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S4H-2	2.0	10/28/21	--	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S4I-0.5	0.5	10/28/21	9.0	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S5A-0.5	0.5	10/27/21	ND<2.6	**160**	ND<3.1	84	ND<0.26	0.30 J	10	2.9	15	ND<0.52	0.16	14	ND<5.2	ND<1.0	ND<5.2	8.6	98
AOC3-S5A-2	2.0	10/27/21	--	4.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3/AOC8-S5B-0.5	0.5	10/27/21	11	77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3/AOC8-S5B-2	2.0	10/27/21	2.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S5C-0.5	0.5	10/27/21	7.6	**140**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S5C-2	2.0	10/27/21	--	3.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S5D-0.5	0.5	10/28/21	11	**150**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S5D-2	2.0	10/28/21	2.2	**990**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S5E-0.5	0.5	10/28/21	7.1	**260**	6.4	99	0.36	0.34	19	5.5	19	ND<2.0	ND<0.085	17	ND<2.0.0	ND<0.5	ND<2.0.0	21	130
AOC3-S5E-2	2.0	10/28/21	--	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S5F-0.5	0.5	10/28/21	3.9	**200**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S5F-2	2.0	10/28/21	--	2.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S5G-0.5	0.5	10/28/21	**45**	17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S5G-2	2.0	10/28/21	1.7 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S5H-0.5	0.5	10/28/21	9.1	**670**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S5H-2	2.0	10/28/21	--	45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S5I-0.5	0.5	10/28/21	4.3	**80**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S5I-2	2.0	10/28/21	--	**210**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S6A-0.5	0.5	10/27/21	3.9	**260**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S6A-2	2.0	10/27/21	--	54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S6B-0.5	0.5	10/27/21	2.8	**860**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S6B-2	2.0	10/27/21	--	8.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S6C-0.5	0.5	10/27/21	6.2	**150**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S6C-2	2.0	10/27/21	--	**140**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S6D-0.5	0.5	10/28/21	4.6	**110**	8.0	110	0.40	0.19 J	21	5.5	36	ND<2.1	ND<0.079	20	ND<2.0.1	0.12 J	ND<2.0.1	23	110
AOC3-S6D-2	2.0	10/28/21	--	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3/AOC8-S6E-0.5	0.5	10/28/21	6.1	**690**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3/AOC8-S6E-2	2.0	10/28/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S6F-0.5	0.5	10/28/21	4.0	**170**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S6F-2	2.0	10/28/21	--	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S6G-0.5	0.5	10/28/21	3.9	**200**	8.7	130	0.46	0.45	27	4.6	31	ND<2.0	ND<0.082	18	ND<2.0.0	0.12 J	ND<2.0.0	24	260
AOC3-S6G-2	2.0	10/28/21	--	65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3/AOC8-S6H-0.5	0.5	10/29/21	6.4	**83**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3/AOC8-S6H-2	2.0	10/29/21	--	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S6I-0.5	0.5	10/29/21	3.7	**250**	12	280	0.70	0.14 J	26	5.6	20	ND<1.9	ND<0.081	22	ND<1.9	ND<0.49	ND<1.9	25	85
AOC3-S6I-0.5 DUP	0.5	10/29/21	3.8	**150**	12	150	0.58	0.19	22	5.6	16	ND<1.9	ND<0.083	21	ND<1.9	ND<0.49	ND<1.9	23	87
AOC3-S6I-2	2.0	10/29/21	--	28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S7A-0.5	0.5	10/27/21	3.3	**300**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S7A-2	2.0	10/27/21	--	5.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S7B-0.5	0.5	10/27/21	3.5	**180**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S7B-2	2.0	10/27/21	--	42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S7C-0.5	0.5	10/27/21	3.6	**200**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 3 – Title 22 Metals

Sample ID	Depth (feet bgs)	Date Collected	Arsenic	Lead	Antimony	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Molybdenum	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			(mg/Kg)																
AOC3-S7C-2	2.0	10/27/21	--	6.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S7D-0.5	0.5	10/27/21	ND<2.5	55	ND<3.0	140	0.24 J	0.6	12	5.5	15	ND<0.50	0.19	15	ND<5	ND<1	ND<5	14	58
AOC3-S7D-2	2.0	10/27/21	ND<2.6	3.0 J	ND<3.1	49	0.18 J	0.26 J	20	3.9	4.2	ND<0.52	0.093	14	ND<5.2	ND<1	ND<5.2	14	14
AOC3-S7E-0.5	0.5	10/28/21	3.2	**120**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S7E-2	2.0	10/28/21	--	2.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S7F-0.5	0.5	10/29/21	8.1	**87**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S7F-2	2.0	10/29/21	--	41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S7G-0.5	0.5	10/29/21	7.3	**150**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S7G-2	2.0	10/29/21	--	3.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S7H-0.5	0.5	10/29/21	3.4	**700**															
AOC3-S7H-2	2.0	10/29/21	--	2.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S7I-0.5	0.5	10/29/21	4.1	**110**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S7I-2	2.0	10/29/21	--	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3/AOC10-S8A-0.5	0.5	10/27/21	ND<2.5	**310**	ND<3.0	140	0.29	0.62	22	4.9	24	ND<0.49	0.12	21	ND<4.9	ND<0.99	ND<4.9	18	160
AOC3/AOC10-S8A-2	2.0	10/27/21	ND<2.4	**94**	ND<2.9	110	0.34	0.68	33	7.0	13	ND<0.48	0.19	27	ND<4.8	ND<0.95	ND<4.8	22	51
AOC3/AOC10-S8B-0.5	0.5	10/27/21	ND<2.6	3.8 J	ND<3.1	76	0.24 J	0.32 J	27	4.2	6.4	ND<0.51	0.16	21	ND<5.1	ND<1.0	ND<5.1	14	20
AOC3/AOC10-S8B-2	2.0	10/27/21	ND<2.5	**150**	ND<3.0	120	0.34	0.70	22	5.7	26	ND<0.51	0.18	20	ND<5.1	ND<1.0	ND<5.1	17	120
AOC3/AOC8-S8C-0.5	0.5	10/27/21	5.4	**180**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3/AOC8-S8C-2	2.0	10/27/21	--	6.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S8D-0.5	0.5	10/27/21	9.2	**110**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S8D-2	2.0	10/27/21	--	3.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S8E-0.5	0.5	10/28/21	**12**	**220**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S8E-2	2.0	10/28/21	--	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S8F-0.5	0.5	10/29/21	2.3	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S8G-0.5	0.5	10/29/21	3.9	60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S8H-0.5	0.5	10/29/21	8.0	**100**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S8H-2	2.0	10/29/21	--	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S8I-0.5	0.5	10/29/21	2.1	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3/AOC10-S9C-0.5	0.5	10/27/21	ND<2.6	**600 J**	ND<3.1	110	0.31	0.63	17 J	5.2	29	ND<0.52	0.12	18	ND<5.2	ND<1.0	ND<5.2	15	120
AOC3/AOC10-S9C-0.5 DUP	0.5	10/27/21	ND<2.5	**120 J**	ND<3.0	73	0.21 J	0.50	0.5 J	4.3	14	ND<0.50	0.15	13	ND<5.0	ND<1.0	ND<5	11	86
AOC3/AOC10-S9C-2	2.0	10/27/21	ND<2.4	**99**	ND<2.9	110	ND<0.24	0.49	22	4.0	14	ND<0.49	0.18	19	ND<4.9	ND<0.98	ND<4.9	14	84
AOC3-S9E-0.5	0.5	10/28/21	7.4	**130**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S9E-0.5 DUP	0.5	10/28/21	2.8	49															
AOC3-S9E-2	2.0	10/28/21	--	1.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S9G-0.5	0.5	10/29/21	1.7 J	28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3/AOC8-S9I-0.5	0.5	10/29/21	7.6	**190**	8.9	88	0.4	0.3	23	5.7	17	ND<2.0	ND<0.082	17	ND<2.0	ND<0.5	0.85 J	25	170
AOC3/AOC8-S9I-0.5 DUP	0.5	10/29/21	4.4	**250**	11	150	0.5	ND<0.2	0.15 J	4.3	15	ND<2.0	0.20	16	ND<2.0	ND<0.49	ND<2.0	22	74
AOC3/AOC8-S9I-2	2.0	10/29/21	--	8.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC4-S1-5	5.0	11/01/21	3.7	12	11	60	0.6	0.085 J	50	7.5	9.0	ND<2.0	0.050	36	ND<2.0	ND<0.49	ND<2.0	31	28
AOC4-S1-5 DUP	5.0	11/01/21	2.8	32	11	56	0.57	0.085 J	42	5.5	8.0	ND<2.0	ND<0.085	32	ND<2.0	ND<0.49	ND<2.0	26	26
AOC4-S1-10	10.0	11/01/21	2.2	3.1	11	49	0.5	0.058 J	36	4.9	6.5	ND<1.9	0.024 J	32	ND<1.9	ND<0.48	ND<1.9	21	20
AOC4-S1-15	15.0	11/01/21	3.5	3.6	12	56	0.64	0.089	51	6.9	10	ND<1.9	0.018 J	35	ND<1.9	ND<0.48	ND<1.9	33	26
AOC5-S7-0.5	0.5	11/16/21	3.09	27	ND<5.0	80	ND<5.0	ND<5.0	29	13	16	ND<5.0	ND<0.50	25	ND<5.0	ND<1	ND<5	24	28
AOC5-S7-2	2.0	11/16/21	2.8	ND<3.0	ND<5.0	48	ND<5.0	ND<5.0	44	5.7	7.9	ND<5.0	ND<0.50	ND<5	ND<5.0	ND<1	ND<5	29	21
AOC5-S7-5	5.0	11/16/21	3.13	ND<3.0	ND<5.0	55	ND<5.0	ND<5.0	40	6.1	8.65	ND<5.0	ND<0.50	35	ND<5.0	ND<1	ND<5	30	23
AOC5-S7-5 DUP	5.0	11/16/21	3.12	3.06	ND<5.0	59	ND<5.0	ND<5.0	41	6.2	9.4	ND<5.0	ND<0.50	37	ND<5.0	ND<1.0	ND<5.0	32	25
AOC9-S2-5	5.0	11/01/21	1.6 J	2.6	7.5	31	0.35	0.041 J	20	2.9	4.4	ND<1.9	ND<0.082	14	ND<1.9	ND<0.49	ND<1.9	15	11
AOC9-S2-10	10.0	11/01/21	2.5	2.8	15	49	0.65	0.059 J	40	6.1	7.1	ND<2.0	ND<0.086	37	ND<2.0	ND<0.5	ND<2.0	27	23
AOC9-SG3-5	5.0	11/01/21	2.3	20	9.8	37	0.44	0.059 J	32	3.0	5.3	ND<1.9	0.060 J	17	ND<1.9	ND<0.49	ND<1.9	21	13

Table 3 – Title 22 Metals

Sample ID	Depth (feet bgs)	Date Collected	Arsenic	Lead	Antimony	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Molybdenum	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			(mg/Kg)																
AOC9-SG3-10	10.0	11/01/21	3.1	2.8	12	52	0.59	0.067 J	45	5.5	7.9	ND<2.0	0.015 J	38	ND<2.0	ND<0.5	ND<2.0	28	21
AOC9-SG4-5	5.0	11/01/21	2.8	3.3	9.6	40	0.52	0.069 J	30	5.6	5.5	ND<1.9	0.035 J	26	ND<1.9	ND<0.49	ND<1.9	26	17
AOC9-SG4-10	10.0	11/01/21	2.7	2.6	12	46	0.54	0.063 J	39	4.7	7.5	ND<2.0	0.032	35	ND<2.0	ND<0.49	ND<2.0	25	20
Screening Criteria																			
DTSC SL			11[a]	80	NE	NE	1,600	910	NE	23	3,100	390	1.0	820	390	390	0.78	390	23,000
EPA RSL			N/A	N/A	31	15,000	NE	NE	NE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
STLC x 10[1]			50	50	150	1,000	8	10	50	800	250	3,500	2.0	200	10	50	70.00	240	2,500
TCLP x 20[2]			100	100	NE	2000	NE	20	100	NE	NE	NE	4	NE	20	100	NE	NE	NE
TTLC[3]			50	1000	500	10,000	75	100	2,500	8,000	2,500	3,500	20.0	2,000	100	500	700.00	2,400	5,000

Notes:

-- - not analyzed

NE - not established

bgs – below ground surface

mg/Kg – milligrams per kilogram

DUP - duplicate sample

STLC - soluble threshold limit concentration

TCLP - toxicity characteristic leaching procedure

TTLC - total threshold limit concentration

N/A - Not Applicable

ND - not detected

ND<X – analyte not detected at or above laboratory reporting limit X

STLC x 10 - ten times the STLC regulatory limit

TCLP x 20 - 20 times the TCLP regulatory limit

Metals analyzed by Environmental Protection Agency (EPA) Method 6010B; mercury analyzed by EPA Method 7471A

a. Arsenic ESLs replaced with site-specific maximum background level from Duverge, 2011. Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region, Decembe

DTSC SL - Department of Toxic Substances Control Screening Levels, Human Health Risk (HERO), Note 3, Quarterly Update, April 2019 Residential Soil; if cancer endpoint value not available, noncancer endpoint value chosen--if no values, default to EPA Regional Screening Levels (RSL), TR=1E-06, HQ=1, November 20

Shaded gray indicates concentration exceeds ten times the STLC

Underlined value indicates concentration exceeds twenty times the TCLP

Bold - indicates concentration exceeds associated DTSC SL and/or EPA RSL

Table 4 – Soil Analytical Results - OCPs, PCBs, PAHs, and SVOCs

Sample ID	Depth (feet bgs)	Date Collected	4,4'-DDE	4,4'-DDT	cis-Chlordane	Dieldrin	trans-Chlordane	*PCB-1260	SVOCs and PAHs
			µg/kg						
AOC1-S1-0.5	0.5	11/01/21	ND<3.4	0.87 J	ND<3.4	ND<3.4	ND<3.4	4.9 J	--
AOC1-S1-0.5 DUP	0.5	11/01/21	ND<3.4	1.7 J	ND<3.4	ND<3.4	ND<3.4	8.5 J	--
AOC1-S1-2	2.0	11/01/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC1-S1-2 DUP	2.0	11/01/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC1-S2-0.5	0.5	10/26/21	3.5 J	10.0	ND<8.3	ND<8.3	ND<8.3	26 J	--
AOC1-S2-2	0.5	10/26/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC1-S3-0.5	0.5	10/26/21	3.6	0.51 J	5.5	2.3 J	1.5 J	6.0 J	--
AOC1-S3-2	2.0	10/26/21	0.29 J	1.0 J	0.70 J	0.24 J	ND<1.7	--	--
AOC1/AOC8-S4-0.5	0.5	10/26/21	15.0	31.0	62.0	45.0	23.0	43.0	--
AOC1/AOC8-S4-0.5DUP	0.5	10/26/21	13.0	27.0	70.0	18.0	25.0	37.0	--
AOC1/AOC8-S4-2	2.0	10/26/21	ND<1.7	ND<1.7	0.51 J	0.28 J	ND<1.7	--	--
AOC1/AOC2-S5-0.5	0.5	10/26/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC1/AOC2-S5-2	2.0	10/26/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC1-S6-0.5	0.5	10/26/21	ND<17	4.0 J	ND<17	ND<17	ND<17	ND<33	--
AOC1-S6-2	2.0	10/26/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC1/AOC7-S8-0.5	2.0	10/26/21	ND<17	ND<17	ND<17	ND<17	ND<17	ND<32	--
AOC1/AOC7-S8-2	2.0	10/26/21	ND<3.2	ND<3.2	ND<3.2	ND<3.2	ND<3.2	ND<31	--
AOC1/AOC7-S8-2DUP	2.0	10/26/21	ND<3.4	ND<3.4	ND<3.4	ND<3.4	ND<3.4	ND<33	--
AOC1-S9A-0.5	2.0	10/26/21	ND<17	ND<17	ND<17	ND<17	ND<17	ND<33	--
AOC1-S9A-0.5 DUP	2.0	10/26/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<32	--
AOC1-S9A-2	0.5	10/26/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC1/AOC8-S10-0.5	0.5	10/26/21	3.9 J	2.7 J	ND<17	ND<17	ND<17	ND<33	--
AOC1/AOC8-S10-2	2.0	10/26/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC1-S11-0.5	0.5	10/26/21	ND<8.2	ND<8.2	ND<8.2	ND<8.2	ND<8.2	ND<32	--
AOC1-S11-2	2.0	10/26/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC2-S12-0.5	0.5	10/26/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC2-S12-0.5DUP	0.5	10/26/21	ND<8.1	ND<8.1	ND<8.1	ND<8.1	ND<8.1	ND<31	--
AOC2-S12-2	2.0	10/26/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC2-S12-2DUP	2.0	10/26/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC2/AOC3-S13/S3I-0.5	0.5	10/26/21	ND<3.3	ND<3.3	ND<3.3	ND<3.3	ND<3.3	ND<32	--
AOC2/AOC3-S13/S3I-2	2.0	10/26/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC2-S14-0.5	0.5	10/26/21	ND<8.1	ND<8.1	ND<8.1	ND<8.1	ND<8.1	ND<31	--
AOC2-S14-2	2.0	10/26/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3/AOC8-S1A-0.5	0.5	10/26/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<31	--
AOC3/AOC8-S1A-2	2.0	10/26/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S1B-0.5	0.5	10/26/21	18 J	ND<32	ND<32	ND<32	ND<32	ND<31	--
AOC3-S1B-2	2.0	10/26/21	ND<3.2	ND<3.2	ND<3.2	ND<3.2	ND<3.2	--	--
AOC3-S1C-0.5	0.5	10/26/21	ND<17	ND<17	ND<17	ND<17	ND<17	ND<33	--
AOC3-S1C-2	2.0	10/26/21	ND<8.0	1.7 J	ND<8.0	ND<8.0	ND<8.0	--	--
AOC3-S1D-0.5	0.5	10/27/21	ND<8.4	ND<8.4	ND<8.4	ND<8.4	ND<8.4	ND<33	--
AOC3-S1D-2	2.0	10/27/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3/AOC8-S1E-0.5	0.5	10/27/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC3/AOC8-S1E-2	2.0	10/27/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S1F-0.5	0.5	10/28/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<32	--
AOC3-S1F-2	2.0	10/28/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S1G-0.5	0.5	10/26/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<32	--
AOC3-S1G-2	2.0	10/26/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S1H-0.5	0.5	10/26/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<32	--
AOC3-S1H-2	2.0	10/28/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S1I-0.5	0.5	10/29/21	ND<17	ND<17	ND<17	ND<17	ND<17	ND<33	--
AOC3-S1I-2	2.0	10/29/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S2A-0.5	0.5	10/27/21	ND<17	ND<17	ND<17	ND<17	ND<17	ND<33	--
AOC3-S2A-2	2.0	10/27/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S2B-0.5	0.5	10/26/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<31	--
AOC3-S2B-2	2.0	10/26/21	ND<3.2	ND<3.2	ND<3.2	ND<3.2	ND<3.2	--	--
AOC3-S2C-0.5	0.5	10/26/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<31	--
AOC3-S2C-2	2.0	10/26/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3/AOC8-S2D-0.5	0.5	10/27/21	ND<8.5	ND<8.5	ND<8.5	ND<8.5	ND<8.5	ND<33	--
AOC3/AOC8-S2D-2	2.0	10/27/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S2E-0.5	0.5	10/27/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC3-S2E-2	2.0	10/27/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S2F-0.5	0.5	10/28/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--

Table 4 – Soil Analytical Results - OCPs, PCBs, PAHs, and SVOCs

Sample ID	Depth (feet bgs)	Date Collected	4,4'-DDE	4,4'-DDT	cis-Chlordane	Dieldrin	trans-Chlordane	*PCB-1260	SVOCs and PAHs
			µg/kg						
AOC3-S2F-0.5DUP	0.5	10/28/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC3-S2F-2	2.0	10/28/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S2G-0.5	0.5	10/28/21	ND<34	ND<34	ND<34	ND<34	ND<34	ND<33	--
AOC3-S2G-2	2.0	10/28/21	ND<3.4	ND<3.4	ND<3.4	ND<3.4	ND<3.4	--	--
AOC3-S2H-0.5	0.5	10/28/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<33	--
AOC3-S2H-2	2.0	10/28/21	ND<17	ND<17	ND<17	ND<17	ND<17	--	--
AOC3-S2I-0.5	0.5	10/29/21	ND<82	ND<82	ND<82	ND<82	ND<82	ND<160	--
AOC3-S2I-2	2.0	10/29/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S3A-0.5	0.5	10/27/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC3-S3A-2	2.0	10/27/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S3B-0.5	0.5	10/27/21	ND<8.4	ND<8.4	ND<8.4	ND<8.4	ND<8.4	ND<33	--
AOC3-S3B-2	2.0	10/27/21	ND<3.3	ND<3.3	ND<3.3	ND<3.3	ND<3.3	--	--
AOC3-S3C-0.5	0.5	10/27/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC3-S3C-2	2.0	10/27/21	ND<8.5	ND<8.5	ND<8.5	ND<8.5	ND<8.5	--	--
AOC3-S3D-0.5	0.5	10/27/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC3-S3D-2	2.0	10/27/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S3E-0.5	0.5	10/27/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC3-S3E-2	2.0	10/27/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S3F-0.5	0.5	10/28/21	ND<83	ND<83	ND<83	ND<83	ND<83	ND<160	--
AOC3-S3F-2	2.0	10/28/21	ND<3.4	ND<3.4	ND<3.4	ND<3.4	ND<3.4	--	--
AOC3/AOC8-S3G-0.5	0.5	10/28/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<160	--
AOC3/AOC8-S3G-2	2.0	10/28/21	ND<8.3	ND<8.3	ND<8.3	ND<8.3	ND<8.3	--	--
AOC3-S3H-0.5	0.5	10/28/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<32	--
AOC3-S3H-2	2.0	10/28/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S4A-0.5	0.5	10/27/21	0.24 J	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<32	--
AOC3-S4A-2	2.0	10/27/21	ND<33	ND<33	ND<33	ND<33	ND<33	--	--
AOC3-S4B-0.5	0.5	10/27/21	3.8 J	4.1 J	ND<17	ND<17	ND<17	ND<32	--
AOC3-S4B-2	2.0	10/27/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S4C-0.5	0.5	10/27/21	ND<17	ND<17	ND<17	ND<17	ND<17	ND<32	--
AOC3-S4C-2	2.0	10/27/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S4D-0.5	0.5	10/27/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC3-S4D-2	2.0	10/27/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S4E-0.5	0.5	10/27/21	ND<17	ND<17	ND<17	ND<17	ND<17	ND<32	--
AOC3-S4E-2	2.0	10/27/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S4F-0.5	0.5	10/28/21	ND<34	ND<34	ND<34	ND<34	ND<34	ND<160	--
AOC3-S4F-2	2.0	10/28/21	ND<17	ND<17	ND<17	ND<17	ND<17	--	--
AOC3-S4G-0.5	0.5	10/28/21	ND<85	ND<85	ND<85	ND<85	ND<85	ND<160	--
AOC3-S4G-2	2.0	10/28/21	ND<3.3	ND<3.3	ND<3.3	ND<3.3	ND<3.3	--	--
AOC3-S4H-0.5	0.5	10/28/21	ND<17	ND<17	ND<17	ND<17	ND<17	ND<32	--
AOC3-S4H-2	2.0	10/28/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S4I-0.5	0.5	10/28/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC3-S4I-2	2.0	10/28/21	ND<8.1	ND<8.1	ND<8.1	ND<8.1	ND<8.1	--	--
AOC3-S5A-0.5	0.5	10/27/21	ND<17	5.7 J	ND<17	ND<17	ND<17	ND<33	--
AOC3-S5A-2	2.0	10/27/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3/AOC8-S5B-0.5	0.5	10/27/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC3/AOC8-S5B-2	2.0	10/27/21	ND<8.3	ND<8.3	ND<8.3	ND<8.3	ND<8.3	--	--
AOC3-S5C-0.5	0.5	10/27/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC3-S5C-2	2.0	10/27/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S5D-0.5	0.5	10/28/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<32	--
AOC3-S5D-2	2.0	10/28/21	ND<8	ND<8	ND<8	ND<8	ND<8	--	--
AOC3-S5E-0.5	0.5	10/28/21	ND<34	ND<34	ND<34	ND<34	ND<34	ND<33	--
AOC3-S5E-2	2.0	10/28/21	ND<3.2	ND<3.2	ND<3.2	ND<3.2	ND<3.2	--	--
AOC3-S5F-0.5	0.5	10/28/21	ND<34	ND<34	ND<34	ND<34	ND<34	ND<160	--
AOC3-S5F-2	2.0	10/28/21	ND<3.3	ND<3.3	ND<3.3	ND<3.3	ND<3.3	--	--
AOC3-S5G-0.5	0.5	10/28/21	ND<82	ND<82	ND<82	ND<82	ND<82	ND<160	--
AOC3-S5G-2	2.0	10/28/21	ND<3.3	ND<3.3	ND<3.3	ND<3.3	ND<3.3	--	--
AOC3-S5G-2DUP	2.0	10/28/21	ND<3.3	ND<3.3	ND<3.3	ND<3.3	ND<3.3	--	--
AOC3-S5H-0.5	0.5	10/28/21	ND<32	ND<32	ND<32	ND<32	ND<32	ND<31	--
AOC3-S5H-2	2.0	10/28/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S5I-0.5	0.5	10/28/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<31	--
AOC3-S5I-2	2.0	10/28/21	ND<8.4	ND<8.4	ND<8.4	ND<8.4	ND<8.4	--	--
AOC3-S6A-0.5	0.5	10/27/21	ND<34	ND<34	ND<34	ND<34	ND<34	3.2 J	--

Table 4 – Soil Analytical Results - OCPs, PCBs, PAHs, and SVOCs

Sample ID	Depth (feet bgs)	Date Collected	4,4'-DDE	4,4'-DDT	cis-Chlordane	Dieldrin	trans-Chlordane	*PCB-1260	SVOCs and PAHs
			µg/kg						
AOC3-S6A-2	2.0	10/27/21	ND<3.3	ND<3.3	ND<3.3	ND<3.3	ND<3.3	--	--
AOC3-S6B-0.5	0.5	10/27/21	ND<8.5	ND<8.5	ND<8.5	ND<8.5	ND<8.5	ND<33	--
AOC3-S6B-2	2.0	10/27/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S6C-0.5	0.5	10/27/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC3-S6C-2	2.0	10/27/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S6D-0.5	0.5	10/28/21	ND<34	ND<34	ND<34	ND<34	ND<34	ND<33	--
AOC3-S6D-2	2.0	10/28/21	ND<8.3	ND<8.3	ND<8.3	ND<8.3	ND<8.3	--	--
AOC3/AOC8-S6E-0.5	0.5	10/28/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<32	--
AOC3/AOC8-S6E-2	2.0	10/28/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S6F-0.5	0.5	10/28/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<32	--
AOC3-S6F-2	2.0	10/28/21	ND<3.4	ND<3.4	ND<3.4	ND<3.4	ND<3.4	--	--
AOC3-S6G-0.5	0.5	10/28/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<160	--
AOC3-S6G-2	2.0	10/28/21	ND<33	ND<33	ND<33	ND<33	ND<33	--	--
AOC3/AOC8-S6H-0.5	0.5	10/29/21	ND<32	ND<32	ND<32	ND<32	ND<32	ND<31	--
AOC3/AOC8-S6H-2	2.0	10/29/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S6I-0.5	0.5	10/29/21	ND<34	ND<34	ND<34	ND<34	ND<34	ND<33	--
AOC3-S6I-0.5DUP	0.5	10/29/21	ND<34	ND<34	ND<34	ND<34	ND<34	ND<33	--
AOC3-S6I-2	2.0	10/29/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S7A-0.5	0.5	10/27/21	ND<17	ND<17	ND<17	ND<17	ND<17	ND<32	--
AOC3-S7A-2	2.0	10/27/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S7B-0.5	0.5	10/27/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	--
AOC3-S7B-2	2.0	10/27/21	ND<3.2	ND<3.2	ND<3.2	ND<3.2	ND<3.2	--	--
AOC3-S7C-0.5	0.5	10/27/21	ND<8.5	ND<8.5	ND<8.5	ND<8.5	ND<8.5	ND<33	--
AOC3-S7C-2	2.0	10/27/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S7D-0.5	0.5	10/27/21	ND<8.1	ND<8.1	ND<8.1	ND<8.1	ND<8.1	ND<32	--
AOC3-S7D-2	2.0	10/27/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S7E-0.5	0.5	10/28/21	ND<34	ND<34	ND<34	ND<34	ND<34	ND<33	--
AOC3-S7E-2	2.0	10/28/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S7F-0.5	0.5	10/29/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<32	--
AOC3-S7F-2	2.0	10/29/21	ND<16	ND<16	ND<16	ND<16	ND<16	--	--
AOC3-S7G-0.5	0.5	10/29/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<32	--
AOC3-S7G-2	2.0	10/29/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S7H-0.5	0.5	10/29/21	ND<8.4	ND<8.4	ND<8.4	ND<8.4	ND<8.4	ND<33	--
AOC3-S7H-2	2.0	10/29/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S7I-0.5	0.5	10/29/21	ND<32	ND<32	ND<32	ND<32	ND<32	ND<31	--
AOC3-S7I-2	2.0	10/29/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3/AOC10-S8A-0.5	0.5	10/27/21	ND<17	ND<17	ND<17	ND<17	ND<17	3.2 J	ND
AOC3/AOC10-S8A-2	2.0	10/27/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	ND
AOC3/AOC10-S8B-0.5	0.5	10/27/21	ND<8.0	ND<8.0	ND<8.0	ND<8.0	ND<8.0	ND<31	ND
AOC3/AOC10-S8B-2	2.0	10/27/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	ND
AOC3/AOC8-S8C-0.5	0.5	10/27/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<32	ND
AOC3/AOC8-S8C-2	2.0	10/27/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	ND
AOC3-S8D-0.5	0.5	10/27/21	ND<8.4	ND<8.4	ND<8.4	ND<8.4	ND<8.4	5.0 J	--
AOC3-S8D-2	2.0	10/27/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S8E-0.5	0.5	10/28/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<31	--
AOC3-S8E-2	2.0	10/28/21	ND<8.4	ND<8.4	ND<8.4	ND<8.4	ND<8.4	--	--
AOC3-S8F-0.5	0.5	10/29/21	ND<17	ND<17	ND<17	ND<17	ND<17	ND<33	--
AOC3-S8F-2	2.0	10/29/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3-S8G-0.5	0.5	10/29/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<32	--
AOC3-S8G-2	2.0	10/29/21	ND<17	ND<17	ND<17	ND<17	ND<17	--	--
AOC3-S8H-0.5	0.5	10/29/21	ND<32	ND<32	ND<32	ND<32	ND<32	ND<31	--
AOC3-S8H-2	2.0	10/29/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S8I-0.5	0.5	10/29/21	ND<32	ND<32	ND<32	ND<32	ND<32	ND<31	--
AOC3-S8I-2	2.0	10/29/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--
AOC3/AOC10-S9C-0.5	0.5	10/27/21	ND<8.3	ND<8.3	ND<8.3	ND<8.3	ND<8.3	ND<32	ND
AOC3/AOC10-S9C-0.5DUP	0.5	10/27/21	ND<8.3	ND<8.3	ND<8.3	ND<8.3	ND<8.3	ND<32	ND
AOC3/AOC10-S9C-2	2.0	10/27/21	ND<16	ND<16	ND<16	ND<16	ND<16	--	ND
AOC3-S9E-0.5	0.5	10/28/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<32	--
AOC3-S9E-0.5DUP	0.5	10/28/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND<32	--
AOC3-S9E-2	2.0	10/28/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	--	--
AOC3-S9G-0.5	0.5	10/29/21	ND<8.3	ND<8.3	ND<8.3	ND<8.3	ND<8.3	ND<32	--
AOC3-S9G-2	2.0	10/29/21	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	--	--

Table 4 – Soil Analytical Results - OCPs, PCBs, PAHs, and SVOCs

Sample ID	Depth (feet bgs)	Date Collected	4,4'-DDE	4,4'-DDT	cis-Chlordane	Dieldrin	trans-Chlordane	*PCB-1260	SVOCs and PAHs
			µg/kg						
AOC3/AOC8-S9I-0.5	0.5	10/29/21	ND<17	ND<17	ND<17	ND<17	ND<17	ND<33	--
AOC3/AOC8-S9I-0.5DUP	0.5	10/29/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND<31	--
AOC3/AOC8-S9I-2	2.0	10/29/21	ND<3.2	ND<3.2	ND<3.2	ND<3.2	ND<3.2	--	--
AOC5-S7-0.5	0.5	11/16/21	--	--	--	--	--	--	ND
AOC5-S7-2	2.0	11/16/21	--	--	--	--	--	--	ND
AOC6-S9B-4	4.0	11/01/21	--	--	--	--	--	ND<31	--
Screening Criteria									
DTSC SL			2,000	1,900	NE	34	NE	240	Various
EPA RSL					36,000		36,000		

Notes:

-- - not analyzed

NE - not established

bgs – below ground surface

µg/Kg – micrograms per kilogram

ND - not detected at or above the laboratory reporting limit

ND<X – analyte not detected at or above laboratory reporting limit X

OCPs - organochlorine pesticides, analyzed by Environmental Protection Agency (EPA) Method 8081

PCBs - polychlorinated biphenyls, analyzed by EPA Method 8082

PAHs - polycyclic aromatic hydrocarbons analyzed using EPA Method 8270C selective ion measurement (SIM)

SVOC - semivolatile organic compound, analyzed by EPA Method 8270C SIM

* = All other PCBs are not detected above the labratory reporting limit

DTSC SL - Department of Toxic Substances Control Screening Levels, Human Health Risk (HERO), Note 3, Quarterly Update, April 2019 Residential Soil; if cancer endpoint value not available, noncancer endpoint value chosen--if no values, default to EPA Regional Screening Levels, TR=1E-06, HQ=1, November 2018

Bold - indicates concentration exceeds associated DTSC SL and/or EPA RSL

Table 5 – Soil Analytical Results - Dioxins/Furans

Sample ID	Depth (feet bgs)	Date Collected	1,2,3,4,6,7,8-HpCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8-HxCDF	1,2,3,7,8,9-HxCDF	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	2,3,7,8-TCDD	2,3,7,8-TCDF	OCDD	OCDF	Total - TEQ
			(pg/g)														
AOC1-S9A-0.5	0.5	11/01/21	2.6 J	0.38 J	1.1 J	ND<4.8	0.29 J	0.19 J	0.4 J	0.35 J	0.35 J	0.39 J	0.21 J	0.73 J	16	1.6 J	0.69
AOC1-S9A-0.5DUP	0.5	11/01/21	3.1 J	0.35 J	1.1 J	ND<4.9	0.26 J	ND<4.9	0.38 J	0.31 J	0.35 J	0.46 J	ND<0.98	0.84 J	20	1.6 J	0.50
AOC1-S9A-2	2.0	11/01/21	0.33 J	ND<4.7	0.15 J	ND<4.7	0.11 J	0.19 J	0.11 J	0.12 J	ND<4.7	ND<4.7	ND<0.94	ND<0.94	1.7 J	0.54 J	0.087
AOC1/AOC8-S4-0.5	0.5	10/26/21	85	3.6 J	40	2.5 UJ	2.5 J	ND<4.9	5.4	5.0	2.1 J	4.9	2.2	7.0	740	90	9.6
AOC1/AOC8-S4-0.5DUP	0.5	10/26/21	60	2.3 UJ	30	1.8 UJ	3.4 J	ND<4.8	7.6	4.6 J	2.4 J	4.4 J	1.3	4.9	500	62	7.7
AOC1/AOC8-S4-2	2.0	10/26/21	1.4 J	0.17 UJ	0.67 UJ	ND<4.5	ND<4.5	ND<4.5	0.15 J	0.081 J	0.1 J	0.13 J	ND<0.91	0.29 UJ	12	1.2 J	0.16
AOC1/AOC8-S10-0.5	0.5	10/26/21	4.2 UJ	0.9 UJ	1.9 UJ	ND<4.9	0.84 J	ND<4.9	0.85 J	0.54 J	0.48 J	0.71 J	0.16 J	0.82 UJ	15	1.3 J	1.6
AOC1/AOC8-S10-2	2.0	10/26/21	0.62 UJ	ND<4.7	0.22 UJ	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<0.93	ND<0.93	3.7 J	0.58 J	0.3
AOC3/AOC8-S1A-0.5	0.5	10/26/21	4.7 UJ	ND<5.0	1.6 UJ	ND<5.0	ND<5.0	ND<5.0	0.79 J	ND<5.0	ND<5.0	ND<5.0	ND<1.0	0.91 UJ	55	2.7 J	0.25
AOC3/AOC8-S1A-2	2.0	10/26/21	0.56 UJ	0.13 UJ	0.14 UJ	0.089 UJ	ND<4.9	ND<4.9	ND<4.9	ND<4.9	0.12 J	ND<4.9	ND<0.97	0.26 UJ	5.3 J	0.47 J	0.074
AOC3/AOC8-S1E-0.5	0.5	10/27/21	2.2 UJ	0.33 UJ	0.68 UJ	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5	0.32 J	0.3 J	22	1.7 J	0.48
AOC3/AOC8-S1E-2	2.0	10/27/21	0.42 UJ	ND<4.8	0.2 UJ	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<0.96	0.23 J	2.5 J	0.59 J	0.059
AOC3/AOC8-S2D-0.5	0.5	10/27/21	3.8 UJ	0.72 UJ	1.4 UJ	0.52 J	0.67 J	0.62 J	0.74 J	0.74 J	0.65 J	0.87 J	1.3	1.0	19	2.4 J	2.2
AOC3/AOC8-S2D-2	2.0	10/27/21	0.51 UJ	ND<4.8	0.41 UJ	0.18 J	0.15 J	0.13 J	0.2 J	0.16 J	0.31 J	0.13 J	ND<0.96	0.5 J	2.4 J	0.93 J	0.2
AOC3/AOC8-S3G-0.5	0.5	10/28/21	2.5 J	0.5 J	1.2 J	ND<4.9	0.31 J	0.29 J	0.45 J	0.39 J	0.38 J	0.43 J	ND<0.97	0.94 J	16	1.7 J	0.78
AOC3/AOC8-S3G-2	2.0	10/28/21	0.26 J	ND<4.9	ND<4.9	ND<4.9	ND<4.9	0.14 J	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<0.98	0.23 J	1.0 J	0.21 J	0.068
AOC3/AOC8-S5B-0.5	0.5	10/27/21	1.5 UJ	ND<4.8	0.87 UJ	ND<4.8	0.65 J	ND<4.8	0.51 J	0.36 J	ND<4.8	ND<4.8	ND<0.96	0.61 J	9.0 J	1.0 J	0.33
AOC3/AOC8-S5B-2	2.0	10/27/21	0.35 UJ	ND<4.7	0.21 UJ	0.13 J	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<0.95	0.24 J	2.4 J	0.45 J	0.069
AOC3/AOC8-S6E-0.5	0.5	10/28/21	3.3 UJ	0.5 UJ	2.3 UJ	0.24 J	0.75 J	0.28 J	1.1 J	0.94 J	0.89 J	1.3 J	0.32 J	1.6	12	1.8 J	1.8
AOC3/AOC8-S6E-2	2.0	10/28/21	0.56 UJ	0.37 UJ	0.5 UJ	0.37 J	0.26 J	0.34 J	0.28 J	0.22 J	0.32 J	0.21 J	ND<0.94	ND<0.94	3.3 J	0.83 J	0.59
AOC3/AOC8-S6H-2	2.0	10/29/21	1.0 J	ND<4.8	0.28 J	ND<4.8	0.077 J	0.17 J	0.09 J	ND<4.8	ND<4.8	ND<4.8	ND<0.96	0.2 J	9.8	0.56 J	0.10
AOC3/AOC8-S8C-0.5	0.5	10/27/21	6 U	1.2 UJ	2.1 UJ	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	1.1 J	ND<0.98	1.3	17	2.4 J	0.67
AOC3/AOC8-S8C-2	2.0	10/27/21	0.3 UJ	0.12 UJ	0.24 UJ	0.12 J	ND<4.7	0.14 J	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<0.95	0.16 J	1.6 J	0.39 J	0.077
AOC3/AOC8-S9I-0.5	0.5	10/29/21	3.6 J	0.45 J	1.7 J	0.18 J	0.39 J	0.17 J	0.62 J	0.66 J	0.45 J	0.7 J	ND<0.96	0.89 J	22	1.6 J	0.91
AOC3/AOC8-S9I-0.5DUP	0.5	10/29/21	3.7 J	0.5 J	1.5 J	ND<4.8	0.41 J	0.15 J	0.49 J	0.55 J	0.42 J	0.56 J	ND<0.97	0.84 J	26	1.5 J	0.62
AOC3/AOC8-S9I-2	2.0	10/29/21	0.69 J	ND<5	0.38 J	ND<5	0.14 J	ND<5	0.14 J	0.11 J	ND<5	ND<5	ND<1.0	0.21 J	5.2 J	0.74 J	0.16
AOC5-S7-0.5	0.5	11/16/21	ND<4.8	11.7	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	5.19	ND<4.8	ND<0.48	ND<0.48	ND<24	ND<29	0.156
AOC5-S7-2	2.0	11/16/21	8.76	12.2	ND<5.0	6.39	5.69	5.69	ND<5.0	ND<5.0	5.64	ND<5.0	ND<0.5	ND<0.5	ND<25	ND<30	1.40
AOC5-S7-5	5.0	11/16/21	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<0.49	ND<0.49	ND<24	ND<29	0.000
AOC5-S7-5DUP	5.0	11/16/21	ND<5.0	12.1	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<25	ND<30	0.000
AOC6-S9B-4	4.0	11/01/21	0.45 J	ND<4.8	0.48 J	ND<4.8	0.5 J	0.4 J	0.4 J	0.4 J	ND<4.8	ND<4.8	ND<0.95	0.57 J	1.3 J	0.64 J	0.33
Screening Criteria																	
DTSC SL			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	4.8	NE	NE	NE	NE

Notes:

-- - not analyzed

NE - not established

bgs – below ground surface

pg/g – picograms per gram

TEQ - toxic equivalency value

J - estimated value

ND - not detected

ND<X – analyte not detected at or above laboratory reporting limit X

Dioxins and Furans analyzed by Environmental Protection Agency (EPA) Method 8290A

DTSC SL - Department of Toxic Substances Control Screening Levels, Human Health Risk (HERO), Note 3, Quarterly Update, April 2019 Residential Soil; if cancer endpoint value not available, noncancer endpoint value chosen--if no values, default to EPA Regional Screening Levels, TR=1E-06, HQ=1, November 2018

Bold - indicates concentration exceeds associated DTSC SL and/or EPA RSL

Table 6 – Soil Analytical Results - TPHs and VOCs

Sample ID	Depth (feet bgs)	Date Collected	TPHd	TPHmo	VOCs and TPHg
			mg/Kg		
AOC4-S1-5	5.0	11/01/21	1.3	4.6 J	ND
AOC4-S1-5 DUP	5.0	11/01/21	1.5	5.8	ND
AOC4-S1-10	10.0	11/01/21	0.60 J	ND<5.0	ND
AOC4-S1-15	15.0	11/01/21	ND<0.99	ND<4.9	ND
AOC6-S9B-4	4.0	11/01/21	1.9	7.3	--
AOC9-S2-5	5.0	11/01/21	0.53 J	ND<5.0	ND
AOC9-S2-10	10.0	11/01/21	1.8	6.2	ND
AOC9-SG3-5	5.0	11/01/21	0.84 J	ND<5.0	ND
AOC9-SG3-10	10.0	11/01/21	ND<0.98	ND<4.9	ND
AOC9-SG4-5	5.0	11/01/21	ND<0.98	ND<4.9	ND
AOC9-SG4-10	10.0	11/01/21	0.62 J	ND<4.9	ND
Screening Criteria					
DTSC SL[1]			NE	NE	Various
RWQCB ESLs[2]			260	12,000	NA

Notes:

-- - not analyzed

NE - not established

bgs – below ground surface

mg/Kg – milligrams per kilogram

ND - not detected at or above the laboratory detection limit

ND<X – analyte not detected at or above laboratory reporting limit X

TPH - total petroleum hydrocarbons

TPHd - TPH as diesel, analyzed by Environmental Protection Agency (EPA) Method 8015B

TPHmo - TPH as motor oil, analyzed by EPA Method 8015B

TPHg - TPH as gasoline, analuzed by EPA Method 8260B

VOCs - volatile organic compounds, analyzed by EPA Method 8260B

NA - not apllicable

[1] - DTSC SL - Department of Toxic Substances Control Screening Levels, Human Health Risk (HERO), Note 3, Quarterly Update, April 2019 Residential Soil; if cancer endpoint value not available, noncancer endpoint value chosen--if no values, default to EPA Regional Screening Levels, TR=1E-06, HQ=1, November 2018

[2] - San Francisco Bay Regional Water Quality Control Board (RWQCB) Residential Environmental Screening Levels (ESLs), 2019 (Rev. 2)

Table 7 – Soil Gas Analytical Results

Sample ID	Date Collected	Depth (feet bgs)	VOCs													Fixed Gases			
			Acetone	2-Butanone (Methyl Ethyl Ketone)	Carbon Disulfide	Chloroform	Cyclohexane	cis-1,2-Dichloroethene	Ethanol	Hexane	Total Xylene	2,2,4-Trimethylpentane	2-Propanol	Toluene	All Other VOCs	Helium	Methane	Carbon Dioxide	Oxygen
			µg/m³													(%)			
SG1-5	11/15/21	5.0	ND<25	ND<12	ND<13	**15**	ND<3.6	ND<4.1	ND<20	ND<3.7	ND<4.5	ND<4.8	ND<10	ND<3.9	ND	ND<0.10	ND<0.00021	2.3	18
SG1-5 DUP	11/15/21	5.0	ND<24	ND<12	73 J	**14**	ND<3.6	ND<4.1	ND<20	ND<3.6	ND<4.5	ND<4.8	23	ND<3.9	ND	ND<0.10	ND<0.00021	2.3	18
SG-1-10	11/16/21	10.0	25	ND<11	ND<12	**6.9**	ND<3.3	ND<3.8	ND<18	ND<3.3	ND<4.1	ND<4.4	12	4.9	ND	18	ND<0.00019	0.26	16
SG-1-10	12/03/21	10.0	25	1.3	2.8	**6.9**	NA	ND<2.0	NA	ND<1.8	ND<2.2	NA	ND<12	ND<1.9	ND	0.93 J	--	--	--
SG2-10	11/16/21	10.0	ND<25	ND<13	ND<13	**19**	14	ND<4.2	ND<20	12	ND<4.6	8.7	ND<10	ND<4.0	ND	ND<0.11	0.00061	4.1	3.8
SG3-5	11/16/21	5.0	ND<24	ND<12	ND<12	ND<4.8	ND<3.4	ND<3.9	ND<19	ND<3.5	ND<4.3	ND<4.6	ND<9.7	3.7	ND	ND<0.099	ND<0.00020	0.47	19
SG4-5	11/15/21	5.0	ND<24	ND<12	18	ND<5.0	ND<3.5	ND<4.1	ND<19	ND<3.6	ND<4.4	ND<4.8	18	ND<3.9	ND	ND<0.10	ND<0.00020	0.34	20
SG4-10	11/15/21	10.0	ND<24	ND<12	ND<12	ND<4.9	16	ND<4.0	ND<19	7.4	5.5	22	ND<9.9	7.8	ND	ND<0.10	0.00083	1.5	19
OA-1	11/15/21	NA	140	12	ND<8.5	ND<3.3	ND<2.3	11	39	ND<2.4	ND<3.0	ND<3.2	190	ND<2.6	ND	ND<0.068	0.0003	0.052	21
Screening Criteria																			
DTSC SL (0.001 AF)[1]			32,000,000	5,200,000	730,000	120	6,300,000	8,300	NE	730,000	100,000	NE	210,000	310,000	Various	NA	NA	NA	NA
DTSC SL (0.03 AF)[2]			1,066,667	173,333	24,333	4.0	210,000	277	NE	24,333	3,333	NE	7,000	10,333	Various	NA	NA	NA	NA

Notes:

% - percent

µg/m³ = micrograms per meters cubed

bgs = below ground surface

ND = not detected (see laboratory report for reporting limit)

NA = not analyzed

NE = not established

-- = not analyzed, not applicable, or not available

ND<X = analyte not detected at or above laboratory reporting limit X

Fixed gasses analyzed by American Society for Testing Materials (ASTM) Method D 1946

VOCs - Volatile organic compounds, analyzed by Environmental Protection Agency (EPA) TO-15

1. DTSC SLs - Screening Levels for Residential Ambient Air (SLs calculated by Residential Cancer Endpoint Final Value divided by an attenuation factor of 0.001 [DTSC , 2011]), from the DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3, June 2020. Note: if the SL is not listed in HERO HHRA Note 3, then the SL value is obtained from the United States Environmental Protection Agency Regional Screening Level, May 2021.

Bold - indicates concentration is at or exceeds residential and/or commercial ESL

Table 8 – Metal Ambient and Soil Screening Level Concentration Comparison

Analyte	Maximum Detected Concentration (mg/kg)[1]	Ambient Concentration[2] (mg/kg)	Is Max. > Ambient Conc?	USEPA Soil RSLs (mg/kg)	Note 3 Soil SLs (mg/kg)	Exceeds Soil Screening Levels?	Select as a COPC
Metals							
Antimony	15.00	12.5	Yes	31	na	No	No
Arsenic	45.0	14.20 (site-specific)	**Yes**	0.68	0.11	Yes	**Yes**
Barium	280	320	No	15000	na	No	No
Beryllium	0.700	1.1	No	160	16	No	No
Cadmium	0.81	2.2	No	71	71	No	No
Chromium	51.0	49.4	**Yes**	120000	36000	No	No
Cobalt	13.200	22	No	23	na	No	No
Copper	36.0	53.3	No	3100	na	No	No
Lead	990	25	**Yes**	400	80	Yes	**Yes**
Mercury	0.20	0.3	No	23	1	No	No
Molybdenum	ND	20	No	390	na	No	No
Nickel	38.0	41.5	No	1500	820	No	No
Silver	ND	2.1	No	390	na	No	No
Thallium	ND	25	No	0.78	na	No	No
Vanadium	46.3	88.3	No	390	na	No	No
Zinc	260.0	104	Yes	23000	na	No	No

Notes:

ND - not detected

mg/Kg – milligrams per kilogram

[1] - Maximum concentration from the 0 to 10 foot soil depth below ground surface.

[2] - 95th Percentile soil concentration. Taken from: Hunter, Davis and Roach (2005)

RSL - Regional Screening Level. From Regional Screening Level Table (RSL) Master (EPA, 2021)

Note 3 SLs - Cal-EPA 2020. Human Health Risk Assessment (HHRA) Note Number 3. DTSC-modified Screening Levels. June

na - Not Available

Bold+Shaded Indicates the concentrations which exceeded their respective residential soil screening level; therefore, these metals were selected as chemicals of potential concern (COPCs)

Table 9 – Indoor Air Exposure Point Concentrations

COPC	CAS Number	Maximum Detected Soil Gas Concentration (µg/m3)	Estimated Indoor Chemical Air Concentration (ug/m3)
2-Propanol	78,831.00	23	6.90E-01
2,4,4-Trimethylpentane	25,167,708.0	22	6.60E-01
Acetone	67,641	25	7.50E-01
Carbon Disulfide	75,150.000	73	2.19E+00
Chloroform	67,663.00	19	5.70E-01
Cyclohexane	110,827.0	16	4.80E-01
Hexane	110,543.000	12	3.60E-01
Toluene	108,883.0	7.8	2.34E-01
Xylenes, total	95,476	5.5	1.65E-01

Notes:

COPC - chemical of potential concern

Attenuation factor (unitless) = 0.03

µg/L = micrograms per liter

Table 10 – Exposure Parameters for Onsite Receptors Residential Exposure Scenario

Exposure Parameters	Units	Residential Scenario		
		Adult	Child	Source
Soil Ingestion Rate (IR-S)	mg/day	100	2.00E+02	DTSC 2019
Skin Surface Area (SA)	cm2/day	6032	2.37E+03	DTSC 2019
Skin Adsorption Factor (ABS)	unitless	chem-specific	chem-specific	DTSC 1994/USEPA 1997a
Adherence Factor (AF)	mg/cm2	0.07	2.00E-01	DTSC 2019
Fraction of Soil Exposed (FE)	unitless	1	1.00E+00	DTSC 2019
Inhalation Rate of Air (IR-A)	m3/day	20	1.00E+01	DTSC 2019
Exposure Frequency (EF)	days/year	350	3.50E+02	DTSC 2019
Exposure Frequency (dermal; EFd)	days/year	350	3.50E+02	DTSC 2019
Exposure Duration (ED)	years	20	6.00E+00	DTSC 2019
Exposure Time (ET)	hours/day	24	2.40E+01	USEPA 2009
Conversion Factor (CF)	kg/mg	0.000001	1.00E-06	--
Body Weight (BW)	kg	80	1.50E+01	DTSC 2019
Averaging Time for Noncarcinogens (ATn)	days	7300	2.19E+03	USEPA 1989 (ED*365 dys/yr)
Averaging Hours for Noncarcinogens (ATn)	hours	175200	5.26E+04	USEPA 2009
Averaging Time for Carcinogens (ATc)	days	25550	2.56E+04	USEPA 1989
Averaging Hours for Carcinogens (ATc)	hours	613200	6.13E+05	USEPA 2009

Table 11 – Cumulative Cancer Risks from Multi-Pathway Soil Exposure Residential Exposure Scenario

Analyte	Chronic Oral Reference Dose (RfDo) mg/kg-day		Inhalation Reference Concentration (RfCi) (ug/m^3)		Oral Cancer Slope Factor (CSFo) ($mg/kg-day^{-1}$)		Inhalation Unir Risk (IUR) (mg/kg-day-1)	
Dioxins								
Dioxins (total)	7E-10	IRIS	0.00	OEHHA	130000	OEHHA	3.80E+01	OEHHA
Pesticides								
4,4'-DDE	0.0003	sPPRTV	1.20	Route (sPPRTV)	0.34	OEHHA	9.70E-05	OEHHA
4,4'-DDT	0.0005	IRIS	NA	NA	0.34	IRIS	9.70E-05	IRIS
Chlordane	0.0005	IRIS	0.70	IRIS	0.35	IRIS	1.00E-04	IRIS
Dieldrin	0.00005	IRIS	0.20	Route (IRIS)	16	OEHHA	4.60E-03	OEHHA
PCBs								
PCB-1260	NA	NA	NA	NA	2	IRIS (PCB mixture)	5.71E-04	IRIS (PCB mixture)
TPH								
TPH (C17-C32 aromatic high)	0.04	PPRTV	NA	NA	NA	NA	NA	NA
TPH (C19-C32 aliphatic high)	3	PPRTV	NA	NA	NA	NA	NA	NA
TPH (C9-C16 aromatic medium)	0.004	PPRTV	3.0	PPRTV	NA	NA	NA	NA
TPH (C9-C18 aliphatic medium)	0.01	PPRTV	100.000	PPRTV	NA	NA	NA	NA
VOCs								
2-Propanol	2	PPRTV	200.0	PPRTV	NA	NA	NA	NA
2,4,4-Trimethylpentane	0.01	sPPRTV	40.000	Route (sPPRTV)	NA	NA	NA	NA
Acetone	0.9	IRIS	30,900.0	ATSDR	NA	NA	NA	NA
Carbon Disulfide	0.1	IRIS	700.000	IRIS	NA	NA	NA	NA
Chloroform	0.01	IRIS	98.0	ATSDR	0.031	OEHHA	2.30E-05	IRIS
Cyclohexane	NA	NA	6,000.000	IRIS	NA	NA	NA	NA
Hexane	NA	NA	700.0	IRIS	NA	NA	NA	NA
Toluene	0.08	IRIS	300.000	OEHHA	NA	NA	NA	NA
Xylenes, total	0.2	IRIS	100.0	IRIS	NA	NA	NA	NA

Notes:

NA - not available

mg/kg - milligrams per kilogram

ug/m3 - micrograms per cubic meter

TPH - total petroleum hydrocarbons

4,4'-DDD - dichlorodiphenyldichloroethane

4,4'-DDT - dichlorodiphenyltrichloroethane

PCBs - polychlorinated biphenyls

PPRTV - Provisional Peer-Reviewed Toxicity Values

ATSDR - Agency for Toxic Substances and Disease Registry

OEHHA - California Office of Environmental Health Hazard Assessment

IRIS - Integrated Risk Information System

Table 12 – Cumulative Cancer Risks and Health Hazards from Multipathway Soil Exposure Residential Exposure Scenario

Analyte	Max soil concentrations (mg/kg)	Residential Cancer Risk - Adult & Child Resident				Residential Noncancer Hazard - Child Resident			
		Ingestion	Dermal	Inhalation	Total Risk	Ingestion	Dermal	Inhalation	Total HI
Dioxins									
Dioxins (total)	9.60E-06	2.E-06	2.E-07	1.E-10	2.E-06	2.E-01	1.E-02	2.E-07	2.E-01
Pesticides									
4,4'-DDE	0.015	7.E-09	2.E-09	4.E-13	9.E-09	6.E-04	2.E-04	9.E-09	8.E-04
4,4'-DDT	0.031	2.E-08	1.E-09	8.E-13	2.E-08	8.E-04	6.E-05	NA	8.E-04
Chlordane	0.095	5.E-08	1.E-08	2.E-12	6.E-08	2.E-03	6.E-04	1.E-07	3.E-03
Dieldrin	0.045	1.E-06	3.E-07	5.E-11	1.E-06	1.E-02	3.E-03	2.E-07	1.E-02
PCBs									
PCB-1260	0.043	1.E-07	3.E-08	6.E-12	2.E-07	NA	NA	NA	--
TPH									
TPH (C17-C32 aromatic high)	3.65	NA	NA	NA	--	1.E-03	3.E-04	NA	1.E-03
TPH (C19-C32 aliphatic high)	3.65	NA	NA	NA	--	2.E-05	4.E-06	NA	2.E-05
TPH (C9-C16 aromatic medium)	0.95	NA	NA	NA	--	3.E-03	7.E-04	2.E-07	4.E-03
TPH (C9-C18 aliphatic medium)	0.95	NA	NA	NA	--	1.E-03	3.E-04	7.E-09	2.E-03
				Total Cancer Risk	**4.00E-06**			**Total Hazard Index**	**2.13E-01**

Notes:

NA - not applicable

-- = not available

TPH - total petroleum hydrocarbons

PCBs - polychlorinated biphenyls

Table 13 – Cancer Risks and Health Hazards from Inhalation of Indoor Air

Analyte	Concentrations[1] (µg/m^3)	Cancer Risks- Residential Exposure Scenario				Health Hazards - Residential Exposure Scenario			
		Inhalation Slope Factor (µg/m^3)$^{-1}$	Lifetime Expossure Conc_c (µg/m3)		Cancer Risk (unitless)	Inhalation Reference Dose (µg/m^3)	Average Expossure Conc_c (µg/m3)		Hazard Quotient (unitless)
			Adult Resident	Child Resident	Adult & Child		Adult Resident	Child Resident	Child
VOCs									
2-Propanol	6.90E-01	NA	1.9E-01	5.7E-02	NA	2.E+02	7.E-01	7.E-01	3.E-03
2,4,4-Trimethylpentane	6.60E-01	NA	1.8E-01	5.4E-02	NA	4.E+01	6.E-01	6.E-01	2.E-02
Acetone	7.50E-01	NA	2.1E-01	6.2E-02	NA	3.E+04	7.E-01	7.E-01	2.E-05
Carbon Disulfide	2.19E+00	NA	6.0E-01	1.8E-01	NA	7.E+02	2.E+00	2.E+00	3.E-03
Chloroform	5.70E-01	2.30E-05	1.6E-01	4.7E-02	5.E-06	1.E+02	5.E-01	5.E-01	6.E-03
Cyclohexane	4.80E-01	NA	1.3E-01	3.9E-02	NA	6.E+03	5.E-01	5.E-01	8.E-05
Hexane	3.60E-01	NA	9.9E-02	3.0E-02	NA	7.E+02	3.E-01	3.E-01	5.E-04
Toluene	2.34E-01	NA	6.4E-02	1.9E-02	NA	3.E+02	2.E-01	2.E-01	7.E-04
Xylenes, total	1.65E-01	NA	4.5E-02	1.4E-02	NA	1.E+02	2.E-01	2.E-01	2.E-03
				Total Cancer Risk	**5.E-06**			**Total Hazard Index**	**3.E-02**

Notes:

NA - not applicable

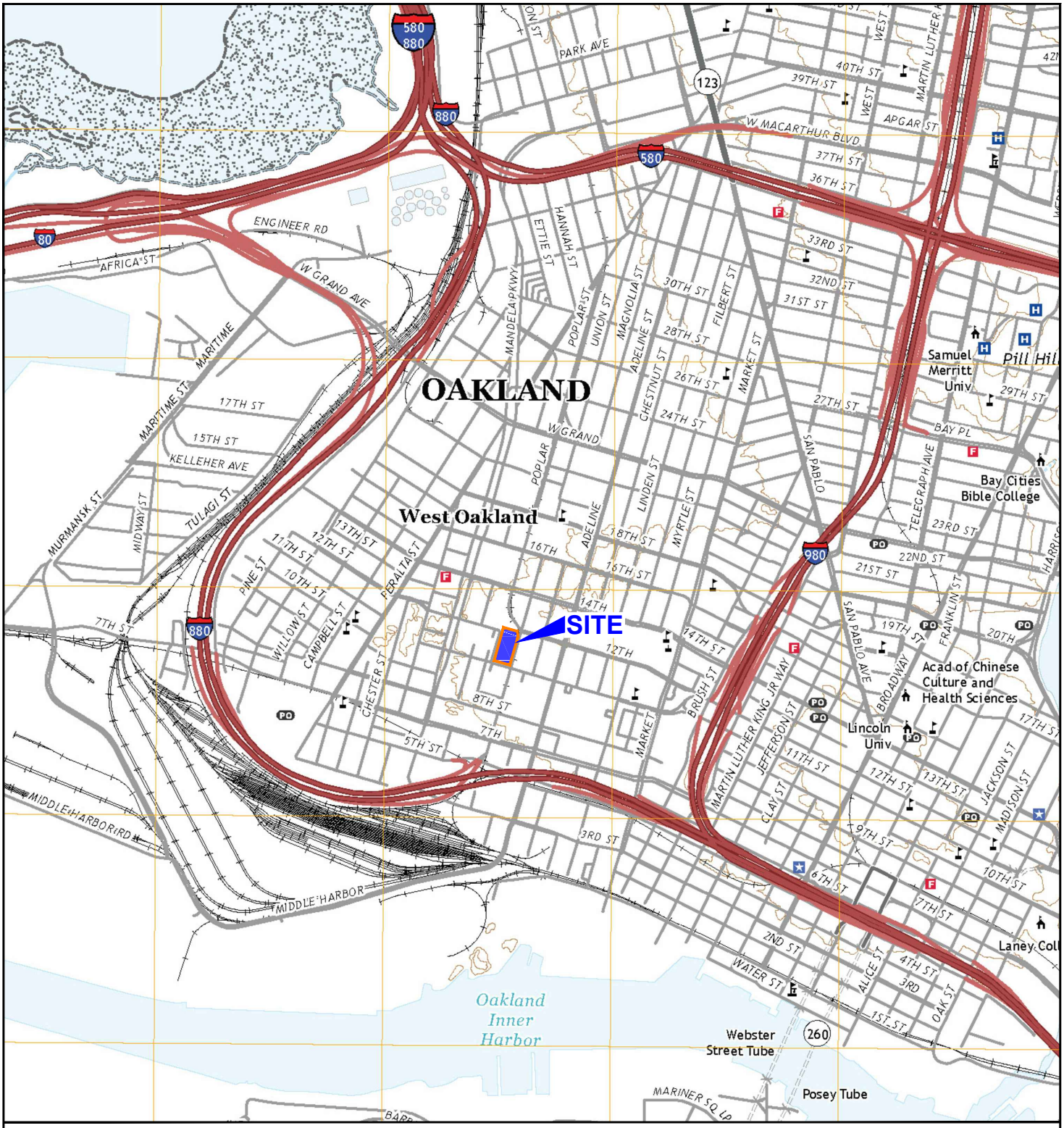
VOCs – volatile organic compounds

µg/m^3 – micrograms per cubic meter

[1] - The maximum concentrations detected in soil vapor probes, also known as the exposure point concentration (EPC).

Estimated Using a Default Attenuation Factor of 0.03

FIGURES



NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE I REFERENCE: USGS, 2018

N

SCALE (FEET)

0 2,000 4,000

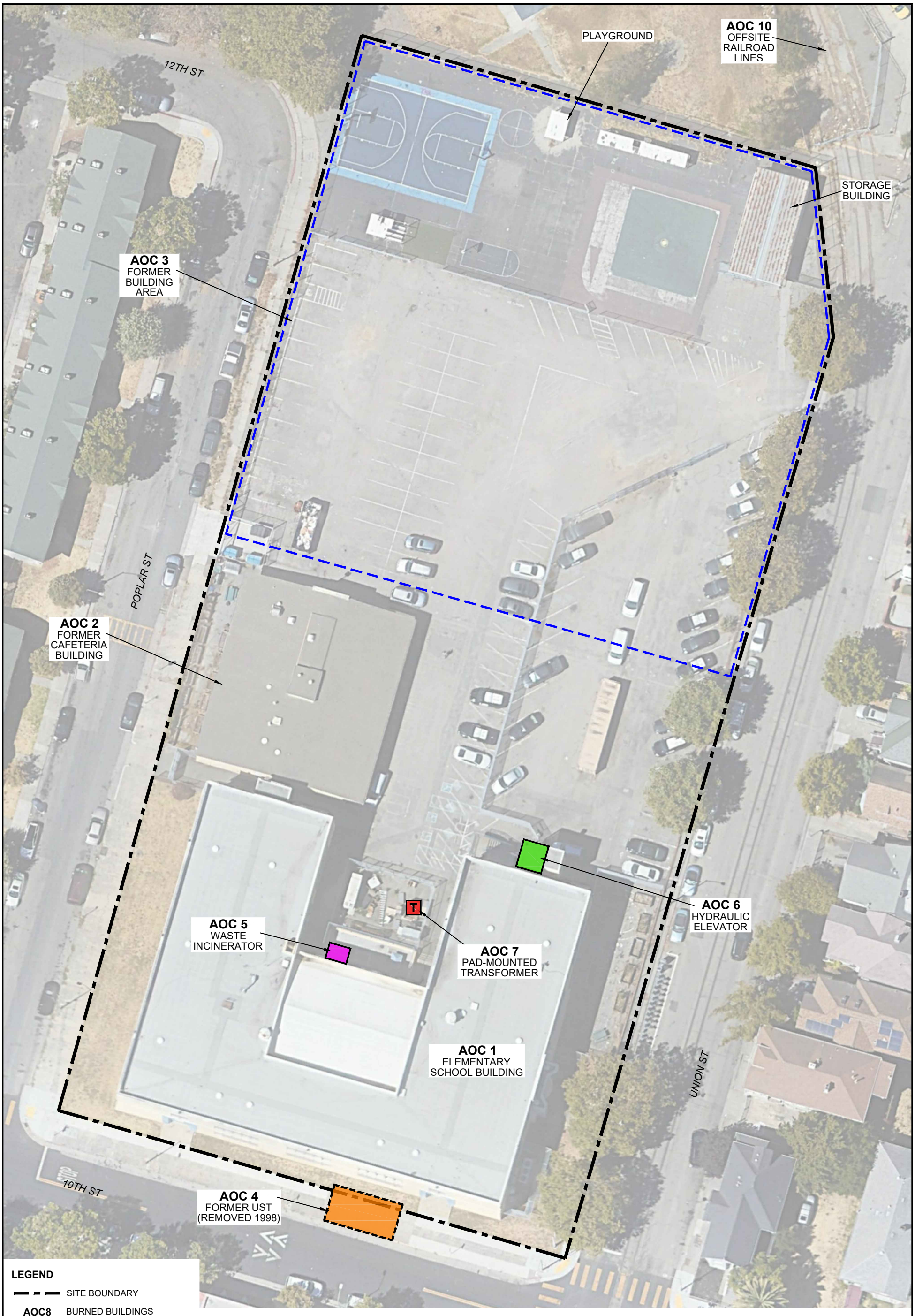
403668001.dwg 12/15/2021 AEK

FIGURE 1

SITE LOCATION

PRELIMINARY ENDANGERMENT ASSESSMENT
1011 UNION STREET
OAKLAND, CALIFORNIA
403668001 I 12/21

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NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE
REFERENCE: SANBORN, 1902, 1911; GOOGLE EARTH, 2021

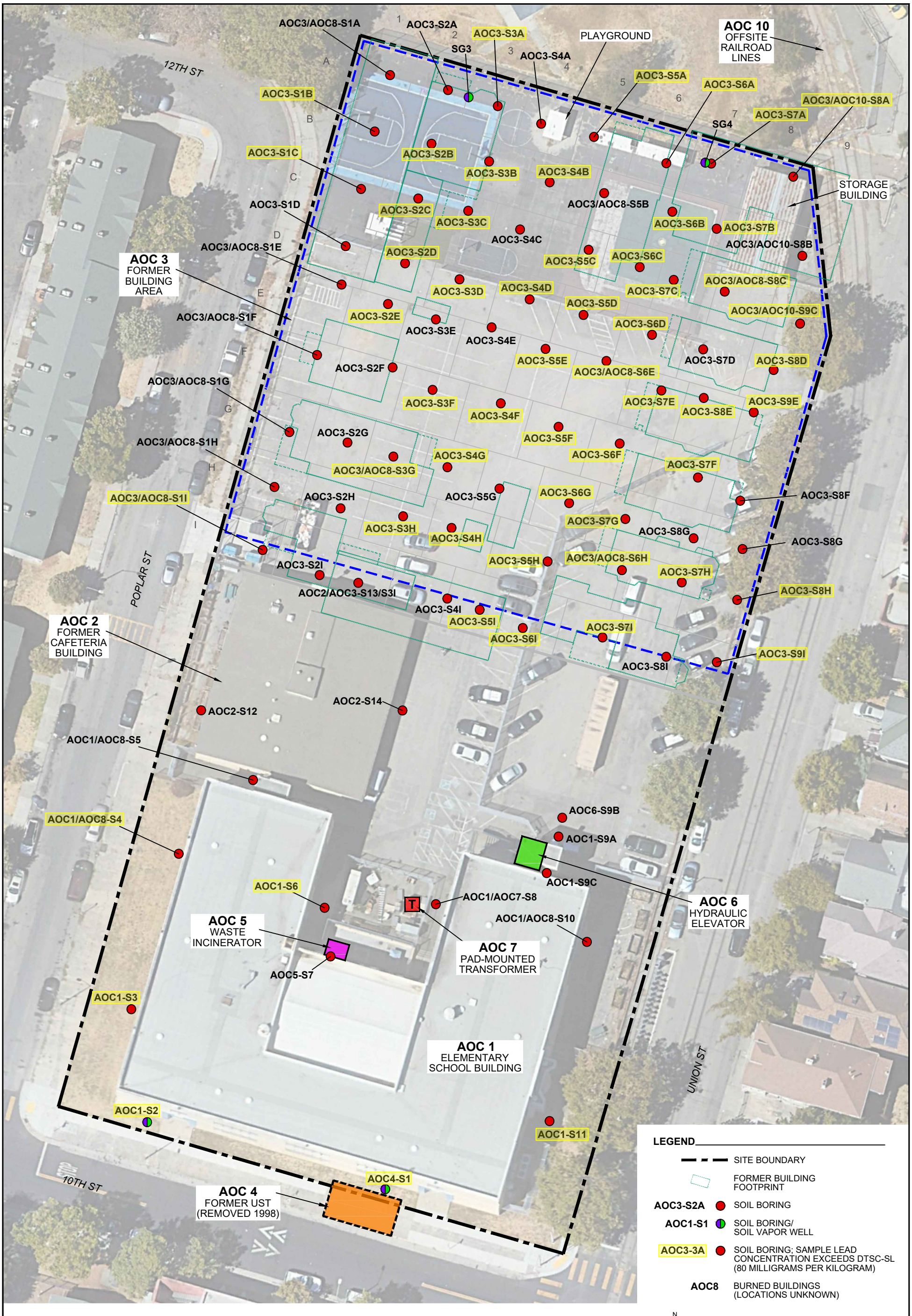
403668001.dwg 12/20/2021 AEK

FIGURE 2

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SITE PLAN

PRELIMINARY ENDANGERMENT ASSESSMENT
1011 UNION STREET
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NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE
REFERENCE: SANBORN FIRE MAPS, 1902, 1911; GOOGLE EARTH, 2021

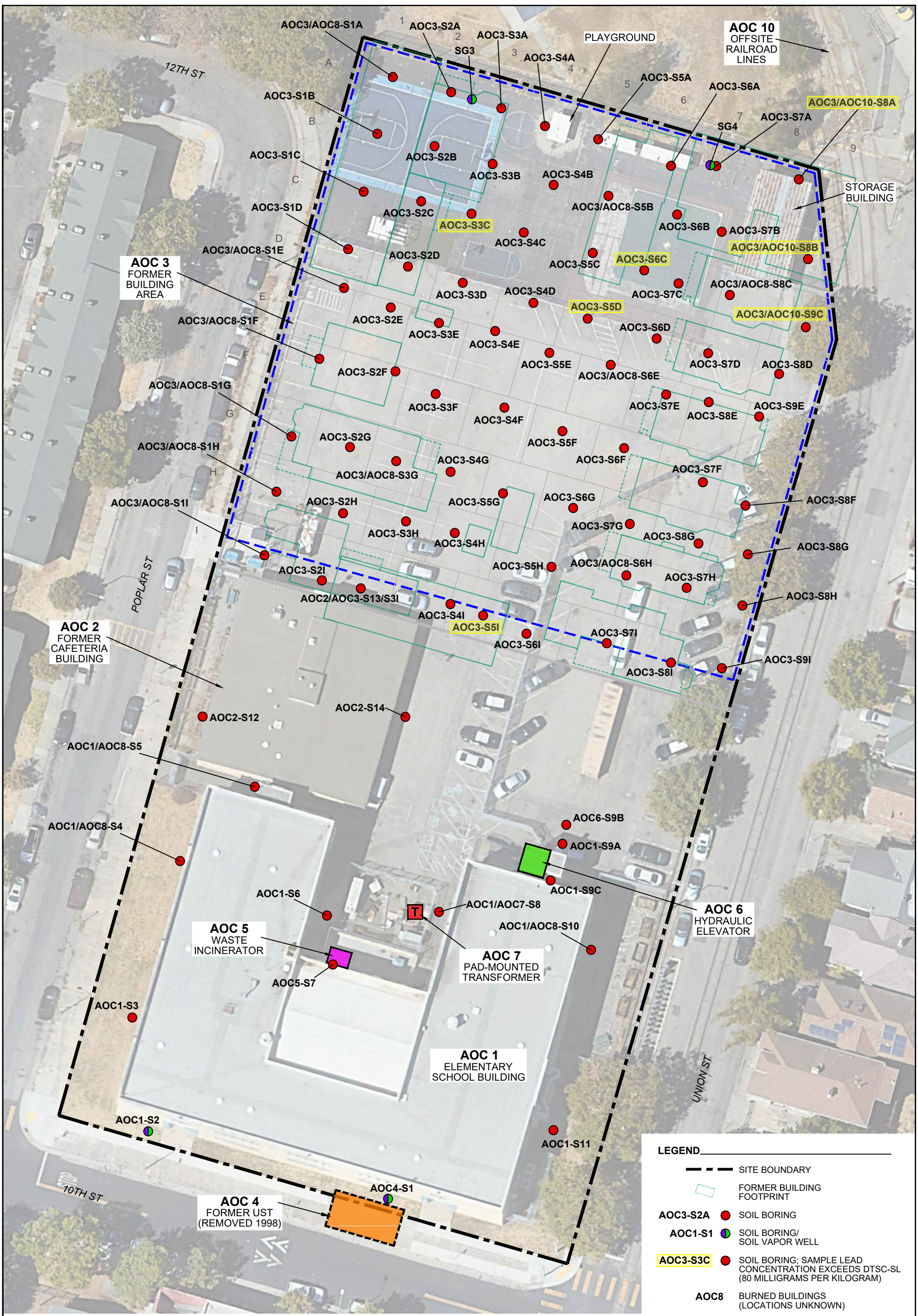
403668001.dwg 12/28/2021 AEK

FIGURE 3

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SOIL LEAD EXCEEDANCES - 0.5 FEET BGS

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NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE
REFERENCE: SANBORN FIRE MAPS, 1902, 1911; GOOGLE EARTH, 2021

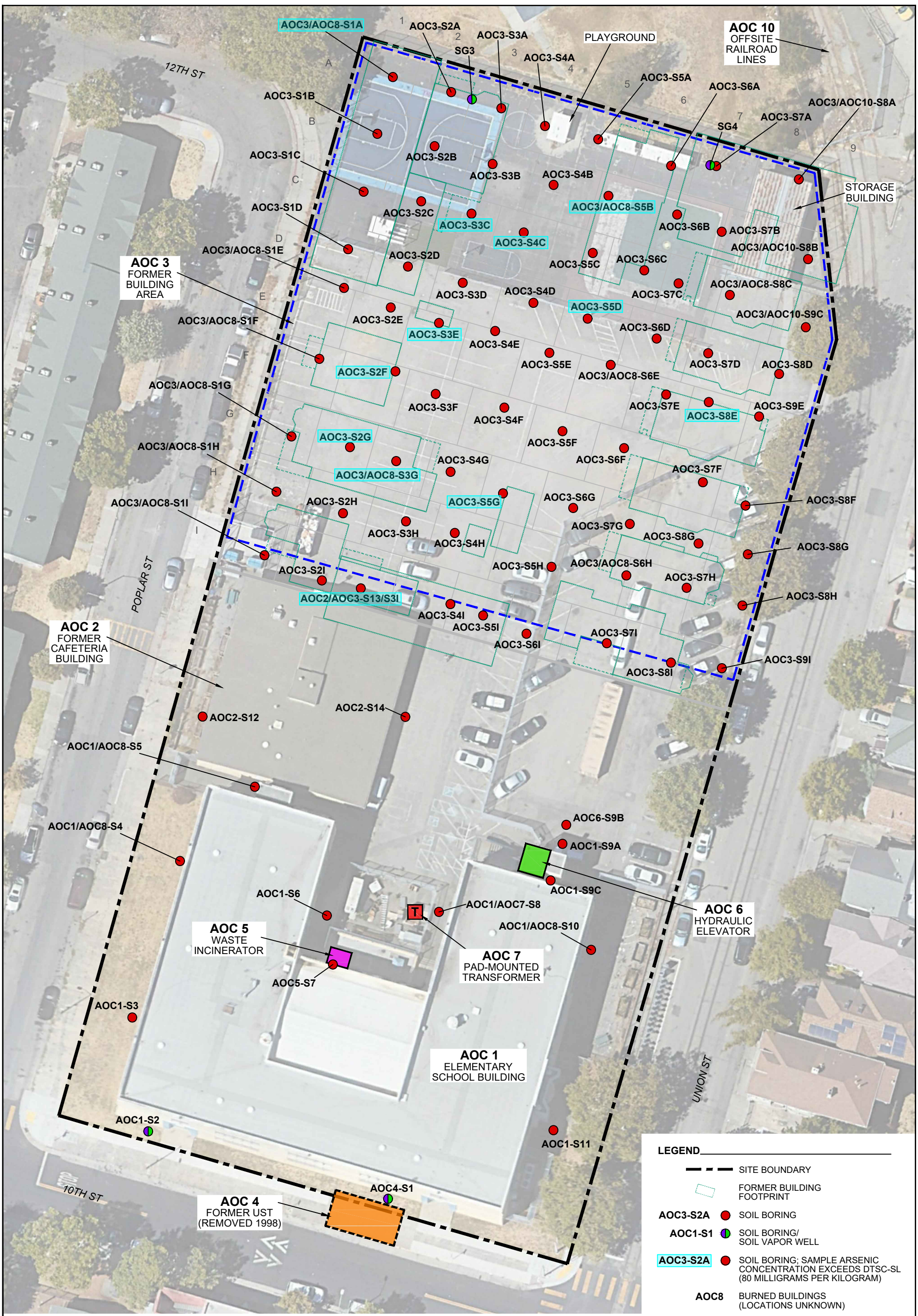
403668001.dwg 12/28/2021 AEK

FIGURE 4

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SOIL LEAD EXCEEDANCES - 2.0 FEET BGS

PRELIMINARY ENDANGERMENT ASSESSMENT
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OAKLAND, CALIFORNIA
403668001 I 12/21



NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE
REFERENCE: SANBORN FIRE MAPS, 1902, 1911; GOOGLE EARTH, 2021

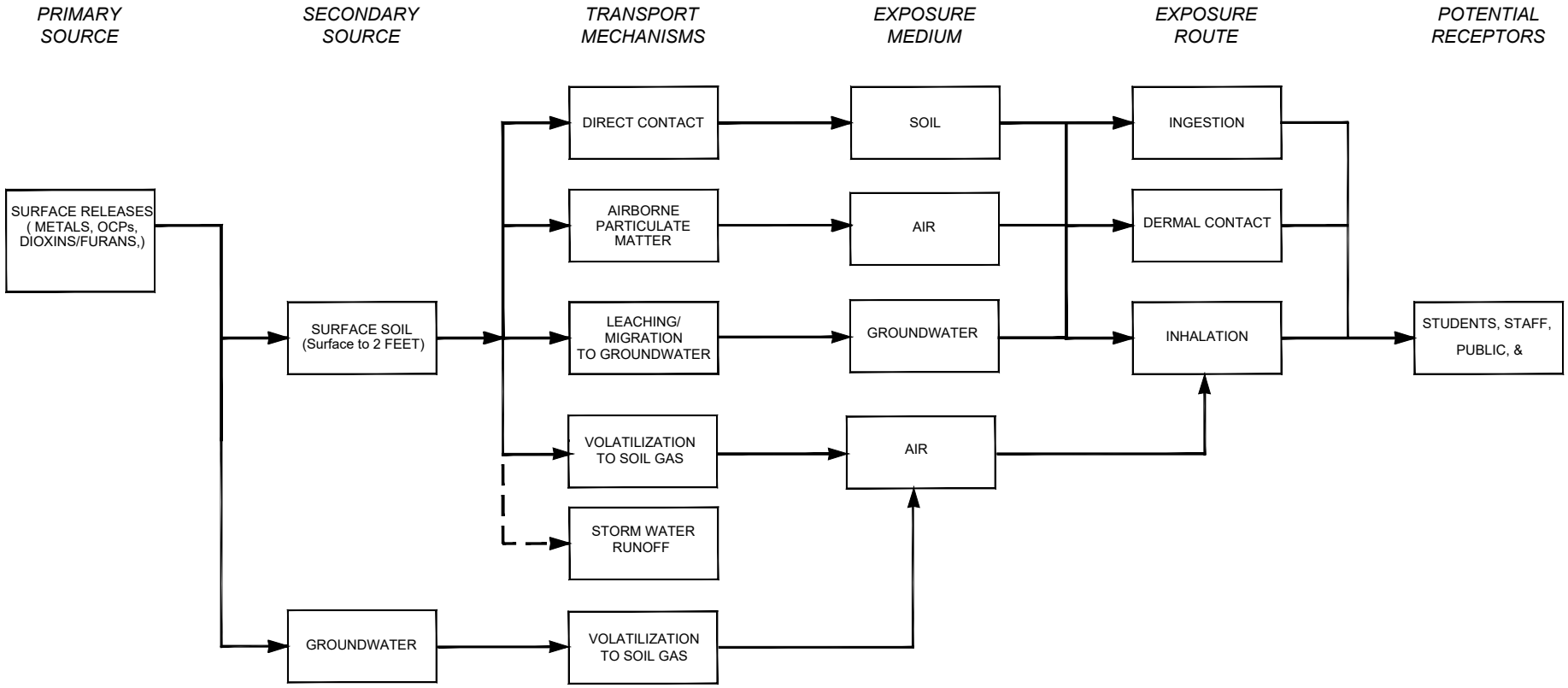
403668001.dwg 12/28/2021 AEK

FIGURE 5

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SOIL ARSENIC EXCEEDANCES - 0.5 FEET BGS

PRELIMINARY ENDANGERMENT ASSESSMENT
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403668001 I 12/21



LEGEND

POTENIALLY COMPLETE PATHWAY — INCOMPLETE PATHWAY

PAHs POLYCYCLIC AROMATIC HYDROCARBONS
PCBs POLYCHLORINATED BIPHENYLS
VOCs VOLATILE ORGANIC COMPOUNDS
TPHmo TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL
TPHd TOTAL PETROLEUM HYDROCARBONS AS DIESEL

REFERENCE: DEPARTMENT OF TOXIC SUBSTANCES CONTROL, 1994 (REVISED OCTOBER 2015), PRELIMINARY ENDANGERMENT ASSESSMENT GUIDANCE MANUAL

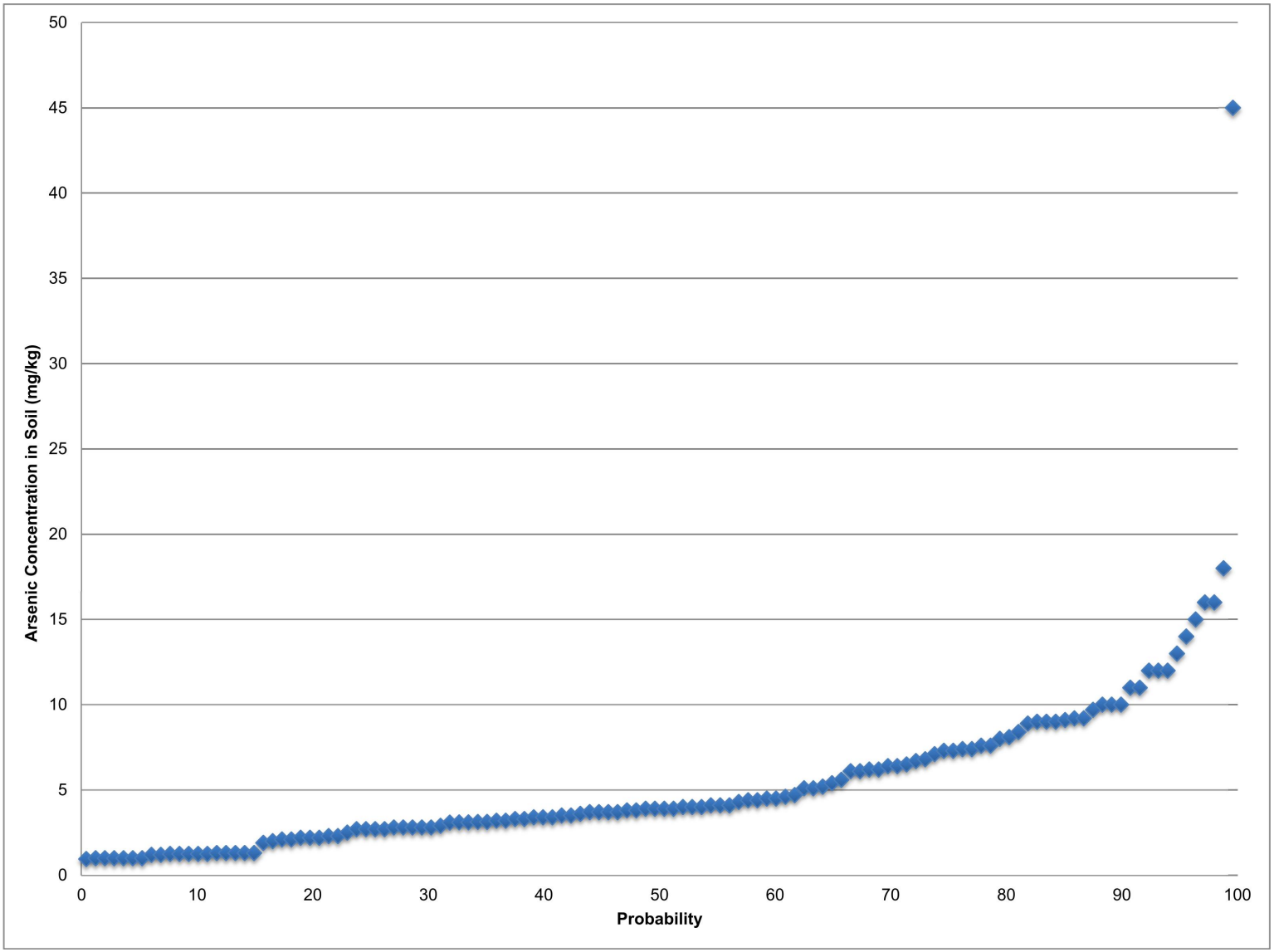
403369002.dwg 10/18/2019 AEK

FIGURE 6

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CONCEPTUAL SITE MODEL

PEA REPORT
1011 UNION ST
OAKLAND, CALIFORNIA
403668001 I 12/21



403668001.dwg 12/27/2021 AEK

FIGURE 7

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ARSENIC PROBABILITY PLOT

PRELIMINARY ENDANGERMENT ASSESSMENT
1011 UNION STREET
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403668001 I 12/21

APPENDIX A

Boring Logs

DATE DRILLED 11/01/2021 BORING NO. SG1

GROUND ELEVATION _____ SHEET 1 OF 1

DRILLING METHOD Hand auger to 5', DPT to 15'

DRIVE WEIGHT _____ DROP _____

SAMPLED BY DNR LOGGED BY DNR REVIEWED BY BSW

DEPTH (feet)	SAMPLES: Bulk	SAMPLES: Driven	SAMPLE ID	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0								SM	Brown, moist, loose, silty SAND with clay; fine to coarse sand.
	■		AOC1-S1-0.5			0.0			
	■		AOC4-S1-2						
5	■		AOC4-S1-5			0.0		SC	Brown, moist, loose, clayey SAND with silt; fine to coarse sand.
10	■		AOC4-S1-10			0.0			@11': Wet.
15	■		AOC4-S1-15						Bottom of boring at 15'. Groundwater not encountered during drilling on 11/01/2021. Soil vapor well AOC4-S1 constructed on 11/01/2021.
20									

FIGURE B-1

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DATE DRILLED 11/01/2021 BORING NO. SG2

GROUND ELEVATION _____ SHEET 1 OF 1

DRILLING METHOD Hand auger to 5', DPT to 10.5'

DRIVE WEIGHT _____ DROP _____

SAMPLED BY DNR LOGGED BY DNR REVIEWED BY BSW

DEPTH (feet)	SAMPLES (Bulk / Driven)	SAMPLE ID	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0	■	AOC1-S2-0.5			0.0		SM	Brown, moist, loose, silty SAND with clay; fine to coarse sand.
	■	AOC1-S2-2						
5	■	AOC9-S2-5			0.0		SC	Brown, moist, loose, clayey SAND with silt; fine to coarse sand.
					0.0			
10	■	AOC9-S2-10						Bottom of boring at 10.5'. Groundwater not encountered during drilling on 11/01/2021. Soil vapor well AOC1-S2 constructed on 11/01/2021.
15								
20								

FIGURE B-2

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1011 UNION STREET, OAKLAND, CALIFORNIA
403668001 | 12/21

DATE DRILLED 11/01/2021 BORING NO. SG3

GROUND ELEVATION _____ SHEET 1 OF 1

DRILLING METHOD Hand auger to 5', DPT to 10.5'

DRIVE WEIGHT _____ DROP _____

SAMPLED BY DNR LOGGED BY DNR REVIEWED BY BSW

DEPTH (feet)	SAMPLES: Bulk	SAMPLES: Driven	SAMPLE ID	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0						0.0		SW	1" Asphalt. Light brown, moist, loose, well-graded SAND with gravel; fine to coarse sand; fine to medium gravel.
								SM	Brown, moist, loose, silty SAND; fine to coarse sand.
5	■		AOC9-SG3-5			0.0			Brown, moist, loose, silty SAND with clay; fine to coarse sand.
10	■		AOC9-SG3-10						Bottom of boring at 10.5'. Groundwater not encountered during drilling on 11/01/2021. Soil vapor well SG3 constructed on 11/01/2021.
15									
20									

FIGURE B-3

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

PRELIMINARY ENDANGERMENT ASSESSMENT
1011 UNION STREET, OAKLAND, CALIFORNIA
403668001 | 12/21

DATE DRILLED 11/01/2021 BORING NO. SG4

GROUND ELEVATION _____ SHEET 1 OF 1

DRILLING METHOD Hand auger to 5', DPT to 10.5'

DRIVE WEIGHT _____ DROP _____

SAMPLED BY DNR LOGGED BY DNR REVIEWED BY BSW

DEPTH (feet)	SAMPLES (Bulk / Driven)	SAMPLE ID	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							SW	1" Asphalt.
					0.0		SM	Light brown, moist, loose, well-graded SAND with gravel; fine to coarse sand; fine gravel.
								Brown, moist, loose, silty SAND; fine to coarse sand.
5		AOC9-SG4-5			0.0			Brown, moist, loose, silty SAND with clay; fine to coarse sand.
10		AOC9-SG4-10						Bottom of boring at 10.5'.
								Groundwater not encountered during drilling on 11/01/2021.
								Soil vapor well SG4 constructed on 11/01/2021.
15								
20								

FIGURE B-4

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

PRELIMINARY ENDANGERMENT ASSESSMENT
1011 UNION STREET, OAKLAND, CALIFORNIA
403668001 | 12/21

APPENDIX B

Laboratory Reports – Soil Groundwater and Soil Gas

Ninyo & Moore
2020 Challenger Drive, Suite 103
Alameda, California 94501
Tel: 510-343-3000

RE: Cole Administration Building

Work Order No.: 2111198

Dear Nathan Diem:

Torrent Laboratory, Inc. received 5 sample(s) on November 17, 2021 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991 If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.



Kathie Evans
Project Manager

December 02, 2021
Date

Date: 12/2/2021

Client: Ninyo & Moore

Project: Cole Administration Building

Work Order: 2111198

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Laboratory, Inc.

Analytical Comments for method 8290, Method Blank, Note: Cleanup standard recovery bias high. All compounds are ND. Cleanup standard recoveries were within range for the client samples. No corrective action required.

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Nathan Diem
Ninyo & Moore

Date Received: 11/17/21
Date Reported: 12/02/21

AOC5-S7-0.5 2111198-001

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Arsenic	SW6010B	1	0.15	1.30	3.09	mg/Kg
Barium	SW6010B	1	0.055	5.00	80.0	mg/Kg
Chromium	SW6010B	1	0.075	5.00	29.0	mg/Kg
Cobalt	SW6010B	1	0.070	5.00	13.2	mg/Kg
Copper	SW6010B	1	0.20	5.00	16.3	mg/Kg
Lead	SW6010B	1	0.10	3.00	26.5	mg/Kg
Nickel	SW6010B	1	0.50	5.00	25.0	mg/Kg
Vanadium	SW6010B	1	0.10	5.00	24.1	mg/Kg
Zinc	SW6010B	1	0.30	5.00	27.7	mg/Kg
12378-PeCDF	SW8290	1	0.99	4.8	5.19	pg/g
123789-HxCDD	SW8290	1	3.1	4.8	11.7	pg/g
Total-Furans	SW8290	1	0.21	0.48	5.21	pg/g
Total-TEQ	SW8290	1			0.156	pg/g

AOC5-S7-2.0 2111198-002

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Arsenic	SW6010B	1	0.15	1.30	2.80	mg/Kg
Barium	SW6010B	1	0.055	5.00	47.9	mg/Kg
Chromium	SW6010B	1	0.075	5.00	43.5	mg/Kg
Cobalt	SW6010B	1	0.070	5.00	5.65	mg/Kg
Copper	SW6010B	1	0.20	5.00	7.85	mg/Kg
Nickel	SW6010B	1	0.50	5.00	38.8	mg/Kg
Vanadium	SW6010B	1	0.10	5.00	29.3	mg/Kg
Zinc	SW6010B	1	0.30	5.00	21.4	mg/Kg
12378-PeCDF	SW8290	1	1.0	5.0	5.64	pg/g
123478-HxCDF	SW8290	1	0.50	5.0	5.69	pg/g
123789-HxCDF	SW8290	1	1.9	5.0	5.69	pg/g
1234789-HpCDF	SW8290	1	1.1	5.0	6.39	pg/g
123789-HxCDD	SW8290	1	3.2	5.0	12.2	pg/g
1234678-HpCDD	SW8290	1	1.6	5.0	8.76	pg/g
Total-Dioxins	SW8290	1	0.21	0.50	8.76	pg/g
Total-Furans	SW8290	1	0.22	0.50	17.0	pg/g
Total-TEQ	SW8290	1			1.40	pg/g

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Nathan Diem
Ninyo & Moore

Date Received: 11/17/21
Date Reported: 12/02/21

AOC5-S7-5.0 2111198-003

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Arsenic	SW6010B	1	0.15	1.30	3.13	mg/Kg
Barium	SW6010B	1	0.055	5.00	55.0	mg/Kg
Chromium	SW6010B	1	0.075	5.00	39.7	mg/Kg
Cobalt	SW6010B	1	0.070	5.00	6.10	mg/Kg
Copper	SW6010B	1	0.20	5.00	8.65	mg/Kg
Nickel	SW6010B	1	0.50	5.00	35.1	mg/Kg
Vanadium	SW6010B	1	0.10	5.00	30.2	mg/Kg
Zinc	SW6010B	1	0.30	5.00	22.7	mg/Kg
Total-TEQ	SW8290	1			0.000	pg/g

AOC5-S7-5.0 Dup 2111198-004

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Arsenic	SW6010B	1	0.15	1.30	3.12	mg/Kg
Barium	SW6010B	1	0.055	5.00	58.5	mg/Kg
Chromium	SW6010B	1	0.075	5.00	40.9	mg/Kg
Cobalt	SW6010B	1	0.070	5.00	6.20	mg/Kg
Copper	SW6010B	1	0.20	5.00	9.40	mg/Kg
Lead	SW6010B	1	0.10	3.00	3.06	mg/Kg
Nickel	SW6010B	1	0.50	5.00	36.7	mg/Kg
Vanadium	SW6010B	1	0.10	5.00	31.6	mg/Kg
Zinc	SW6010B	1	0.30	5.00	24.5	mg/Kg
123789-HxCDD	SW8290	1	3.2	5.0	12.1	pg/g
Total-TEQ	SW8290	1			0.000	pg/g

EB11162021 2111198-005

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Total-TEQ	SW8290	1	0.0002	0.014	<0.0140	pg/L

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-0.5	**Lab Sample ID:**	2111198-001A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:57		
SDG:			

Prep Method:	7471BP	**Prep Batch Date/Time:**	11/27/21	10:40:00AM
Prep Batch ID:	1137236	**Prep Analyst:**	ERVS	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	SW7471B	1	0.083	0.50	ND		mg/Kg	11/29/21	14:14	BJAY	461738

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-0.5	**Lab Sample ID:**	2111198-001A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:57		
SDG:			

Prep Method:	3050B	**Prep Batch Date/Time:**	11/27/21 10:00:00AM
Prep Batch ID:	1137280	**Prep Analyst:**	PHUFANO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	SW6010B	1	0.050	5.00	ND		mg/Kg	11/30/21	13:06	ERR	461787
Arsenic	SW6010B	1	0.15	1.30	**3.09**		mg/Kg	11/30/21	13:06	ERR	461787
Barium	SW6010B	1	0.055	5.00	**80.0**		mg/Kg	11/30/21	13:06	ERR	461787
Beryllium	SW6010B	1	0.055	5.00	ND		mg/Kg	11/30/21	13:06	ERR	461787
Cadmium	SW6010B	1	0.10	5.00	ND		mg/Kg	11/30/21	13:06	ERR	461787
Chromium	SW6010B	1	0.075	5.00	**29.0**		mg/Kg	11/30/21	13:06	ERR	461787
Cobalt	SW6010B	1	0.070	5.00	**13.2**		mg/Kg	11/30/21	13:06	ERR	461787
Copper	SW6010B	1	0.20	5.00	**16.3**		mg/Kg	11/30/21	13:06	ERR	461787
Lead	SW6010B	1	0.10	3.00	**26.5**		mg/Kg	11/30/21	13:06	ERR	461787
Molybdenum	SW6010B	1	0.050	5.00	ND		mg/Kg	11/30/21	13:06	ERR	461787
Nickel	SW6010B	1	0.50	5.00	**25.0**		mg/Kg	11/30/21	13:06	ERR	461787
Selenium	SW6010B	1	0.22	5.00	ND		mg/Kg	11/30/21	13:06	ERR	461787
Silver	SW6010B	1	0.15	1.00	ND		mg/Kg	11/30/21	13:06	ERR	461787
Thallium	SW6010B	1	0.55	5.00	ND		mg/Kg	11/30/21	13:06	ERR	461787
Vanadium	SW6010B	1	0.10	5.00	**24.1**		mg/Kg	11/30/21	13:06	ERR	461787
Zinc	SW6010B	1	0.30	5.00	**27.7**		mg/Kg	11/30/21	13:06	ERR	461787

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-0.5	**Lab Sample ID:**	2111198-001A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:57		
SDG:			

Prep Method:	3546_BNA	**Prep Batch Date/Time:**	11/19/21 10:35:00AM
Prep Batch ID:	1137022	**Prep Analyst:**	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
The results shown below are reported using their MDL.											
N-Nitrosodimethylamine	SW8270C	10	1300	20000	ND		ug/Kg	11/20/21	22:55	MT	461558
Phenol	SW8270C	10	1220	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
Bis(2-chloroethyl)ether	SW8270C	10	369	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
2-Chlorophenol	SW8270C	10	1320	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
1,3-Dichlorobenzene	SW8270C	10	365	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
1,4-Dichlorobenzene	SW8270C	10	406	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Benzyl Alcohol	SW8270C	10	568	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
1,2-Dichlorobenzene	SW8270C	10	375	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
2-Methylphenol (o-Cresol)	SW8270C	10	815	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
N-Methyl-2-Pyrrolidone (NMP)	SW8270C	10	1890	20000	ND		ug/Kg	11/20/21	22:55	MT	461558
3-/4-Methylphenol (p-/m-Cresol)	SW8270C	10	870	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
N-nitroso-di-n-propylamine	SW8270C	10	365	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Hexachloroethane	SW8270C	10	474	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Nitrobenzene	SW8270C	10	357	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Isophorone	SW8270C	10	338	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
2-Nitrophenol	SW8270C	10	705	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
2,4-Dimethylphenol	SW8270C	10	634	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
Benzoic Acid	SW8270C	10	1160	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
Bis(2-Chloroethoxy)methane	SW8270C	10	272	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Bis(2-chloroisopropyl)ether	SW8270C	10	350	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
2,4-Dichlorophenol	SW8270C	10	1090	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
1,2,4-Trichlorobenzene	SW8270C	10	329	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Naphthalene	SW8270C	10	294	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
2,6-Dichlorophenol	SW8270C	10	994	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
Hexachloro-1,3-butadiene	SW8270C	10	232	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
4-Chloro-3-methylphenol	SW8270C	10	939	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
2-Methylnaphthalene	SW8270C	10	290	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
1-Methylnaphthalene	SW8270C	10	339	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Hexachlorocyclopentadiene	SW8270C	10	360	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
2,4,6-Trichlorophenol	SW8270C	10	999	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
2,4,5-Trichlorophenol	SW8270C	10	928	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
2-Chloronaphthalene	SW8270C	10	295	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
1,4-Dinitrobenzene	SW8270C	10	287	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Dimethyl phthalate	SW8270C	10	393	20000	ND		ug/Kg	11/20/21	22:55	MT	461558
1,3-Dinitrobenzene	SW8270C	10	289	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Acenaphthylene	SW8270C	10	230	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
2,6-Dinitrotoluene	SW8270C	10	314	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
1,2-Dinitrobenzene	SW8270C	10	438	4000	ND		ug/Kg	11/20/21	22:55	MT	461558

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-0.5	**Lab Sample ID:**	2111198-001A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:57		
SDG:			

Prep Method:	3546_BNA	**Prep Batch Date/Time:**	11/19/21 10:35:00AM
Prep Batch ID:	1137022	**Prep Analyst:**	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
The results shown below are reported using their MDL.											
Acenaphthene	SW8270C	10	296	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
2,4-Dinitrophenol	SW8270C	10	2150	20000	ND		ug/Kg	11/20/21	22:55	MT	461558
4-Nitrophenol	SW8270C	10	1520	20000	ND		ug/Kg	11/20/21	22:55	MT	461558
Dibenzofuran	SW8270C	10	312	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
2,4-Dinitrotoluene	SW8270C	10	336	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
2,3,5,6-Tetrachlorophenol	SW8270C	10	766	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
2,3,4,6-Tetrachlorophenol	SW8270C	10	874	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
Diethylphthalate	SW8270C	10	379	20000	ND		ug/Kg	11/20/21	22:55	MT	461558
Fluorene	SW8270C	10	286	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
4-Chlorophenyl-phenylether	SW8270C	10	259	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
4,6-Dinitro-2-methylphenol	SW8270C	10	372	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
Diphenylamine	SW8270C	10	362	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Azobenzene	SW8270C	10	3160	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
4-Bromophenyl-phenylether	SW8270C	10	229	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Hexachlorobenzene	SW8270C	10	240	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Pentachlorophenol	SW8270C	10	694	8000	ND		ug/Kg	11/20/21	22:55	MT	461558
Phenanthrene	SW8270C	10	259	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Anthracene	SW8270C	10	248	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Carbazole	SW8270C	10	298	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Di-n-butylphthalate	SW8270C	10	375	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Fluoranthene	SW8270C	10	278	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Benzidine	SW8270C	10	4080	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Pyrene	SW8270C	10	332	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Butylbenzylphthalate	SW8270C	10	584	20000	ND		ug/Kg	11/20/21	22:55	MT	461558
Benzo(a)anthracene	SW8270C	10	272	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
3,3-Dichlorobenzidine	SW8270C	10	3270	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Chrysene	SW8270C	10	421	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Bis(2-Ethylhexyl)phthalate	SW8270C	10	426	20000	ND		ug/Kg	11/20/21	22:55	MT	461558
Di-n-Octylphthalate	SW8270C	10	341	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Benzo(b)fluorathene	SW8270C	10	334	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
benzo(k)fluorathene	SW8270C	10	227	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Benzo(a)pyrene	SW8270C	10	272	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Indeno(1,2,3-c,d)pyrene	SW8270C	10	383	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Dibenzo(a,h)anthracene	SW8270C	10	353	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Benzo(g,h,i)perylene	SW8270C	10	463	4000	ND		ug/Kg	11/20/21	22:55	MT	461558
Pyridine	SW8270C	10	1220	20000	ND		ug/Kg	11/20/21	22:55	MT	461558
			Acceptance Limits								
2-Fluorophenol (S)	SW8270C		25 - 121		**0.000**	D	%	11/20/21	22:55	MT	461558

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-0.5	**Lab Sample ID:**	2111198-001A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:57		
SDG:			

Prep Method:	3546_BNA	**Prep Batch Date/Time:**	11/19/21 10:35:00AM
Prep Batch ID:	1137022	**Prep Analyst:**	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
The results shown below are reported using their MDL.											
Phenol-d6 (S)	SW8270C		24 - 113		**0.000**	D	%	11/20/21	22:55	MT	461558
2,4,6-Tribromophenol (S)	SW8270C		19 - 122		**0.000**	D	%	11/20/21	22:55	MT	461558
2-Fluorobiphenyl (S)	SW8270C		45 - 143		**0.000**	D	%	11/20/21	22:55	MT	461558
Nitrobenzene-d5 (S)	SW8270C		23 - 120		**0.000**	D	%	11/20/21	22:55	MT	461558
p-Terphenyl-d14 (S)	SW8270C		18 - 137		**0.000**	D	%	11/20/21	22:55	MT	461558

NOTE: In an effort to minimize matrix interference, the solvent final volume to sample mass ratio had to be increased resulting in elevated reporting limits. The sample was further diluted due to the nature of the extract (dark and viscous).

Prep Method:	8290S-P	**Prep Batch Date/Time:**	11/13/21 8:31:00AM
Prep Batch ID:	1137060	**Prep Analyst:**	LATZN
		Units:	pg/g

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2378-TCDF	SW8290	1	0.21	0.48	ND		pg/g	11/23/21	3:14	TT	461813
12378-PeCDF	SW8290	1	0.99	4.8	**5.19**		pg/g	11/23/21	3:14	TT	461813
23478-PeCDF	SW8290	1	0.65	4.8	ND		pg/g	11/23/21	3:14	TT	461813
123478-HxCDF	SW8290	1	0.49	4.8	ND		pg/g	11/23/21	3:14	TT	461813
123678-HxCDF	SW8290	1	1.1	4.8	ND		pg/g	11/23/21	3:14	TT	461813
234678-HxCDF	SW8290	1	1.4	4.8	ND		pg/g	11/23/21	3:14	TT	461813
123789-HxCDF	SW8290	1	1.9	4.8	ND		pg/g	11/23/21	3:14	TT	461813
1234678-HpCDF	SW8290	1	1.8	4.8	ND		pg/g	11/23/21	3:14	TT	461813
1234789-HpCDF	SW8290	1	1.1	4.8	ND		pg/g	11/23/21	3:14	TT	461813
OCDF	SW8290	1	1.4	29	ND		pg/g	11/23/21	3:14	TT	461813
2378-TCDD	SW8290	1	0.20	0.48	ND		pg/g	11/23/21	3:14	TT	461813
12378-PeCDD	SW8290	1	1.1	4.8	ND		pg/g	11/23/21	3:14	TT	461813
123478-HxCDD	SW8290	1	0.90	4.8	ND		pg/g	11/23/21	3:14	TT	461813
123678-HxCDD	SW8290	1	1.3	4.8	ND		pg/g	11/23/21	3:14	TT	461813
123789-HxCDD	SW8290	1	3.1	4.8	**11.7**	E	pg/g	11/23/21	3:14	TT	461813
1234678-HpCDD	SW8290	1	1.5	4.8	ND		pg/g	11/23/21	3:14	TT	461813
OCDD	SW8290	1	4.3	24	ND		pg/g	11/23/21	3:14	TT	461813
Total-Dioxins	SW8290	1	0.20	0.48	ND		pg/g	11/23/21	3:14	TT	461813
Total-Furans	SW8290	1	0.21	0.48	**5.21**		pg/g	11/23/21	3:14	TT	461813
Total-TEQ	SW8290	1			**0.156**		pg/g	11/23/21	3:14	TT	461813
			Acceptance Limits								
(LS) 13C-2378-TCDF	SW8290		**22 - 150**		**78.4**		%	11/23/21	3:14	TT	461813
(LS) 13C-12378-PeCDF	SW8290		**22 - 150**		**91.4**		%	11/23/21	3:14	TT	461813

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-0.5	**Lab Sample ID:**	2111198-001A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:57		
SDG:			

Prep Method:	8290S-P	**Prep Batch Date/Time:**	11/13/21	8:31:00AM
Prep Batch ID:	1137060	**Prep Analyst:**	LATZN	
		Units:	pg/g	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
(LS) 13C-23478-PeCDF	SW8290		**22 - 150**		**90.8**		%	11/23/21	3:14	TT	461813
(LS) 13C-123478-HxCDF	SW8290		**22 - 150**		**84.7**		%	11/23/21	3:14	TT	461813
(LS) 13C-123678-HxCDF	SW8290		**22 - 150**		**75.0**		%	11/23/21	3:14	TT	461813
(LS) 13C-234678-HxCDF	SW8290		**22 - 150**		**83.0**		%	11/23/21	3:14	TT	461813
(LS) 13C-123789-HxCDF	SW8290		**22 - 150**		**83.4**		%	11/23/21	3:14	TT	461813
(LS) 13C-1234678-HpCDF	SW8290		**22 - 150**		**68.2**		%	11/23/21	3:14	TT	461813
(LS) 13C-1234789-HpCDF	SW8290		**22 - 150**		**77.8**		%	11/23/21	3:14	TT	461813
(LS) 13C-2378-TCDD	SW8290		**22 - 150**		**76.3**		%	11/23/21	3:14	TT	461813
(LS) 13C-12378-PeCDD	SW8290		**22 - 150**		**89.7**		%	11/23/21	3:14	TT	461813
(LS) 13C-123478-HxCDD	SW8290		**22 - 150**		**81.9**		%	11/23/21	3:14	TT	461813
(LS) 13C-123678-HxCDD	SW8290		**22 - 150**		**75.7**		%	11/23/21	3:14	TT	461813
(LS) 13C-1234678-HpCDD	SW8290		**22 - 150**		**74.2**		%	11/23/21	3:14	TT	461813
(LS) 13C-OCDD	SW8290		**22 - 150**		**59.3**		%	11/23/21	3:14	TT	461813
(CRS) 37Cl-2378-TCDD	SW8290		**40 - 135**		**102**		%	11/23/21	3:14	TT	461813

NOTE: E - estimated result due to ion ratio ouside criteria due to matrix interference

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-2.0	**Lab Sample ID:**	2111198-002A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 10:00		
SDG:			

Prep Method:	7471BP	**Prep Batch Date/Time:**	11/27/21 10:40:00AM
Prep Batch ID:	1137236	**Prep Analyst:**	ERVS

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	SW7471B	1	0.083	0.50	ND		mg/Kg	11/29/21	14:16	BJAY	461738

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-2.0	**Lab Sample ID:**	2111198-002A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 10:00		
SDG:			

Prep Method:	3050B	**Prep Batch Date/Time:**	11/27/21 10:00:00AM
Prep Batch ID:	1137280	**Prep Analyst:**	PHUFANO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	SW6010B	1	0.050	5.00	ND		mg/Kg	11/30/21	13:07	ERR	461787
Arsenic	SW6010B	1	0.15	1.30	**2.80**		mg/Kg	11/30/21	13:07	ERR	461787
Barium	SW6010B	1	0.055	5.00	**47.9**		mg/Kg	11/30/21	13:07	ERR	461787
Beryllium	SW6010B	1	0.055	5.00	ND		mg/Kg	11/30/21	13:07	ERR	461787
Cadmium	SW6010B	1	0.10	5.00	ND		mg/Kg	11/30/21	13:07	ERR	461787
Chromium	SW6010B	1	0.075	5.00	**43.5**		mg/Kg	11/30/21	13:07	ERR	461787
Cobalt	SW6010B	1	0.070	5.00	**5.65**		mg/Kg	11/30/21	13:07	ERR	461787
Copper	SW6010B	1	0.20	5.00	**7.85**		mg/Kg	11/30/21	13:07	ERR	461787
Lead	SW6010B	1	0.10	3.00	ND		mg/Kg	11/30/21	13:07	ERR	461787
Molybdenum	SW6010B	1	0.050	5.00	ND		mg/Kg	11/30/21	13:07	ERR	461787
Nickel	SW6010B	1	0.50	5.00	**38.8**		mg/Kg	11/30/21	13:07	ERR	461787
Selenium	SW6010B	1	0.22	5.00	ND		mg/Kg	11/30/21	13:07	ERR	461787
Silver	SW6010B	1	0.15	1.00	ND		mg/Kg	11/30/21	13:07	ERR	461787
Thallium	SW6010B	1	0.55	5.00	ND		mg/Kg	11/30/21	13:07	ERR	461787
Vanadium	SW6010B	1	0.10	5.00	**29.3**		mg/Kg	11/30/21	13:07	ERR	461787
Zinc	SW6010B	1	0.30	5.00	**21.4**		mg/Kg	11/30/21	13:07	ERR	461787

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-2.0	**Lab Sample ID:**	2111198-002A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 10:00		
SDG:			

Prep Method:	3546_BNA	**Prep Batch Date/Time:**	11/19/21 10:35:00AM
Prep Batch ID:	1137022	**Prep Analyst:**	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
N-Nitrosodimethylamine	SW8270C	1	46.9	720	ND		ug/Kg	11/20/21	23:25	MT	461558
Phenol	SW8270C	1	43.8	288	ND		ug/Kg	11/20/21	23:25	MT	461558
Bis(2-chloroethyl)ether	SW8270C	1	13.3	144	ND		ug/Kg	11/20/21	23:25	MT	461558
2-Chlorophenol	SW8270C	1	47.7	288	ND		ug/Kg	11/20/21	23:25	MT	461558
1,3-Dichlorobenzene	SW8270C	1	13.1	144	ND		ug/Kg	11/20/21	23:25	MT	461558
1,4-Dichlorobenzene	SW8270C	1	14.6	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Benzyl Alcohol	SW8270C	1	20.5	288	ND		ug/Kg	11/20/21	23:25	MT	461558
1,2-Dichlorobenzene	SW8270C	1	13.5	144	ND		ug/Kg	11/20/21	23:25	MT	461558
2-Methylphenol (o-Cresol)	SW8270C	1	29.3	288	ND		ug/Kg	11/20/21	23:25	MT	461558
N-Methyl-2-Pyrrolidone (NMP)	SW8270C	1	68.0	720	ND		ug/Kg	11/20/21	23:25	MT	461558
3-/4-Methylphenol (p-/m-Cresol)	SW8270C	1	31.3	288	ND		ug/Kg	11/20/21	23:25	MT	461558
N-nitroso-di-n-propylamine	SW8270C	1	13.2	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Hexachloroethane	SW8270C	1	17.1	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Nitrobenzene	SW8270C	1	12.8	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Isophorone	SW8270C	1	12.2	144	ND		ug/Kg	11/20/21	23:25	MT	461558
2-Nitrophenol	SW8270C	1	25.4	288	ND		ug/Kg	11/20/21	23:25	MT	461558
2,4-Dimethylphenol	SW8270C	1	22.8	288	ND		ug/Kg	11/20/21	23:25	MT	461558
Benzoic Acid	SW8270C	1	41.7	288	ND		ug/Kg	11/20/21	23:25	MT	461558
Bis(2-Chloroethoxy)methane	SW8270C	1	9.79	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Bis(2-chloroisopropyl)ether	SW8270C	1	12.6	144	ND		ug/Kg	11/20/21	23:25	MT	461558
2,4-Dichlorophenol	SW8270C	1	39.3	288	ND		ug/Kg	11/20/21	23:25	MT	461558
1,2,4-Trichlorobenzene	SW8270C	1	11.8	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Naphthalene	SW8270C	1	10.6	144	ND		ug/Kg	11/20/21	23:25	MT	461558
2,6-Dichlorophenol	SW8270C	1	35.8	288	ND		ug/Kg	11/20/21	23:25	MT	461558
Hexachloro-1,3-butadiene	SW8270C	1	8.34	144	ND		ug/Kg	11/20/21	23:25	MT	461558
4-Chloro-3-methylphenol	SW8270C	1	33.8	288	ND		ug/Kg	11/20/21	23:25	MT	461558
2-Methylnaphthalene	SW8270C	1	10.4	144	ND		ug/Kg	11/20/21	23:25	MT	461558
1-Methylnaphthalene	SW8270C	1	12.2	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Hexachlorocyclopentadiene	SW8270C	1	12.9	144	ND		ug/Kg	11/20/21	23:25	MT	461558
2,4,6-Trichlorophenol	SW8270C	1	35.9	288	ND		ug/Kg	11/20/21	23:25	MT	461558
2,4,5-Trichlorophenol	SW8270C	1	33.4	288	ND		ug/Kg	11/20/21	23:25	MT	461558
2-Chloronaphthalene	SW8270C	1	10.6	144	ND		ug/Kg	11/20/21	23:25	MT	461558
1,4-Dinitrobenzene	SW8270C	1	10.3	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Dimethyl phthalate	SW8270C	1	14.2	720	ND		ug/Kg	11/20/21	23:25	MT	461558
1,3-Dinitrobenzene	SW8270C	1	10.4	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Acenaphthylene	SW8270C	1	8.28	144	ND		ug/Kg	11/20/21	23:25	MT	461558
2,6-Dinitrotoluene	SW8270C	1	11.3	144	ND		ug/Kg	11/20/21	23:25	MT	461558
1,2-Dinitrobenzene	SW8270C	1	15.8	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Acenaphthene	SW8270C	1	10.7	144	ND		ug/Kg	11/20/21	23:25	MT	461558

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-2.0	**Lab Sample ID:**	2111198-002A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 10:00		
SDG:			

Prep Method:	3546_BNA	**Prep Batch Date/Time:**	11/19/21 10:35:00AM
Prep Batch ID:	1137022	**Prep Analyst:**	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2,4-Dinitrophenol	SW8270C	1	77.6	720	ND		ug/Kg	11/20/21	23:25	MT	461558
4-Nitrophenol	SW8270C	1	54.7	720	ND		ug/Kg	11/20/21	23:25	MT	461558
Dibenzofuran	SW8270C	1	11.2	144	ND		ug/Kg	11/20/21	23:25	MT	461558
2,4-Dinitrotoluene	SW8270C	1	12.1	144	ND		ug/Kg	11/20/21	23:25	MT	461558
2,3,5,6-Tetrachlorophenol	SW8270C	1	27.6	288	ND		ug/Kg	11/20/21	23:25	MT	461558
2,3,4,6-Tetrachlorophenol	SW8270C	1	31.5	288	ND		ug/Kg	11/20/21	23:25	MT	461558
Diethylphthalate	SW8270C	1	13.6	720	ND		ug/Kg	11/20/21	23:25	MT	461558
Fluorene	SW8270C	1	10.3	144	ND		ug/Kg	11/20/21	23:25	MT	461558
4-Chlorophenyl-phenylether	SW8270C	1	9.32	144	ND		ug/Kg	11/20/21	23:25	MT	461558
4,6-Dinitro-2-methylphenol	SW8270C	1	13.4	288	ND		ug/Kg	11/20/21	23:25	MT	461558
Diphenylamine	SW8270C	1	13.0	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Azobenzene	SW8270C	1	114	144	ND		ug/Kg	11/20/21	23:25	MT	461558
4-Bromophenyl-phenylether	SW8270C	1	8.23	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Hexachlorobenzene	SW8270C	1	8.66	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Pentachlorophenol	SW8270C	1	25.0	288	ND		ug/Kg	11/20/21	23:25	MT	461558
Phenanthrene	SW8270C	1	9.32	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Anthracene	SW8270C	1	8.91	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Carbazole	SW8270C	1	10.7	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Di-n-butylphthalate	SW8270C	1	13.5	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Fluoranthene	SW8270C	1	10.0	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Benzidine	SW8270C	1	147	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Pyrene	SW8270C	1	12.0	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Butylbenzylphthalate	SW8270C	1	21.0	720	ND		ug/Kg	11/20/21	23:25	MT	461558
Benzo(a)anthracene	SW8270C	1	9.80	144	ND		ug/Kg	11/20/21	23:25	MT	461558
3,3-Dichlorobenzidine	SW8270C	1	118	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Chrysene	SW8270C	1	15.2	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Bis(2-Ethylhexyl)phthalate	SW8270C	1	15.3	720	ND		ug/Kg	11/20/21	23:25	MT	461558
Di-n-Octylphthalate	SW8270C	1	12.3	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Benzo(b)fluorathene	SW8270C	1	12.0	144	ND		ug/Kg	11/20/21	23:25	MT	461558
benzo(k)fluorathene	SW8270C	1	8.16	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Benzo(a)pyrene	SW8270C	1	9.80	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Indeno(1,2,3-c,d)pyrene	SW8270C	1	13.8	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Dibenzo(a,h)anthracene	SW8270C	1	12.7	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Benzo(g,h,i)perylene	SW8270C	1	16.7	144	ND		ug/Kg	11/20/21	23:25	MT	461558
Pyridine	SW8270C	1	43.8	720	ND		ug/Kg	11/20/21	23:25	MT	461558
			Acceptance Limits								
2-Fluorophenol (S)	SW8270C		25 - 121		**83.6**		%	11/20/21	23:25	MT	461558
Phenol-d6 (S)	SW8270C		24 - 113		**86.7**		%	11/20/21	23:25	MT	461558
2,4,6-Tribromophenol (S)	SW8270C		19 - 122		**83.6**		%	11/20/21	23:25	MT	461558

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-2.0	**Lab Sample ID:**	2111198-002A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 10:00		
SDG:			

Prep Method:	3546_BNA	**Prep Batch Date/Time:**	11/19/21 10:35:00AM
Prep Batch ID:	1137022	**Prep Analyst:**	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2-Fluorobiphenyl (S)	SW8270C		45 - 143		**87.5**		%	11/20/21	23:25	MT	461558
Nitrobenzene-d5 (S)	SW8270C		23 - 120		**83.1**		%	11/20/21	23:25	MT	461558
p-Terphenyl-d14 (S)	SW8270C		18 - 137		**85.4**		%	11/20/21	23:25	MT	461558

Prep Method:	8290S-P	**Prep Batch Date/Time:**	11/13/21 8:31:00AM
Prep Batch ID:	1137060	**Prep Analyst:**	LATZN
		Units:	pg/g

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2378-TCDF	SW8290	1	0.22	0.50	ND		pg/g	11/23/21	4:17	TT	461813
12378-PeCDF	SW8290	1	1.0	5.0	**5.64**	E	pg/g	11/23/21	4:17	TT	461813
23478-PeCDF	SW8290	1	0.67	5.0	ND		pg/g	11/23/21	4:17	TT	461813
123478-HxCDF	SW8290	1	0.50	5.0	**5.69**	E	pg/g	11/23/21	4:17	TT	461813
123678-HxCDF	SW8290	1	1.1	5.0	ND		pg/g	11/23/21	4:17	TT	461813
234678-HxCDF	SW8290	1	1.5	5.0	ND		pg/g	11/23/21	4:17	TT	461813
123789-HxCDF	SW8290	1	1.9	5.0	**5.69**	E	pg/g	11/23/21	4:17	TT	461813
1234678-HpCDF	SW8290	1	1.8	5.0	ND		pg/g	11/23/21	4:17	TT	461813
1234789-HpCDF	SW8290	1	1.1	5.0	**6.39**	E	pg/g	11/23/21	4:17	TT	461813
OCDF	SW8290	1	1.5	30	ND		pg/g	11/23/21	4:17	TT	461813
2378-TCDD	SW8290	1	0.21	0.50	ND		pg/g	11/23/21	4:17	TT	461813
12378-PeCDD	SW8290	1	1.1	5.0	ND		pg/g	11/23/21	4:17	TT	461813
123478-HxCDD	SW8290	1	0.93	5.0	ND		pg/g	11/23/21	4:17	TT	461813
123678-HxCDD	SW8290	1	1.3	5.0	ND		pg/g	11/23/21	4:17	TT	461813
123789-HxCDD	SW8290	1	3.2	5.0	**12.2**	E	pg/g	11/23/21	4:17	TT	461813
1234678-HpCDD	SW8290	1	1.6	5.0	**8.76**		pg/g	11/23/21	4:17	TT	461813
OCDD	SW8290	1	4.4	25	ND		pg/g	11/23/21	4:17	TT	461813
Total-Dioxins	SW8290	1	0.21	0.50	**8.76**		pg/g	11/23/21	4:17	TT	461813
Total-Furans	SW8290	1	0.22	0.50	**17.0**		pg/g	11/23/21	4:17	TT	461813
Total-TEQ	SW8290	1			**1.40**		pg/g	11/23/21	4:17	TT	461813
			Acceptance Limits								
(LS) 13C-2378-TCDF	SW8290		**22 - 150**		**84.8**		%	11/23/21	4:17	TT	461813
(LS) 13C-12378-PeCDF	SW8290		**22 - 150**		**105**		%	11/23/21	4:17	TT	461813
(LS) 13C-23478-PeCDF	SW8290		**22 - 150**		**107**		%	11/23/21	4:17	TT	461813
(LS) 13C-123478-HxCDF	SW8290		**22 - 150**		**94.2**		%	11/23/21	4:17	TT	461813
(LS) 13C-123678-HxCDF	SW8290		**22 - 150**		**85.6**		%	11/23/21	4:17	TT	461813
(LS) 13C-234678-HxCDF	SW8290		**22 - 150**		**95.2**		%	11/23/21	4:17	TT	461813

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-2.0	**Lab Sample ID:**	2111198-002A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 10:00		
SDG:			

Prep Method:	8290S-P	**Prep Batch Date/Time:**	11/13/21	8:31:00AM
Prep Batch ID:	1137060	**Prep Analyst:**	LATZN	
		Units:	pg/g	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
(LS) 13C-123789-HxCDF	SW8290		**22 - 150**		**99.4**		%	11/23/21	4:17	TT	461813
(LS) 13C-1234678-HpCDF	SW8290		**22 - 150**		**76.9**		%	11/23/21	4:17	TT	461813
(LS) 13C-1234789-HpCDF	SW8290		**22 - 150**		**85.8**		%	11/23/21	4:17	TT	461813
(LS) 13C-2378-TCDD	SW8290		**22 - 150**		**80.1**		%	11/23/21	4:17	TT	461813
(LS) 13C-12378-PeCDD	SW8290		**22 - 150**		**107**		%	11/23/21	4:17	TT	461813
(LS) 13C-123478-HxCDD	SW8290		**22 - 150**		**93.3**		%	11/23/21	4:17	TT	461813
(LS) 13C-123678-HxCDD	SW8290		**22 - 150**		**87.8**		%	11/23/21	4:17	TT	461813
(LS) 13C-1234678-HpCDD	SW8290		**22 - 150**		**76.1**		%	11/23/21	4:17	TT	461813
(LS) 13C-OCDD	SW8290		**22 - 150**		**67.0**		%	11/23/21	4:17	TT	461813
(CRS) 37Cl-2378-TCDD	SW8290		**40 - 135**		**105**		%	11/23/21	4:17	TT	461813

NOTE: E - estimated result due to ion ratio ouside criteria due to matrix interference

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-5.0	**Lab Sample ID:**	2111198-003A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 10:02		
SDG:			

Prep Method:	7471BP	**Prep Batch Date/Time:**	11/27/21	10:40:00AM
Prep Batch ID:	1137236	**Prep Analyst:**	ERVS	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	SW7471B	1	0.083	0.50	ND		mg/Kg	11/29/21	14:18	BJAY	461738

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-5.0	**Lab Sample ID:**	2111198-003A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 10:02		
SDG:			

Prep Method:	3050B	**Prep Batch Date/Time:**	11/27/21 10:00:00AM
Prep Batch ID:	1137280	**Prep Analyst:**	PHUFANO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	SW6010B	1	0.050	5.00	ND		mg/Kg	11/30/21	13:09	ERR	461787
Arsenic	SW6010B	1	0.15	1.30	**3.13**		mg/Kg	11/30/21	13:09	ERR	461787
Barium	SW6010B	1	0.055	5.00	**55.0**		mg/Kg	11/30/21	13:09	ERR	461787
Beryllium	SW6010B	1	0.055	5.00	ND		mg/Kg	11/30/21	13:09	ERR	461787
Cadmium	SW6010B	1	0.10	5.00	ND		mg/Kg	11/30/21	13:09	ERR	461787
Chromium	SW6010B	1	0.075	5.00	**39.7**		mg/Kg	11/30/21	13:09	ERR	461787
Cobalt	SW6010B	1	0.070	5.00	**6.10**		mg/Kg	11/30/21	13:09	ERR	461787
Copper	SW6010B	1	0.20	5.00	**8.65**		mg/Kg	11/30/21	13:09	ERR	461787
Lead	SW6010B	1	0.10	3.00	ND		mg/Kg	11/30/21	13:09	ERR	461787
Molybdenum	SW6010B	1	0.050	5.00	ND		mg/Kg	11/30/21	13:09	ERR	461787
Nickel	SW6010B	1	0.50	5.00	**35.1**		mg/Kg	11/30/21	13:09	ERR	461787
Selenium	SW6010B	1	0.22	5.00	ND		mg/Kg	11/30/21	13:09	ERR	461787
Silver	SW6010B	1	0.15	1.00	ND		mg/Kg	11/30/21	13:09	ERR	461787
Thallium	SW6010B	1	0.55	5.00	ND		mg/Kg	11/30/21	13:09	ERR	461787
Vanadium	SW6010B	1	0.10	5.00	**30.2**		mg/Kg	11/30/21	13:09	ERR	461787
Zinc	SW6010B	1	0.30	5.00	**22.7**		mg/Kg	11/30/21	13:09	ERR	461787

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-5.0	**Lab Sample ID:**	2111198-003A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 10:02		
SDG:			

Prep Method:	3546_BNA	**Prep Batch Date/Time:**	11/19/21 10:35:00AM
Prep Batch ID:	1137022	**Prep Analyst:**	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
N-Nitrosodimethylamine	SW8270C	1	46.9	720	ND		ug/Kg	11/20/21	23:55	MT	461558
Phenol	SW8270C	1	43.8	288	ND		ug/Kg	11/20/21	23:55	MT	461558
Bis(2-chloroethyl)ether	SW8270C	1	13.3	144	ND		ug/Kg	11/20/21	23:55	MT	461558
2-Chlorophenol	SW8270C	1	47.7	288	ND		ug/Kg	11/20/21	23:55	MT	461558
1,3-Dichlorobenzene	SW8270C	1	13.1	144	ND		ug/Kg	11/20/21	23:55	MT	461558
1,4-Dichlorobenzene	SW8270C	1	14.6	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Benzyl Alcohol	SW8270C	1	20.5	288	ND		ug/Kg	11/20/21	23:55	MT	461558
1,2-Dichlorobenzene	SW8270C	1	13.5	144	ND		ug/Kg	11/20/21	23:55	MT	461558
2-Methylphenol (o-Cresol)	SW8270C	1	29.3	288	ND		ug/Kg	11/20/21	23:55	MT	461558
N-Methyl-2-Pyrrolidone (NMP)	SW8270C	1	68.0	720	ND		ug/Kg	11/20/21	23:55	MT	461558
3-/4-Methylphenol (p-/m-Cresol)	SW8270C	1	31.3	288	ND		ug/Kg	11/20/21	23:55	MT	461558
N-nitroso-di-n-propylamine	SW8270C	1	13.2	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Hexachloroethane	SW8270C	1	17.1	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Nitrobenzene	SW8270C	1	12.8	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Isophorone	SW8270C	1	12.2	144	ND		ug/Kg	11/20/21	23:55	MT	461558
2-Nitrophenol	SW8270C	1	25.4	288	ND		ug/Kg	11/20/21	23:55	MT	461558
2,4-Dimethylphenol	SW8270C	1	22.8	288	ND		ug/Kg	11/20/21	23:55	MT	461558
Benzoic Acid	SW8270C	1	41.7	288	ND		ug/Kg	11/20/21	23:55	MT	461558
Bis(2-Chloroethoxy)methane	SW8270C	1	9.79	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Bis(2-chloroisopropyl)ether	SW8270C	1	12.6	144	ND		ug/Kg	11/20/21	23:55	MT	461558
2,4-Dichlorophenol	SW8270C	1	39.3	288	ND		ug/Kg	11/20/21	23:55	MT	461558
1,2,4-Trichlorobenzene	SW8270C	1	11.8	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Naphthalene	SW8270C	1	10.6	144	ND		ug/Kg	11/20/21	23:55	MT	461558
2,6-Dichlorophenol	SW8270C	1	35.8	288	ND		ug/Kg	11/20/21	23:55	MT	461558
Hexachloro-1,3-butadiene	SW8270C	1	8.34	144	ND		ug/Kg	11/20/21	23:55	MT	461558
4-Chloro-3-methylphenol	SW8270C	1	33.8	288	ND		ug/Kg	11/20/21	23:55	MT	461558
2-Methylnaphthalene	SW8270C	1	10.4	144	ND		ug/Kg	11/20/21	23:55	MT	461558
1-Methylnaphthalene	SW8270C	1	12.2	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Hexachlorocyclopentadiene	SW8270C	1	12.9	144	ND		ug/Kg	11/20/21	23:55	MT	461558
2,4,6-Trichlorophenol	SW8270C	1	35.9	288	ND		ug/Kg	11/20/21	23:55	MT	461558
2,4,5-Trichlorophenol	SW8270C	1	33.4	288	ND		ug/Kg	11/20/21	23:55	MT	461558
2-Chloronaphthalene	SW8270C	1	10.6	144	ND		ug/Kg	11/20/21	23:55	MT	461558
1,4-Dinitrobenzene	SW8270C	1	10.3	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Dimethyl phthalate	SW8270C	1	14.2	720	ND		ug/Kg	11/20/21	23:55	MT	461558
1,3-Dinitrobenzene	SW8270C	1	10.4	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Acenaphthylene	SW8270C	1	8.28	144	ND		ug/Kg	11/20/21	23:55	MT	461558
2,6-Dinitrotoluene	SW8270C	1	11.3	144	ND		ug/Kg	11/20/21	23:55	MT	461558
1,2-Dinitrobenzene	SW8270C	1	15.8	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Acenaphthene	SW8270C	1	10.7	144	ND		ug/Kg	11/20/21	23:55	MT	461558

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-5.0	**Lab Sample ID:**	2111198-003A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 10:02		
SDG:			

Prep Method:	3546_BNA	**Prep Batch Date/Time:**	11/19/21 10:35:00AM
Prep Batch ID:	1137022	**Prep Analyst:**	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2,4-Dinitrophenol	SW8270C	1	77.6	720	ND		ug/Kg	11/20/21	23:55	MT	461558
4-Nitrophenol	SW8270C	1	54.7	720	ND		ug/Kg	11/20/21	23:55	MT	461558
Dibenzofuran	SW8270C	1	11.2	144	ND		ug/Kg	11/20/21	23:55	MT	461558
2,4-Dinitrotoluene	SW8270C	1	12.1	144	ND		ug/Kg	11/20/21	23:55	MT	461558
2,3,5,6-Tetrachlorophenol	SW8270C	1	27.6	288	ND		ug/Kg	11/20/21	23:55	MT	461558
2,3,4,6-Tetrachlorophenol	SW8270C	1	31.5	288	ND		ug/Kg	11/20/21	23:55	MT	461558
Diethylphthalate	SW8270C	1	13.6	720	ND		ug/Kg	11/20/21	23:55	MT	461558
Fluorene	SW8270C	1	10.3	144	ND		ug/Kg	11/20/21	23:55	MT	461558
4-Chlorophenyl-phenylether	SW8270C	1	9.32	144	ND		ug/Kg	11/20/21	23:55	MT	461558
4,6-Dinitro-2-methylphenol	SW8270C	1	13.4	288	ND		ug/Kg	11/20/21	23:55	MT	461558
Diphenylamine	SW8270C	1	13.0	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Azobenzene	SW8270C	1	114	144	ND		ug/Kg	11/20/21	23:55	MT	461558
4-Bromophenyl-phenylether	SW8270C	1	8.23	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Hexachlorobenzene	SW8270C	1	8.66	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Pentachlorophenol	SW8270C	1	25.0	288	ND		ug/Kg	11/20/21	23:55	MT	461558
Phenanthrene	SW8270C	1	9.32	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Anthracene	SW8270C	1	8.91	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Carbazole	SW8270C	1	10.7	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Di-n-butylphthalate	SW8270C	1	13.5	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Fluoranthene	SW8270C	1	10.0	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Benzidine	SW8270C	1	147	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Pyrene	SW8270C	1	12.0	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Butylbenzylphthalate	SW8270C	1	21.0	720	ND		ug/Kg	11/20/21	23:55	MT	461558
Benzo(a)anthracene	SW8270C	1	9.80	144	ND		ug/Kg	11/20/21	23:55	MT	461558
3,3-Dichlorobenzidine	SW8270C	1	118	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Chrysene	SW8270C	1	15.2	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Bis(2-Ethylhexyl)phthalate	SW8270C	1	15.3	720	ND		ug/Kg	11/20/21	23:55	MT	461558
Di-n-Octylphthalate	SW8270C	1	12.3	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Benzo(b)fluorathene	SW8270C	1	12.0	144	ND		ug/Kg	11/20/21	23:55	MT	461558
benzo(k)fluorathene	SW8270C	1	8.16	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Benzo(a)pyrene	SW8270C	1	9.80	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Indeno(1,2,3-c,d)pyrene	SW8270C	1	13.8	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Dibenzo(a,h)anthracene	SW8270C	1	12.7	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Benzo(g,h,i)perylene	SW8270C	1	16.7	144	ND		ug/Kg	11/20/21	23:55	MT	461558
Pyridine	SW8270C	1	43.8	720	ND		ug/Kg	11/20/21	23:55	MT	461558
			Acceptance Limits								
2-Fluorophenol (S)	SW8270C		25 - 121		**83.9**		%	11/20/21	23:55	MT	461558
Phenol-d6 (S)	SW8270C		24 - 113		**87.6**		%	11/20/21	23:55	MT	461558
2,4,6-Tribromophenol (S)	SW8270C		19 - 122		**83.3**		%	11/20/21	23:55	MT	461558

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-5.0	**Lab Sample ID:**	2111198-003A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 10:02		
SDG:			

Prep Method:	3546_BNA	**Prep Batch Date/Time:**	11/19/21 10:35:00AM
Prep Batch ID:	1137022	**Prep Analyst:**	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2-Fluorobiphenyl (S)	SW8270C		45 - 143		**85.5**		%	11/20/21	23:55	MT	461558
Nitrobenzene-d5 (S)	SW8270C		23 - 120		**83.0**		%	11/20/21	23:55	MT	461558
p-Terphenyl-d14 (S)	SW8270C		18 - 137		**86.9**		%	11/20/21	23:55	MT	461558

Prep Method:	8290S-P	**Prep Batch Date/Time:**	11/13/21 8:31:00AM
Prep Batch ID:	1137060	**Prep Analyst:**	LATZN
		Units:	pg/g

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2378-TCDF	SW8290	1	0.21	0.49	ND		pg/g	11/23/21	5:20	TT	461813
12378-PeCDF	SW8290	1	1.0	4.9	ND		pg/g	11/23/21	5:20	TT	461813
23478-PeCDF	SW8290	1	0.66	4.9	ND		pg/g	11/23/21	5:20	TT	461813
123478-HxCDF	SW8290	1	0.49	4.9	ND		pg/g	11/23/21	5:20	TT	461813
123678-HxCDF	SW8290	1	1.1	4.9	ND		pg/g	11/23/21	5:20	TT	461813
234678-HxCDF	SW8290	1	1.4	4.9	ND		pg/g	11/23/21	5:20	TT	461813
123789-HxCDF	SW8290	1	1.9	4.9	ND		pg/g	11/23/21	5:20	TT	461813
1234678-HpCDF	SW8290	1	1.8	4.9	ND		pg/g	11/23/21	5:20	TT	461813
1234789-HpCDF	SW8290	1	1.1	4.9	ND		pg/g	11/23/21	5:20	TT	461813
OCDF	SW8290	1	1.5	29	ND		pg/g	11/23/21	5:20	TT	461813
2378-TCDD	SW8290	1	0.20	0.49	ND		pg/g	11/23/21	5:20	TT	461813
12378-PeCDD	SW8290	1	1.1	4.9	ND		pg/g	11/23/21	5:20	TT	461813
123478-HxCDD	SW8290	1	0.92	4.9	ND		pg/g	11/23/21	5:20	TT	461813
123678-HxCDD	SW8290	1	1.3	4.9	ND		pg/g	11/23/21	5:20	TT	461813
123789-HxCDD	SW8290	1	3.2	4.9	ND		pg/g	11/23/21	5:20	TT	461813
1234678-HpCDD	SW8290	1	1.6	4.9	ND		pg/g	11/23/21	5:20	TT	461813
OCDD	SW8290	1	4.3	24	ND		pg/g	11/23/21	5:20	TT	461813
Total-Dioxins	SW8290	1	0.20	0.49	ND		pg/g	11/23/21	5:20	TT	461813
Total-Furans	SW8290	1	0.21	0.49	ND		pg/g	11/23/21	5:20	TT	461813
Total-TEQ	SW8290	1			**0.000**		pg/g	11/23/21	5:20	TT	461813
			Acceptance Limits								
(LS) 13C-2378-TCDF	SW8290		**22 - 150**		**84.5**		%	11/23/21	5:20	TT	461813
(LS) 13C-12378-PeCDF	SW8290		**22 - 150**		**98.5**		%	11/23/21	5:20	TT	461813
(LS) 13C-23478-PeCDF	SW8290		**22 - 150**		**99.3**		%	11/23/21	5:20	TT	461813
(LS) 13C-123478-HxCDF	SW8290		**22 - 150**		**90.7**		%	11/23/21	5:20	TT	461813
(LS) 13C-123678-HxCDF	SW8290		**22 - 150**		**81.4**		%	11/23/21	5:20	TT	461813
(LS) 13C-234678-HxCDF	SW8290		**22 - 150**		**91.7**		%	11/23/21	5:20	TT	461813

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-5.0	**Lab Sample ID:**	2111198-003A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 10:02		
SDG:			

Prep Method:	8290S-P	**Prep Batch Date/Time:**	11/13/21	8:31:00AM
Prep Batch ID:	1137060	**Prep Analyst:**	LATZN	
		Units:	pg/g	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
(LS) 13C-123789-HxCDF	SW8290		**22 - 150**		**94.6**		%	11/23/21	5:20	TT	461813
(LS) 13C-1234678-HpCDF	SW8290		**22 - 150**		**76.2**		%	11/23/21	5:20	TT	461813
(LS) 13C-1234789-HpCDF	SW8290		**22 - 150**		**81.0**		%	11/23/21	5:20	TT	461813
(LS) 13C-2378-TCDD	SW8290		**22 - 150**		**79.2**		%	11/23/21	5:20	TT	461813
(LS) 13C-12378-PeCDD	SW8290		**22 - 150**		**97.2**		%	11/23/21	5:20	TT	461813
(LS) 13C-123478-HxCDD	SW8290		**22 - 150**		**86.8**		%	11/23/21	5:20	TT	461813
(LS) 13C-123678-HxCDD	SW8290		**22 - 150**		**82.4**		%	11/23/21	5:20	TT	461813
(LS) 13C-1234678-HpCDD	SW8290		**22 - 150**		**73.8**		%	11/23/21	5:20	TT	461813
(LS) 13C-OCDD	SW8290		**22 - 150**		**67.0**		%	11/23/21	5:20	TT	461813
(CRS) 37Cl-2378-TCDD	SW8290		**40 - 135**		**106**		%	11/23/21	5:20	TT	461813

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-5.0 Dup	**Lab Sample ID:**	2111198-004A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:35		
SDG:			

Prep Method:	7471BP	**Prep Batch Date/Time:**	11/27/21 10:40:00AM
Prep Batch ID:	1137236	**Prep Analyst:**	ERVS

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	SW7471B	1	0.083	0.50	ND		mg/Kg	11/29/21	14:20	BJAY	461738

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-5.0 Dup	**Lab Sample ID:**	2111198-004A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:35		
SDG:			

Prep Method:	3050B	**Prep Batch Date/Time:**	11/27/21 10:00:00AM
Prep Batch ID:	1137280	**Prep Analyst:**	PHUFANO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	SW6010B	1	0.050	5.00	ND		mg/Kg	11/30/21	13:11	ERR	461787
Arsenic	SW6010B	1	0.15	1.30	**3.12**		mg/Kg	11/30/21	13:11	ERR	461787
Barium	SW6010B	1	0.055	5.00	**58.5**		mg/Kg	11/30/21	13:11	ERR	461787
Beryllium	SW6010B	1	0.055	5.00	ND		mg/Kg	11/30/21	13:11	ERR	461787
Cadmium	SW6010B	1	0.10	5.00	ND		mg/Kg	11/30/21	13:11	ERR	461787
Chromium	SW6010B	1	0.075	5.00	**40.9**		mg/Kg	11/30/21	13:11	ERR	461787
Cobalt	SW6010B	1	0.070	5.00	**6.20**		mg/Kg	11/30/21	13:11	ERR	461787
Copper	SW6010B	1	0.20	5.00	**9.40**		mg/Kg	11/30/21	13:11	ERR	461787
Lead	SW6010B	1	0.10	3.00	**3.06**		mg/Kg	11/30/21	13:11	ERR	461787
Molybdenum	SW6010B	1	0.050	5.00	ND		mg/Kg	11/30/21	13:11	ERR	461787
Nickel	SW6010B	1	0.50	5.00	**36.7**		mg/Kg	11/30/21	13:11	ERR	461787
Selenium	SW6010B	1	0.22	5.00	ND		mg/Kg	11/30/21	13:11	ERR	461787
Silver	SW6010B	1	0.15	1.00	ND		mg/Kg	11/30/21	13:11	ERR	461787
Thallium	SW6010B	1	0.55	5.00	ND		mg/Kg	11/30/21	13:11	ERR	461787
Vanadium	SW6010B	1	0.10	5.00	**31.6**		mg/Kg	11/30/21	13:11	ERR	461787
Zinc	SW6010B	1	0.30	5.00	**24.5**		mg/Kg	11/30/21	13:11	ERR	461787

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-5.0 Dup	**Lab Sample ID:**	2111198-004A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:35		
SDG:			

Prep Method:	3546_BNA	**Prep Batch Date/Time:**	11/19/21 10:35:00AM
Prep Batch ID:	1137022	**Prep Analyst:**	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
N-Nitrosodimethylamine	SW8270C	1	46.9	720	ND		ug/Kg	11/21/21	0:25	MT	461558
Phenol	SW8270C	1	43.8	288	ND		ug/Kg	11/21/21	0:25	MT	461558
Bis(2-chloroethyl)ether	SW8270C	1	13.3	144	ND		ug/Kg	11/21/21	0:25	MT	461558
2-Chlorophenol	SW8270C	1	47.7	288	ND		ug/Kg	11/21/21	0:25	MT	461558
1,3-Dichlorobenzene	SW8270C	1	13.1	144	ND		ug/Kg	11/21/21	0:25	MT	461558
1,4-Dichlorobenzene	SW8270C	1	14.6	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Benzyl Alcohol	SW8270C	1	20.5	288	ND		ug/Kg	11/21/21	0:25	MT	461558
1,2-Dichlorobenzene	SW8270C	1	13.5	144	ND		ug/Kg	11/21/21	0:25	MT	461558
2-Methylphenol (o-Cresol)	SW8270C	1	29.3	288	ND		ug/Kg	11/21/21	0:25	MT	461558
N-Methyl-2-Pyrrolidone (NMP)	SW8270C	1	68.0	720	ND		ug/Kg	11/21/21	0:25	MT	461558
3-/4-Methylphenol (p-/m-Cresol)	SW8270C	1	31.3	288	ND		ug/Kg	11/21/21	0:25	MT	461558
N-nitroso-di-n-propylamine	SW8270C	1	13.2	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Hexachloroethane	SW8270C	1	17.1	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Nitrobenzene	SW8270C	1	12.8	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Isophorone	SW8270C	1	12.2	144	ND		ug/Kg	11/21/21	0:25	MT	461558
2-Nitrophenol	SW8270C	1	25.4	288	ND		ug/Kg	11/21/21	0:25	MT	461558
2,4-Dimethylphenol	SW8270C	1	22.8	288	ND		ug/Kg	11/21/21	0:25	MT	461558
Benzoic Acid	SW8270C	1	41.7	288	ND		ug/Kg	11/21/21	0:25	MT	461558
Bis(2-Chloroethoxy)methane	SW8270C	1	9.79	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Bis(2-chloroisopropyl)ether	SW8270C	1	12.6	144	ND		ug/Kg	11/21/21	0:25	MT	461558
2,4-Dichlorophenol	SW8270C	1	39.3	288	ND		ug/Kg	11/21/21	0:25	MT	461558
1,2,4-Trichlorobenzene	SW8270C	1	11.8	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Naphthalene	SW8270C	1	10.6	144	ND		ug/Kg	11/21/21	0:25	MT	461558
2,6-Dichlorophenol	SW8270C	1	35.8	288	ND		ug/Kg	11/21/21	0:25	MT	461558
Hexachloro-1,3-butadiene	SW8270C	1	8.34	144	ND		ug/Kg	11/21/21	0:25	MT	461558
4-Chloro-3-methylphenol	SW8270C	1	33.8	288	ND		ug/Kg	11/21/21	0:25	MT	461558
2-Methylnaphthalene	SW8270C	1	10.4	144	ND		ug/Kg	11/21/21	0:25	MT	461558
1-Methylnaphthalene	SW8270C	1	12.2	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Hexachlorocyclopentadiene	SW8270C	1	12.9	144	ND		ug/Kg	11/21/21	0:25	MT	461558
2,4,6-Trichlorophenol	SW8270C	1	35.9	288	ND		ug/Kg	11/21/21	0:25	MT	461558
2,4,5-Trichlorophenol	SW8270C	1	33.4	288	ND		ug/Kg	11/21/21	0:25	MT	461558
2-Chloronaphthalene	SW8270C	1	10.6	144	ND		ug/Kg	11/21/21	0:25	MT	461558
1,4-Dinitrobenzene	SW8270C	1	10.3	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Dimethyl phthalate	SW8270C	1	14.2	720	ND		ug/Kg	11/21/21	0:25	MT	461558
1,3-Dinitrobenzene	SW8270C	1	10.4	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Acenaphthylene	SW8270C	1	8.28	144	ND		ug/Kg	11/21/21	0:25	MT	461558
2,6-Dinitrotoluene	SW8270C	1	11.3	144	ND		ug/Kg	11/21/21	0:25	MT	461558
1,2-Dinitrobenzene	SW8270C	1	15.8	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Acenaphthene	SW8270C	1	10.7	144	ND		ug/Kg	11/21/21	0:25	MT	461558

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-5.0 Dup	**Lab Sample ID:**	2111198-004A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:35		
SDG:			

Prep Method:	3546_BNA	**Prep Batch Date/Time:**	11/19/21 10:35:00AM
Prep Batch ID:	1137022	**Prep Analyst:**	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2,4-Dinitrophenol	SW8270C	1	77.6	720	ND		ug/Kg	11/21/21	0:25	MT	461558
4-Nitrophenol	SW8270C	1	54.7	720	ND		ug/Kg	11/21/21	0:25	MT	461558
Dibenzofuran	SW8270C	1	11.2	144	ND		ug/Kg	11/21/21	0:25	MT	461558
2,4-Dinitrotoluene	SW8270C	1	12.1	144	ND		ug/Kg	11/21/21	0:25	MT	461558
2,3,5,6-Tetrachlorophenol	SW8270C	1	27.6	288	ND		ug/Kg	11/21/21	0:25	MT	461558
2,3,4,6-Tetrachlorophenol	SW8270C	1	31.5	288	ND		ug/Kg	11/21/21	0:25	MT	461558
Diethylphthalate	SW8270C	1	13.6	720	ND		ug/Kg	11/21/21	0:25	MT	461558
Fluorene	SW8270C	1	10.3	144	ND		ug/Kg	11/21/21	0:25	MT	461558
4-Chlorophenyl-phenylether	SW8270C	1	9.32	144	ND		ug/Kg	11/21/21	0:25	MT	461558
4,6-Dinitro-2-methylphenol	SW8270C	1	13.4	288	ND		ug/Kg	11/21/21	0:25	MT	461558
Diphenylamine	SW8270C	1	13.0	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Azobenzene	SW8270C	1	114	144	ND		ug/Kg	11/21/21	0:25	MT	461558
4-Bromophenyl-phenylether	SW8270C	1	8.23	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Hexachlorobenzene	SW8270C	1	8.66	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Pentachlorophenol	SW8270C	1	25.0	288	ND		ug/Kg	11/21/21	0:25	MT	461558
Phenanthrene	SW8270C	1	9.32	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Anthracene	SW8270C	1	8.91	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Carbazole	SW8270C	1	10.7	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Di-n-butylphthalate	SW8270C	1	13.5	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Fluoranthene	SW8270C	1	10.0	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Benzidine	SW8270C	1	147	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Pyrene	SW8270C	1	12.0	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Butylbenzylphthalate	SW8270C	1	21.0	720	ND		ug/Kg	11/21/21	0:25	MT	461558
Benzo(a)anthracene	SW8270C	1	9.80	144	ND		ug/Kg	11/21/21	0:25	MT	461558
3,3-Dichlorobenzidine	SW8270C	1	118	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Chrysene	SW8270C	1	15.2	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Bis(2-Ethylhexyl)phthalate	SW8270C	1	15.3	720	ND		ug/Kg	11/21/21	0:25	MT	461558
Di-n-Octylphthalate	SW8270C	1	12.3	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Benzo(b)fluorathene	SW8270C	1	12.0	144	ND		ug/Kg	11/21/21	0:25	MT	461558
benzo(k)fluorathene	SW8270C	1	8.16	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Benzo(a)pyrene	SW8270C	1	9.80	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Indeno(1,2,3-c,d)pyrene	SW8270C	1	13.8	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Dibenzo(a,h)anthracene	SW8270C	1	12.7	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Benzo(g,h,i)perylene	SW8270C	1	16.7	144	ND		ug/Kg	11/21/21	0:25	MT	461558
Pyridine	SW8270C	1	43.8	720	ND		ug/Kg	11/21/21	0:25	MT	461558
			Acceptance Limits								
2-Fluorophenol (S)	SW8270C		25 - 121		**79.1**		%	11/21/21	0:25	MT	461558
Phenol-d6 (S)	SW8270C		24 - 113		**82.5**		%	11/21/21	0:25	MT	461558
2,4,6-Tribromophenol (S)	SW8270C		19 - 122		**83.5**		%	11/21/21	0:25	MT	461558

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-5.0 Dup	**Lab Sample ID:**	2111198-004A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:35		
SDG:			

Prep Method:	3546_BNA	**Prep Batch Date/Time:**	11/19/21 10:35:00AM
Prep Batch ID:	1137022	**Prep Analyst:**	AKIZ

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2-Fluorobiphenyl (S)	SW8270C		45 - 143		**84.3**		%	11/21/21	0:25	MT	461558
Nitrobenzene-d5 (S)	SW8270C		23 - 120		**78.3**		%	11/21/21	0:25	MT	461558
p-Terphenyl-d14 (S)	SW8270C		18 - 137		**82.4**		%	11/21/21	0:25	MT	461558

Prep Method:	8290S-P	**Prep Batch Date/Time:**	11/13/21 8:31:00AM
Prep Batch ID:	1137060	**Prep Analyst:**	LATZN
		Units:	pg/g

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2378-TCDF	SW8290	1	0.22	0.50	ND		pg/g	11/23/21	6:24	TT	461813
12378-PeCDF	SW8290	1	1.0	5.0	ND		pg/g	11/23/21	6:24	TT	461813
23478-PeCDF	SW8290	1	0.67	5.0	ND		pg/g	11/23/21	6:24	TT	461813
123478-HxCDF	SW8290	1	0.50	5.0	ND		pg/g	11/23/21	6:24	TT	461813
123678-HxCDF	SW8290	1	1.1	5.0	ND		pg/g	11/23/21	6:24	TT	461813
234678-HxCDF	SW8290	1	1.5	5.0	ND		pg/g	11/23/21	6:24	TT	461813
123789-HxCDF	SW8290	1	1.9	5.0	ND		pg/g	11/23/21	6:24	TT	461813
1234678-HpCDF	SW8290	1	1.8	5.0	ND		pg/g	11/23/21	6:24	TT	461813
1234789-HpCDF	SW8290	1	1.1	5.0	ND		pg/g	11/23/21	6:24	TT	461813
OCDF	SW8290	1	1.5	30	ND		pg/g	11/23/21	6:24	TT	461813
2378-TCDD	SW8290	1	0.21	0.50	ND		pg/g	11/23/21	6:24	TT	461813
12378-PeCDD	SW8290	1	1.1	5.0	ND		pg/g	11/23/21	6:24	TT	461813
123478-HxCDD	SW8290	1	0.93	5.0	ND		pg/g	11/23/21	6:24	TT	461813
123678-HxCDD	SW8290	1	1.3	5.0	ND		pg/g	11/23/21	6:24	TT	461813
123789-HxCDD	SW8290	1	3.2	5.0	**12.1**	E	pg/g	11/23/21	6:24	TT	461813
1234678-HpCDD	SW8290	1	1.6	5.0	ND		pg/g	11/23/21	6:24	TT	461813
OCDD	SW8290	1	4.4	25	ND		pg/g	11/23/21	6:24	TT	461813
Total-Dioxins	SW8290	1	0.21	0.50	ND		pg/g	11/23/21	6:24	TT	461813
Total-Furans	SW8290	1	0.22	0.50	ND		pg/g	11/23/21	6:24	TT	461813
Total-TEQ	SW8290	1			**0.000**		pg/g	11/23/21	6:24	TT	461813
			Acceptance Limits								
(LS) 13C-2378-TCDF	SW8290		**22 - 150**		**83.0**		%	11/23/21	6:24	TT	461813
(LS) 13C-12378-PeCDF	SW8290		**22 - 150**		**99.2**		%	11/23/21	6:24	TT	461813
(LS) 13C-23478-PeCDF	SW8290		**22 - 150**		**103**		%	11/23/21	6:24	TT	461813
(LS) 13C-123478-HxCDF	SW8290		**22 - 150**		**93.1**		%	11/23/21	6:24	TT	461813
(LS) 13C-123678-HxCDF	SW8290		**22 - 150**		**86.9**		%	11/23/21	6:24	TT	461813
(LS) 13C-234678-HxCDF	SW8290		**22 - 150**		**97.7**		%	11/23/21	6:24	TT	461813

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	AOC5-S7-5.0 Dup	**Lab Sample ID:**	2111198-004A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Soil
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:35		
SDG:			

Prep Method:	8290S-P	**Prep Batch Date/Time:**	11/13/21	8:31:00AM
Prep Batch ID:	1137060	**Prep Analyst:**	LATZN	
		Units:	pg/g	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
(LS) 13C-123789-HxCDF	SW8290		**22 - 150**		**100.**		%	11/23/21	6:24	TT	461813
(LS) 13C-1234678-HpCDF	SW8290		**22 - 150**		**78.9**		%	11/23/21	6:24	TT	461813
(LS) 13C-1234789-HpCDF	SW8290		**22 - 150**		**85.6**		%	11/23/21	6:24	TT	461813
(LS) 13C-2378-TCDD	SW8290		**22 - 150**		**79.9**		%	11/23/21	6:24	TT	461813
(LS) 13C-12378-PeCDD	SW8290		**22 - 150**		**98.9**		%	11/23/21	6:24	TT	461813
(LS) 13C-123478-HxCDD	SW8290		**22 - 150**		**92.8**		%	11/23/21	6:24	TT	461813
(LS) 13C-123678-HxCDD	SW8290		**22 - 150**		**88.8**		%	11/23/21	6:24	TT	461813
(LS) 13C-1234678-HpCDD	SW8290		**22 - 150**		**79.8**		%	11/23/21	6:24	TT	461813
(LS) 13C-OCDD	SW8290		**22 - 150**		**70.9**		%	11/23/21	6:24	TT	461813
(CRS) 37Cl-2378-TCDD	SW8290		**40 - 135**		**108**		%	11/23/21	6:24	TT	461813

NOTE: E - estimated result due to ion ratio ouside criteria due to matrix interference

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	EB11162021	**Lab Sample ID:**	2111198-005A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Waste Water
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:35		
SDG:			

Prep Method:	245.1P	**Prep Batch Date/Time:**	11/18/21	11:20:00AM
Prep Batch ID:	1136976	**Prep Analyst:**	ERVS	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	E245.1	1	0.00013	0.00020	ND		mg/L	11/18/21	15:34	BJAY	461509

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	EB11162021	**Lab Sample ID:**	2111198-005A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Waste Water
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:35		
SDG:			

Prep Method:	200.7P	**Prep Batch Date/Time:**	11/18/21 11:20:00AM
Prep Batch ID:	1136980	**Prep Analyst:**	ERVS

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	E200.7	1	0.0050	0.050	ND		mg/L	11/18/21	15:39	ERR	461496
Arsenic	E200.7	1	0.0040	0.010	ND		mg/L	11/18/21	15:39	ERR	461496
Barium	E200.7	1	0.0010	0.050	ND		mg/L	11/18/21	15:39	ERR	461496
Beryllium	E200.7	1	0.0010	0.050	ND		mg/L	11/18/21	15:39	ERR	461496
Cadmium	E200.7	1	0.0020	0.050	ND		mg/L	11/18/21	15:39	ERR	461496
Chromium	E200.7	1	0.0010	0.050	ND		mg/L	11/18/21	15:39	ERR	461496
Cobalt	E200.7	1	0.0010	0.050	ND		mg/L	11/18/21	15:39	ERR	461496
Copper	E200.7	1	0.0020	0.050	ND		mg/L	11/18/21	15:39	ERR	461496
Lead	E200.7	1	0.0014	0.050	ND		mg/L	11/18/21	15:39	ERR	461496
Molybdenum	E200.7	1	0.0020	0.050	ND		mg/L	11/18/21	15:39	ERR	461496
Nickel	E200.7	1	0.0020	0.050	ND		mg/L	11/18/21	15:39	ERR	461496
Selenium	E200.7	1	0.0070	0.050	ND		mg/L	11/18/21	15:39	ERR	461496
Silver	E200.7	1	0.0040	0.050	ND		mg/L	11/18/21	15:39	ERR	461496
Thallium	E200.7	1	0.0040	0.050	ND		mg/L	11/18/21	15:39	ERR	461496
Vanadium	E200.7	1	0.0020	0.050	ND		mg/L	11/18/21	15:39	ERR	461496
Zinc	E200.7	1	0.0020	0.050	ND		mg/L	11/18/21	15:39	ERR	461496

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	EB11162021	**Lab Sample ID:**	2111198-005B
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Waste Water
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:35		
SDG:			

Prep Method:	3510_BNA	**Prep Batch Date/Time:**	11/19/21 4:38:00PM
Prep Batch ID:	1137056	**Prep Analyst:**	NBAIN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
N-Nitrosdimethylamine	SW8270C	1	2.35	20	ND		ug/L	11/20/21	17:20	MT	461557
Aniline	SW8270C	1	2.48	20	ND		ug/L	11/20/21	17:20	MT	461557
Phenol	SW8270C	1	1.46	20	ND		ug/L	11/20/21	17:20	MT	461557
Bis(2-chloroethyl) ether	SW8270C	1	1.69	10	ND		ug/L	11/20/21	17:20	MT	461557
2-Chlorophenol	SW8270C	1	2.50	20	ND		ug/L	11/20/21	17:20	MT	461557
1,3-Dichlorobenzene	SW8270C	1	1.33	10	ND		ug/L	11/20/21	17:20	MT	461557
1,4-Dichlorobenzene	SW8270C	1	1.58	10	ND		ug/L	11/20/21	17:20	MT	461557
1,2-Dichlorobenzene	SW8270C	1	1.31	10	ND		ug/L	11/20/21	17:20	MT	461557
2-Methylphenol (o-Cresol)	SW8270C	1	1.75	20	ND		ug/L	11/20/21	17:20	MT	461557
Bis(2-chloroisopropyl)ether	SW8270C	1	1.49	10	ND		ug/L	11/20/21	17:20	MT	461557
3-/4-Methylphenol (p-/m-Cresol)	SW8270C	1	1.64	20	ND		ug/L	11/20/21	17:20	MT	461557
N-nitroso-di-n-propylamine	SW8270C	1	2.67	20	ND		ug/L	11/20/21	17:20	MT	461557
Hexachloroethane	SW8270C	1	1.33	10	ND		ug/L	11/20/21	17:20	MT	461557
Nitrobenzene	SW8270C	1	1.41	10	ND		ug/L	11/20/21	17:20	MT	461557
Isophorone	SW8270C	1	1.49	10	ND		ug/L	11/20/21	17:20	MT	461557
2-Nitrophenol	SW8270C	1	2.72	20	ND		ug/L	11/20/21	17:20	MT	461557
2,4-Dimethylphenol	SW8270C	1	1.91	20	ND		ug/L	11/20/21	17:20	MT	461557
Bis(2-Chloroethoxy)methane	SW8270C	1	1.38	10	ND		ug/L	11/20/21	17:20	MT	461557
2,4-Dichlorophenol	SW8270C	1	2.13	20	ND		ug/L	11/20/21	17:20	MT	461557
1,2,4-Trichlorobenzene	SW8270C	1	1.50	10	ND		ug/L	11/20/21	17:20	MT	461557
Naphthalene	SW8270C	1	1.42	10	ND		ug/L	11/20/21	17:20	MT	461557
2,6-Dichlorophenol	SW8270C	1	2.42	20	ND		ug/L	11/20/21	17:20	MT	461557
Hexachloro-1,3-butadiene	SW8270C	1	1.51	10	ND		ug/L	11/20/21	17:20	MT	461557
4-Chloro-3-methylphenol	SW8270C	1	1.47	20	ND		ug/L	11/20/21	17:20	MT	461557
2-Methylnaphthalene	SW8270C	1	1.34	10	ND		ug/L	11/20/21	17:20	MT	461557
Hexachlorocyclopentadiene	SW8270C	1	1.55	10	ND		ug/L	11/20/21	17:20	MT	461557
2,4,6-Trichlorophenol	SW8270C	1	2.50	20	ND		ug/L	11/20/21	17:20	MT	461557
2-Chloronaphthalene	SW8270C	1	1.43	10	ND		ug/L	11/20/21	17:20	MT	461557
Dimethyl phthalate	SW8270C	1	1.24	10	ND		ug/L	11/20/21	17:20	MT	461557
Acenaphthylene	SW8270C	1	1.48	10	ND		ug/L	11/20/21	17:20	MT	461557
2,6-Dinitrotoluene	SW8270C	1	1.29	10	ND		ug/L	11/20/21	17:20	MT	461557
Acenaphthene	SW8270C	1	1.40	10	ND		ug/L	11/20/21	17:20	MT	461557
2,4-Dinitrophenol	SW8270C	1	5.68	40	ND		ug/L	11/20/21	17:20	MT	461557
4-Nitrophenol	SW8270C	1	1.26	40	ND		ug/L	11/20/21	17:20	MT	461557
2,4-Dinitrotoluene	SW8270C	1	1.04	10	ND		ug/L	11/20/21	17:20	MT	461557
Diethylphthalate	SW8270C	1	0.760	10	ND		ug/L	11/20/21	17:20	MT	461557
Fluorene	SW8270C	1	1.18	10	ND		ug/L	11/20/21	17:20	MT	461557
4-Chlorophenyl phenyl ether	SW8270C	1	1.25	10	ND		ug/L	11/20/21	17:20	MT	461557
Diphenylamine	SW8270C	1	0.974	10	ND		ug/L	11/20/21	17:20	MT	461557

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	EB11162021	**Lab Sample ID:**	2111198-005B
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Waste Water
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:35		
SDG:			

Prep Method: 3510_BNA
Prep Batch ID: 1137056
Prep Batch Date/Time: 11/19/21 4:38:00PM
Prep Analyst: NBAIN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Azobenzene	SW8270C	1	1.46	10	ND		ug/L	11/20/21	17:20	MT	461557
4-Bromophenyl phenyl ether	SW8270C	1	1.30	10	ND		ug/L	11/20/21	17:20	MT	461557
Hexachlorobenzene	SW8270C	1	1.22	10	ND		ug/L	11/20/21	17:20	MT	461557
Pentachlorophenol	SW8270C	1	1.53	20	ND		ug/L	11/20/21	17:20	MT	461557
Phenanthrene	SW8270C	1	0.911	10	ND		ug/L	11/20/21	17:20	MT	461557
Anthracene	SW8270C	1	0.922	10	ND		ug/L	11/20/21	17:20	MT	461557
Di-n-butylphthalate	SW8270C	1	0.639	10	ND		ug/L	11/20/21	17:20	MT	461557
Fluoranthene	SW8270C	1	0.272	10	ND		ug/L	11/20/21	17:20	MT	461557
Benzidine	SW8270C	1	18.0	20	ND		ug/L	11/20/21	17:20	MT	461557
Pyrene	SW8270C	1	0.585	10	ND		ug/L	11/20/21	17:20	MT	461557
Benzyl butyl phthalate	SW8270C	1	2.12	10	ND		ug/L	11/20/21	17:20	MT	461557
Benz[a]anthracene	SW8270C	1	0.304	10	ND		ug/L	11/20/21	17:20	MT	461557
3,3-Dichlorobenzidine	SW8270C	1	3.40	20	ND		ug/L	11/20/21	17:20	MT	461557
Chrysene	SW8270C	1	0.322	10	ND		ug/L	11/20/21	17:20	MT	461557
Bis(2-Ethylhexyl)phthalate	SW8270C	1	1.10	10	ND		ug/L	11/20/21	17:20	MT	461557
Di-n-octyl phthalate	SW8270C	1	0.581	10	ND		ug/L	11/20/21	17:20	MT	461557
Benzo[b]fluoranthene	SW8270C	1	0.389	10	ND		ug/L	11/20/21	17:20	MT	461557
Benzo[k]fluoranthene	SW8270C	1	0.427	10	ND		ug/L	11/20/21	17:20	MT	461557
Benzo[a]pyrene	SW8270C	1	0.394	10	ND		ug/L	11/20/21	17:20	MT	461557
Indeno[1,2,3-cd]pyrene	SW8270C	1	0.558	10	ND		ug/L	11/20/21	17:20	MT	461557
Dibenz[a,h]anthracene	SW8270C	1	0.630	10	ND		ug/L	11/20/21	17:20	MT	461557
Benzo[g,h,i]perylene	SW8270C	1	0.704	10	ND		ug/L	11/20/21	17:20	MT	461557
			Acceptance Limits								
2-Fluorophenol (S)	SW8270C		21 - 100		**47.2**		%	11/20/21	17:20	MT	461557
Phenol-d6 (S)	SW8270C		10 - 94		**28.8**		%	11/20/21	17:20	MT	461557
Nitrobenzene-d5 (S)	SW8270C		31 - 116		**94.0**		%	11/20/21	17:20	MT	461557
2-Fluorobiphenyl (S)	SW8270C		21.3 - 123		**93.4**		%	11/20/21	17:20	MT	461557
2,4,6-Tribromophenol (S)	SW8270C		29.6 - 130		**88.9**		%	11/20/21	17:20	MT	461557
p-Terphenyl-d14 (S)	SW8270C		50 - 150		**97.4**		%	11/20/21	17:20	MT	461557

Prep Method: 8290W-P
Prep Batch ID: 1137079
Prep Batch Date/Time: 11/18/21 3:58:00PM
Prep Analyst: LATZN
Units: %

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
2378-TCDF	SW8290	1	0.00087	0.0051	ND		pg/L	11/27/21	20:36	TT	461807
12378-PeCDF	SW8290	1	0.0028	0.025	ND		pg/L	11/27/21	20:36	TT	461807

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 11/17/21, 1:40 pm
Date Reported: 12/02/21

Client Sample ID:	EB11162021	**Lab Sample ID:**	2111198-005B
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Waste Water
Project Number:	403668001		
Date/Time Sampled:	11/16/21 / 9:35		
SDG:			

Prep Method:	8290W-P	**Prep Batch Date/Time:**	11/18/21	3:58:00PM
Prep Batch ID:	1137079	**Prep Analyst:**	LATZN	
		Units:	%	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
23478-PeCDF	SW8290	1	0.0028	0.025	ND		pg/L	11/27/21	20:36	TT	461807
123478-HxCDF	SW8290	1	0.0018	0.025	ND		pg/L	11/27/21	20:36	TT	461807
123678-HxCDF	SW8290	1	0.0024	0.025	ND		pg/L	11/27/21	20:36	TT	461807
234678-HxCDF	SW8290	1	0.0016	0.025	ND		pg/L	11/27/21	20:36	TT	461807
123789-HxCDF	SW8290	1	0.0023	0.025	ND		pg/L	11/27/21	20:36	TT	461807
1234678-HpCDF	SW8290	1	0.0018	0.025	ND		pg/L	11/27/21	20:36	TT	461807
1234789-HpCDF	SW8290	1	0.0018	0.025	ND		pg/L	11/27/21	20:36	TT	461807
OCDF	SW8290	1	0.0037	0.061	ND		pg/L	11/27/21	20:36	TT	461807
2378-TCDD	SW8290	1	0.0012	0.0051	ND		pg/L	11/27/21	20:36	TT	461807
12378-PeCDD	SW8290	1	0.0018	0.025	ND		pg/L	11/27/21	20:36	TT	461807
123478-HxCDD	SW8290	1	0.0017	0.025	ND		pg/L	11/27/21	20:36	TT	461807
123678-HxCDD	SW8290	1	0.0017	0.025	ND		pg/L	11/27/21	20:36	TT	461807
123789-HxCDD	SW8290	1	0.0017	0.025	ND		pg/L	11/27/21	20:36	TT	461807
1234678-HpCDD	SW8290	1	0.0027	0.025	ND		pg/L	11/27/21	20:36	TT	461807
OCDD	SW8290	1	0.0037	0.051	ND		pg/L	11/27/21	20:36	TT	461807
Total-Dioxins	SW8290	1	0.0012	0.0051	ND		pg/L	11/27/21	20:36	TT	461807
Total-Furans	SW8290	1	0.00087	0.0051	ND		pg/L	11/27/21	20:36	TT	461807
Total-TEQ	SW8290	1	0.0002	0.014	**<0.0140**		pg/L	11/27/21	20:36	TT	461807
			Acceptance Limits								
(LS) 13C-2378-TCDF	SW8290		**22 - 150**		**78.4**		%	11/27/21	20:36	TT	461807
(LS) 13C-12378-PeCDF	SW8290		**22 - 150**		**93.8**		%	11/27/21	20:36	TT	461807
(LS) 13C-23478-PeCDF	SW8290		**22 - 150**		**96.6**		%	11/27/21	20:36	TT	461807
(LS) 13C-123478-HxCDF	SW8290		**22 - 150**		**87.6**		%	11/27/21	20:36	TT	461807
(LS) 13C-123678-HxCDF	SW8290		**22 - 150**		**79.2**		%	11/27/21	20:36	TT	461807
(LS) 13C-234678-HxCDF	SW8290		**22 - 150**		**88.7**		%	11/27/21	20:36	TT	461807
(LS) 13C-123789-HxCDF	SW8290		**22 - 150**		**88.4**		%	11/27/21	20:36	TT	461807
(LS) 13C-1234678-HpCDF	SW8290		**22 - 150**		**90.9**		%	11/27/21	20:36	TT	461807
(LS) 13C-1234789-HpCDF	SW8290		**22 - 150**		**94.5**		%	11/27/21	20:36	TT	461807
(LS) 13C-2378-TCDD	SW8290		**22 - 150**		**80.3**		%	11/27/21	20:36	TT	461807
(LS) 13C-12378-PeCDD	SW8290		**22 - 150**		**100**		%	11/27/21	20:36	TT	461807
(LS) 13C-123478-HxCDD	SW8290		**22 - 150**		**90.2**		%	11/27/21	20:36	TT	461807
(LS) 13C-123678-HxCDD	SW8290		**22 - 150**		**85.4**		%	11/27/21	20:36	TT	461807
(LS) 13C-1234678-HpCDD	SW8290		**22 - 150**		**95.6**		%	11/27/21	20:36	TT	461807
(LS) 13C-OCDD	SW8290		**22 - 150**		**86.7**		%	11/27/21	20:36	TT	461807
(CRS) 37Cl-2378-TCDD	SW8290		**40 - 135**		**116**		%	11/27/21	20:36	TT	461807

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2111198	**Prep Method:**	245.1P	**Prep Date:**	11/18/21	**Prep Batch:**	1136976
Matrix:	Water	**Analytical Method:**	E245.1	**Analyzed Date:**	11/18/2021	**Analytical Batch:**	461509
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Mercury	0.00013	0.00020	ND	

Work Order:	2111198	**Prep Method:**	200.7P	**Prep Date:**	11/18/21	**Prep Batch:**	1136980
Matrix:	Water	**Analytical Method:**	E200.7	**Analyzed Date:**	11/18/2021	**Analytical Batch:**	461496
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Antimony	0.0050	0.050	ND	
Arsenic	0.0040	0.010	ND	
Barium	0.0010	0.050	ND	
Beryllium	0.0010	0.050	ND	
Cadmium	0.0020	0.050	ND	
Chromium	0.0010	0.050	0.022	
Cobalt	0.0010	0.050	ND	
Copper	0.0020	0.050	ND	
Lead	0.0014	0.050	ND	
Molybdenum	0.0020	0.010	ND	
Nickel	0.0020	0.050	ND	
Selenium	0.0070	0.050	ND	
Silver	0.0040	0.050	ND	
Thallium	0.0040	0.050	ND	
Vanadium	0.0010	0.050	0.0014	
Zinc	0.0020	0.050	ND	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2111198	**Prep Method:**	3546_BNA	**Prep Date:**	11/19/21	**Prep Batch:**	1137022
Matrix:	Soil	**Analytical Method:**	SW8270C	**Analyzed Date:**	11/20/2021	**Analytical Batch:**	461558
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
N-Nitrosodimethylamine	46.9	720	ND		
Phenol	43.8	288	ND		
Bis(2-chloroethyl)ether	13.3	144	ND		
2-Chlorophenol	47.7	288	ND		
1,3-Dichlorobenzene	13.1	144	ND		
1,4-Dichlorobenzene	14.6	144	ND		
Benzyl Alcohol	20.5	288	ND		
1,2-Dichlorobenzene	13.5	144	ND		
2-Methylphenol (o-Cresol)	29.3	288	ND		
N-Methyl-2-Pyrrolidone (NMP)	68.0	720	ND		
3-/4-Methylphenol (p-/m-Cresol)	31.3	288	ND		
N-nitroso-di-n-propylamine	13.2	144	ND		
Hexachloroethane	17.1	144	ND		
Nitrobenzene	12.8	144	ND		
Isophorone	12.2	144	ND		
2-Nitrophenol	25.4	288	ND		
2,4-Dimethylphenol	22.8	288	ND		
Benzoic Acid	41.7	288	ND		
Bis(2-Chloroethoxy)methane	9.79	144	ND		
Bis(2-chloroisopropyl)ether	12.6	144	ND		
2,4-Dichlorophenol	39.3	288	ND		
1,2,4-Trichlorobenzene	11.8	144	ND		
Naphthalene	10.6	144	ND		
2,6-Dichlorophenol	35.8	288	ND		
Hexachloro-1,3-butadiene	8.34	144	ND		
4-Chloro-3-methylphenol	33.8	288	ND		
2-Methylnaphthalene	10.4	144	ND		
1-Methylnaphthalene	12.2	144	ND		
Hexachlorocyclopentadiene	12.9	144	ND		
2,4,6-Trichlorophenol	35.9	288	ND		
2,4,5-Trichlorophenol	33.4	288	ND		
2-Chloronaphthalene	10.6	144	ND		
1,4-Dinitrobenzene	10.3	144	ND		
Dimethyl phthalate	14.2	720	ND		
1,3-Dinitrobenzene	10.4	144	ND		
Acenaphthylene	8.28	144	ND		
2,6-Dinitrotoluene	11.3	144	ND		
1,2-Dinitrobenzene	15.8	144	ND		
Acenaphthene	10.7	144	ND		
2,4-Dinitrophenol	77.6	720	ND		
4-Nitrophenol	54.7	720	ND		
Dibenzofuran	11.2	144	ND		
2,4-Dinitrotoluene	12.1	144	ND		
2,3,5,6-Tetrachlorophenol	27.6	288	ND		
2,3,4,6-Tetrachlorophenol	31.5	288	ND		

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2111198	**Prep Method:**	3546_BNA	**Prep Date:**	11/19/21	**Prep Batch:**	1137022
Matrix:	Soil	**Analytical Method:**	SW8270C	**Analyzed Date:**	11/20/2021	**Analytical Batch:**	461558
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Diethylphthalate	13.6	720	ND		
Fluorene	10.3	144	ND		
4-Chlorophenyl-phenylether	9.32	144	ND		
4,6-Dinitro-2-methylphenol	13.4	288	ND		
Diphenylamine	13.0	144	ND		
Azobenzene	114	144	ND		
4-Bromophenyl-phenylether	8.23	144	ND		
Hexachlorobenzene	8.66	144	ND		
Pentachlorophenol	25.0	288	ND		
Phenanthrene	9.32	144	ND		
Anthracene	8.91	144	ND		
Carbazole	10.7	144	ND		
Di-n-butylphthalate	13.5	144	ND		
Fluoranthene	10.0	144	ND		
Benzidine	147	144	ND		
Pyrene	12.0	144	ND		
Butylbenzylphthalate	21.0	720	ND		
Benzo(a)anthracene	9.80	144	ND		
3,3-Dichlorobenzidine	118	144	ND		
Chrysene	15.2	144	ND		
Bis(2-Ethylhexyl)phthalate	15.3	720	ND		
Di-n-Octylphthalate	12.3	144	ND		
Benzo(b)fluorathene	12.0	144	ND		
benzo(k)fluorathene	8.16	144	ND		
Benzo(a)pyrene	9.80	144	ND		
Indeno(1,2,3-c,d)pyrene	13.8	144	ND		
Dibenzo(a,h)anthracene	12.7	144	ND		
Benzo(g,h,i)perylene	12.7	144	ND		
Pyridine	43.8	720	ND		
2-Fluorophenol (S)			89.2		
Phenol-d6 (S)			96.1		
2,4,6-Tribromophenol (S)			91.1		
2-Fluorobiphenyl (S)			92.9		
Nitrobenzene-d5 (S)			88.8		
p-Terphenyl-d14 (S)			97.6		

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2111198	**Prep Method:**	3510_BNA	**Prep Date:**	11/19/21	**Prep Batch:**	1137056
Matrix:	Water	**Analytical Method:**	SW8270C	**Analyzed Date:**	11/20/2021	**Analytical Batch:**	461557
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
N-Nitrosdimethylamine	2.12	20	ND		
Aniline	2.35	20	ND		
Phenol	2.48	20	ND		
Bis(2-chloroethyl) ether	1.46	20	ND		
2-Chlorophenol	1.69	10	ND		
1,3-Dichlorobenzene	2.50	20	ND		
1,4-Dichlorobenzene	1.33	10	ND		
1,2-Dichlorobenzene	1.58	10	ND		
2-Methylphenol (o-Cresol)	1.34	10	ND		
Bis(2-chloroisopropyl)ether	1.31	10	ND		
3-/4-Methylphenol (p-/m-Cresol)	1.75	20	ND		
N-nitroso-di-n-propylamine	1.14	10	ND		
Hexachloroethane	1.49	10	ND		
Nitrobenzene	1.64	20	ND		
Isophorone	2.67	20	ND		
2-Nitrophenol	1.33	10	ND		
2,4-Dimethylphenol	1.41	10	ND		
Bis(2-Chloroethoxy)methane	1.49	10	ND		
2,4-Dichlorophenol	2.72	20	ND		
1,2,4-Trichlorobenzene	1.91	20	ND		
Naphthalene	2.76	20	ND		
2,6-Dichlorophenol	1.38	10	ND		
Hexachloro-1,3-butadiene	2.13	20	ND		
4-Chloro-3-methylphenol	1.50	10	ND		
2-Methylnaphthalene	1.42	10	ND		
Hexachlorocyclopentadiene	1.76	10	ND		
2,4,6-Trichlorophenol	2.42	20	ND		
2-Chloronaphthalene	1.51	10	ND		
Dimethyl phthalate	1.47	20	ND		
Acenaphthylene	1.34	10	ND		
2,6-Dinitrotoluene	1.47	10	ND		
Acenaphthene	1.55	10	ND		
2,4-Dinitrophenol	2.50	20	ND		
4-Nitrophenol	1.87	20	ND		
2,4-Dinitrotoluene	1.43	10	ND		
Diethylphthalate	2.27	20	ND		
Fluorene	1.15	10	ND		
4-Chlorophenyl phenyl ether	1.24	10	ND		
Diphenylamine	1.43	10	ND		
Azobenzene	1.48	10	ND		
4-Bromophenyl phenyl ether	1.29	10	ND		
Hexachlorobenzene	1.44	10	ND		
Pentachlorophenol	4.34	20	ND		
Phenanthrene	0.000	0.00	0.000		
Anthracene	5.68	40	ND		

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2111198	**Prep Method:**	3510_BNA	**Prep Date:**	11/19/21	**Prep Batch:**	1137056
Matrix:	Water	**Analytical Method:**	SW8270C	**Analyzed Date:**	11/20/2021	**Analytical Batch:**	461557
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Di-n-butylphthalate	1.26	40	ND		
Fluoranthene	1.27	10	ND		
Benzidine	1.04	10	ND		
Pyrene	1.44	20	ND		
Benzyl butyl phthalate	1.58	20	ND		
Benz[a]anthracene	0.760	10	ND		
3,3-Dichlorobenzidine	1.18	10	ND		
Chrysene	1.25	10	ND		
Bis(2-Ethylhexyl)phthalate	3.81	20	ND		
Di-n-octyl phthalate	2.80	20	ND		
Benzo[b]fluoranthene	0.974	10	ND		
Benzo[k]fluoranthene	1.46	10	ND		
Benzo[a]pyrene	1.30	10	ND		
Indeno[1,2,3-cd]pyrene	1.22	10	ND		
Dibenz[a,h]anthracene	1.53	20	ND		
Benzo[g,h,i]perylene	0.911	10	ND		
2-Fluorophenol (S)			32.8		
Phenol-d6 (S)			22.0		
Nitrobenzene-d5 (S)			47.0		
2-Fluorobiphenyl (S)			52.9		
2,4,6-Tribromophenol (S)			70.3		
p-Terphenyl-d14 (S)			88.7		

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2111198	**Prep Method:**	8290S-P	**Prep Date:**	11/13/21	**Prep Batch:**	1137060
Matrix:	Soil	**Analytical Method:**	SW8290	**Analyzed Date:**	11/23/2021	**Analytical Batch:**	461813
Units:	pg/g						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
2378-TCDF	0.21	0.48	ND	
12378-PeCDF	1.00	4.8	ND	
23478-PeCDF	0.66	4.8	ND	
123478-HxCDF	0.49	4.8	ND	
123678-HxCDF	1.1	4.8	ND	
234678-HxCDF	1.4	4.8	ND	
123789-HxCDF	1.9	4.8	ND	
1234678-HpCDF	1.8	4.8	ND	
1234789-HpCDF	1.1	4.8	ND	
OCDF	1.4	29	26.2	
2378-TCDD	0.20	0.48	ND	
12378-PeCDD	1.1	4.8	ND	
123478-HxCDD	0.91	4.8	ND	
123678-HxCDD	1.3	4.8	ND	
123789-HxCDD	3.2	4.8	ND	
1234678-HpCDD	1.5	4.8	ND	
OCDD	4.3	24	14.9	
Total-Dioxins	0.20	4.8	ND	
Total-Furans	0.21	0.48	ND	
OCDD			0.000	
(LS) 13C-2378-TCDF			67.1	
(LS) 13C-12378-PeCDF			85.2	
(LS) 13C-23478-PeCDF			93.4	
(LS) 13C-123478-HxCDF			75.9	
(LS) 13C-123678-HxCDF			69.4	
(LS) 13C-234678-HxCDF			79.8	
(LS) 13C-123789-HxCDF			81.4	
(LS) 13C-1234678-HpCDF			82.2	
(LS) 13C-1234789-HpCDF			75.8	
(LS) 13C-2378-TCDD			71.0	
(LS) 13C-12378-PeCDD			89.8	
(LS) 13C-123478-HxCDD			75.6	
(LS) 13C-123678-HxCDD			74.9	
(LS) 13C-1234678-HpCDD			75.1	
(LS) 13C-OCDD			65.2	
(CRS) 37Cl-2378-TCDD			140	S

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2111198	**Prep Method:**	8290W-P	**Prep Date:**	11/18/21	**Prep Batch:**	1137079
Matrix:	Water	**Analytical Method:**	SW8290	**Analyzed Date:**	11/27/2021	**Analytical Batch:**	461807
Units:	pg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
2378-TCDF	0.00086	0.0050	ND	
12378-PeCDF	0.0027	0.025	ND	
23478-PeCDF	0.0028	0.025	ND	
123478-HxCDF	0.0018	0.025	ND	
123678-HxCDF	0.0024	0.025	ND	
234678-HxCDF	0.0016	0.025	ND	
123789-HxCDF	0.0022	0.025	ND	
1234678-HpCDF	0.0018	0.025	ND	
1234789-HpCDF	0.0018	0.025	ND	
OCDF	0.0037	0.060	0.0542	
2378-TCDD	0.0011	0.0050	ND	
12378-PeCDD	0.0018	0.025	ND	
123478-HxCDD	0.0017	0.025	ND	
123678-HxCDD	0.0016	0.025	ND	
123789-HxCDD	0.0017	0.025	ND	
1234678-HpCDD	0.0027	0.025	ND	
OCDD	0.0037	0.050	ND	
Total-Dioxins	0.0011	0.0050	ND	
Total-Furans	0.00086	0.0050	ND	
Total-TEQ	0.00020	0.014	<0.0140	
(LS) 13C-2378-TCDF			66.7	
(LS) 13C-12378-PeCDF			78.9	
(LS) 13C-23478-PeCDF			82.7	
(LS) 13C-123478-HxCDF			74.4	
(LS) 13C-123678-HxCDF			68.2	
(LS) 13C-234678-HxCDF			77.7	
(LS) 13C-123789-HxCDF			77.6	
(LS) 13C-1234678-HpCDF			84.7	
(LS) 13C-1234789-HpCDF			85.6	
(LS) 13C-2378-TCDD			71.2	
(LS) 13C-12378-PeCDD			83.7	
(LS) 13C-123478-HxCDD			76.5	
(LS) 13C-123678-HxCDD			74.8	
(LS) 13C-1234678-HpCDD			84.7	
(LS) 13C-OCDD			76.0	
(CRS) 37Cl-2378-TCDD			131	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2111198	**Prep Method:**	7471BP	**Prep Date:**	11/27/21	**Prep Batch:**	1137236
Matrix:	Soil	**Analytical Method:**	SW7471B	**Analyzed Date:**	11/29/2021	**Analytical Batch:**	461738
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Mercury	0.083	0.50	ND	

Work Order:	2111198	**Prep Method:**	3050B	**Prep Date:**	11/27/21	**Prep Batch:**	1137280
Matrix:	Soil	**Analytical Method:**	SW6010B	**Analyzed Date:**	11/30/2021	**Analytical Batch:**	461787
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Antimony	0.050	5.00	ND	
Arsenic	0.15	1.30	0.54	
Barium	0.055	5.00	0.060	
Beryllium	0.055	5.00	ND	
Cadmium	0.10	5.00	ND	
Chromium	0.075	5.00	ND	
Cobalt	0.070	5.00	ND	
Copper	0.20	5.00	ND	
Lead	0.10	3.00	ND	
Molybdenum	0.050	5.00	0.28	
Nickel	0.50	5.00	ND	
Selenium	0.22	5.00	ND	
Silver	0.15	1.00	ND	
Thallium	0.55	5.00	ND	
Vanadium	0.10	5.00	0.24	
Zinc	0.30	5.00	ND	

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2111198	**Prep Method:**	245.1P	**Prep Date:**	11/18/21	**Prep Batch:**	1136976
Matrix:	Water	**Analytical Method:**	E245.1	**Analyzed Date:**	11/18/2021	**Analytical Batch:**	461509
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury	0.00013	0.00020	ND	0.015	119	119	0.560	85 - 115	20	S

Work Order:	2111198	**Prep Method:**	200.7P	**Prep Date:**	11/18/21	**Prep Batch:**	1136980
Matrix:	Water	**Analytical Method:**	E200.7	**Analyzed Date:**	11/18/2021	**Analytical Batch:**	461496
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.0050	0.010	ND	1	103	101	1.96	80 - 120	20	
Arsenic	0.0040	0.010	ND	1	102	101	0.985	80 - 120	20	
Barium	0.0010	0.0050	ND	1	103	101	1.96	80 - 120	20	
Beryllium	0.0010	0.0050	ND	1	104	103	0.966	80 - 120	20	
Cadmium	0.0020	0.0050	ND	1	102	101	0.985	80 - 120	20	
Chromium	0.0010	0.0050	0.022	1	103	102	0.976	80 - 120	20	
Cobalt	0.0010	0.0050	ND	1	104	103	0.966	80 - 120	20	
Copper	0.0020	0.0050	ND	1	104	102	1.94	80 - 120	20	
Lead	0.0014	0.010	ND	1	104	102	1.94	80 - 120	20	
Molybdenum	0.0020	0.010	ND	1	104	103	0.966	80 - 120	20	
Nickel	0.0020	0.0050	ND	1	103	101	1.96	80 - 120	20	
Selenium	0.0070	0.010	ND	1	102	100	1.98	80 - 120	20	
Silver	0.0040	0.010	ND	1	101	99.1	1.90	80 - 120	20	
Thallium	0.0040	0.015	ND	1	102	101	0.985	80 - 120	20	
Vanadium	0.0020	0.0050	0.0014	1	103	101	1.96	80 - 120	20	
Zinc	0.0020	0.0050	ND	1	102	101	0.985	80 - 120	20	

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2111198	**Prep Method:**	3546_BNA	**Prep Date:**	11/19/21	**Prep Batch:**	1137022
Matrix:	Soil	**Analytical Method:**	SW8270C	**Analyzed Date:**	11/20/2021	**Analytical Batch:**	461558
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Phenol	43.8	288	ND	1600	82.8	84.4	1.49	40 - 100	30	
2-Chlorophenol	47.7	288	ND	1600	95.0	95.3	0.656	45 - 105	30	
Bis(2-chloroethyl)ether	14.6	144	ND	800	94.8	94.5	0.396	35 - 105	30	
N-nitroso-di-n-propylamine	13.2	144	ND	1600	94.6	98.6	4.53	40 - 115	30	
1,2,4-Trichlorobenzene	11.8	144	ND	800	95.5	93.9	1.58	45 - 110	30	
1,4-Dichlorobenzene	33.8	288	ND	1600	99.3	102	2.48	45 - 110	30	
Acenaphthene	10.7	144	ND	800	97.0	98.0	1.03	45 - 110	30	
4-Nitrophenol	54.7	720	ND	1600	108	111	3.43	15 - 140	30	
2,4-Dinitrotoluene	12.1	144	ND	800	108	108	0.694	50 - 115	30	
N-Methyl-2-Pyrrolidone (NMP)	12.0	144	ND	1600	90.1	91.7	2.06	25 - 120	30	
Pyrene	12.0	144		800	96.5	98.0	1.54	45 - 145	30	
2-Fluorophenol (S)				22200	100	103		25 - 121		
Phenol-d6 (S)				22200	103	106		24 - 113		
2,4,6-Tribromophenol (S)				22200	106	106		19 - 122		
2-Fluorobiphenyl (S)				11100	103	104		30 - 143		
Nitrobenzene-d5 (S)				11100	96.8	101		23 - 120		
p-Terphenyl-d14 (S)				11100	102	104		18 - 137		

Work Order:	2111198	**Prep Method:**	3510_BNA	**Prep Date:**	11/19/21	**Prep Batch:**	1137056
Matrix:	Water	**Analytical Method:**	SW8270C	**Analyzed Date:**	11/20/2021	**Analytical Batch:**	461557
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Phenol	1.5	20	ND	40.00	27.8	36.3	26.6	25 - 100	30	
2-Chlorophenol	2.5	20	ND	40.00	62.7	78.6	22.3	35 - 105	30	
1,4-Dichlorobenzene	1.6	10	ND	20.00	50.0	57.7	14.1	30 - 100	30	
N-nitroso-di-n-propylamine	2.7	20	ND	40.00	64.5	79.8	21.1	35 - 130	30	
1,2,4-Trichlorobenzene	1.5	10	ND	20.00	53.8	61.4	13.0	35 - 105	30	
4-Chloro-3-methylphenol	1.5	20	ND	40.00	76.3	90.0	16.5	30 - 110	30	
Acenaphthene	1.4	10	ND	20.00	73.3	83.7	12.7	45 - 110	30	
4-Nitrophenol	1.3	40	ND	40.00	38.7	44.8	14.4	25 - 115	30	
2,4-Dinitrotoluene	1.0	10	ND	20.00	94.3	101	7.14	50 - 120	30	
Pentachlorophenol	1.2	10	ND	40.00	80.7	85.2	5.42	40 - 115	30	
Pyrene	0.59	10	ND	20.00	89.8	94.4	4.88	50 - 130	30	
2-Fluorophenol (S)				22220	41.9	51.3		21 - 100		
Phenol-d6 (S)				22220	28.1	34.9		10 - 94		
Nitrobenzene-d5 (S)				11110	64.7	74.9		31 - 116		
2-Fluorobiphenyl (S)				11110	75.2	83.0		21.3 - 123		
2,4,6-Tribromophenol (S)				22220	95.8	94.0		29.6 - 130		
p-Terphenyl-d14 (S)				11110	98.7	97.7		50 - 150		

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2111198	**Prep Method:**	8290S-P	**Prep Date:**	11/13/21	**Prep Batch:**	1137060
Matrix:	Soil	**Analytical Method:**	SW8290	**Analyzed Date:**	11/23/2021	**Analytical Batch:**	461813
Units:	pg/g						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
2378-TCDF	0.21	0.48	ND	50	94.2			65 - 135		
12378-PeCDF	0.99	4.8	ND	200	96.4			65 - 135		
23478-PeCDF	0.65	4.8	ND	200	97.8			65 - 135		
123478-HxCDF	0.48	4.8	ND	200	81.7			65 - 135		
123678-HxCDF	1.1	4.8	ND	200	90.1			65 - 135		
234678-HxCDF	1.4	4.8	ND	200	83.0			65 - 135		
123789-HxCDF	1.8	4.8	ND	200	82.7			65 - 135		
1234678-HpCDF	1.8	4.8	ND	200	97.3			65 - 135		
1234789-HpCDF	1.1	4.8	ND	200	96.6			65 - 135		
OCDF	1.4	29	26.2	500	99.1			65 - 135		
2378-TCDD	0.20	0.48	ND	50	93.5			65 - 135		
12378-PeCDD	1.1	4.8	ND	200	96.5			65 - 135		
123478-HxCDD	0.90	4.8	ND	200	86.0			65 - 135		
123678-HxCDD	1.3	4.8	ND	200	86.0			65 - 135		
123789-HxCDD	3.1	4.8	ND	200	94.1			65 - 135		
1234678-HpCDD	1.5	4.8	ND	200	103			65 - 135		
OCDD	4.2	24	14.9	500	83.0			65 - 135		
(LS) 13C-2378-TCDF				100	69.0			22 - 150		
(LS) 13C-12378-PeCDF				100	83.2			22 - 150		
(LS) 13C-23478-PeCDF				100	86.7			22 - 150		
(LS) 13C-123478-HxCDF				100	74.9			22 - 150		
(LS) 13C-123678-HxCDF				100	68.0			22 - 150		
(LS) 13C-234678-HxCDF				100	75.8			22 - 150		
(LS) 13C-123789-HxCDF				100	79.4			22 - 150		
(LS) 13C-1234678-HpCDF				100	73.4			22 - 150		
(LS) 13C-1234789-HpCDF				100	74.0			22 - 150		
(LS) 13C-2378-TCDD				100	69.8			22 - 150		
(LS) 13C-12378-PeCDD				100	85.4			22 - 150		
(LS) 13C-123478-HxCDD				100	72.4			22 - 150		
(LS) 13C-123678-HxCDD				100	70.6			22 - 150		
(LS) 13C-1234678-HpCDD				100	67.7			22 - 150		
(LS) 13C-OCDD				200	61.8			22 - 150		
(CRS) 37Cl-2378-TCDD				10	120			40 - 135		

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2111198	**Prep Method:**	8290W-P	**Prep Date:**	11/18/21	**Prep Batch:**	1137079
Matrix:	Water	**Analytical Method:**	SW8290	**Analyzed Date:**	11/27/2021	**Analytical Batch:**	461807
Units:	pg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
2378-TCDF	0.00086	0.0050	ND	0.1	84.3			65 - 135		
12378-PeCDF	0.0027	0.025	ND	0.5	93.0			65 - 135		
23478-PeCDF	0.0028	0.025	ND	0.5	85.6			65 - 135		
123478-HxCDF	0.0018	0.025	ND	0.5	90.2			65 - 135		
123678-HxCDF	0.0024	0.025	ND	0.5	101			65 - 135		
234678-HxCDF	0.0016	0.025	ND	0.5	86.7			65 - 135		
123789-HxCDF	0.0022	0.025	ND	0.5	92.7			65 - 135		
1234678-HpCDF	0.0018	0.025	ND	0.5	99.3			65 - 135		
1234789-HpCDF	0.0018	0.025	ND	0.5	98.0			65 - 135		
OCDF	0.0037	0.050	0.0542	1	89.9			65 - 135		
2378-TCDD	0.0011	0.0050	ND	0.1	83.4			65 - 135		
12378-PeCDD	0.0018	0.025	ND	0.5	87.9			65 - 135		
123478-HxCDD	0.0017	0.025	ND	0.5	88.8			65 - 135		
123678-HxCDD	0.0016	0.025	ND	0.5	88.2			65 - 135		
123789-HxCDD	0.0017	0.025	ND	0.5	88.6			65 - 135		
1234678-HpCDD	0.0027	0.025	ND	0.5	96.4			65 - 135		
OCDD	0.0037	0.050	ND	1	87.0			65 - 135		
(LS) 13C-2378-TCDF				100	67.6			22 - 150		
(LS) 13C-12378-PeCDF				100	88.4			22 - 150		
(LS) 13C-23478-PeCDF				100	92.9			22 - 150		
(LS) 13C-123478-HxCDF				100	90.2			22 - 150		
(LS) 13C-123678-HxCDF				100	81.6			22 - 150		
(LS) 13C-234678-HxCDF				100	93.0			22 - 150		
(LS) 13C-123789-HxCDF				100	92.1			22 - 150		
(LS) 13C-1234678-HpCDF				100	94.5			22 - 150		
(LS) 13C-1234789-HpCDF				100	101			22 - 150		
(LS) 13C-2378-TCDD				100	70.0			22 - 150		
(LS) 13C-12378-PeCDD				100	98.5			22 - 150		
(LS) 13C-123478-HxCDD				100	94.4			22 - 150		
(LS) 13C-123678-HxCDD				100	89.3			22 - 150		
(LS) 13C-1234678-HpCDD				100	101			22 - 150		
(LS) 13C-OCDD				200	89.0			22 - 150		
(CRS) 37Cl-2378-TCDD				10	131			40 - 135		

Work Order:	2111198	**Prep Method:**	7471BP	**Prep Date:**	11/27/21	**Prep Batch:**	1137236
Matrix:	Soil	**Analytical Method:**	SW7471B	**Analyzed Date:**	11/29/2021	**Analytical Batch:**	461738
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury	0.047	0.50	ND	1.25	103	99.3	3.95	80 - 120	30	

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2111198	**Prep Method:**	3050B	**Prep Date:**	11/27/21	**Prep Batch:**	1137280
Matrix:	Soil	**Analytical Method:**	SW6010B	**Analyzed Date:**	11/30/2021	**Analytical Batch:**	461787
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.050	5.00	ND	50	98.9	97.5	1.42	80 - 120	30	
Arsenic	0.15	1.30	0.54	50	103	103	0.000	80 - 120	30	
Barium	0.055	5.00	0.060	50	108	107	0.930	80 - 120	30	
Beryllium	0.055	5.00	ND	50	107	105	1.89	80 - 120	30	
Cadmium	0.10	5.00	ND	50	104	103	0.966	80 - 120	30	
Chromium	0.075	5.00	ND	50	107	107	0.000	80 - 120	30	
Cobalt	0.070	5.00	ND	50	106	105	0.948	80 - 120	30	
Copper	0.20	5.00	ND	50	109	110	0.913	80 - 120	30	
Lead	0.10	3.00	ND	50	105	103	1.92	80 - 120	30	
Molybdenum	0.050	5.00	0.28	50	111	110	0.905	80 - 120	30	
Nickel	0.50	5.00	ND	50	105	104	0.957	80 - 120	30	
Selenium	0.22	5.00	ND	50	93.5	92.7	0.858	80 - 120	30	
Silver	0.15	5.00	ND	50	104	103	0.966	80 - 120	30	
Thallium	0.20	5.00	ND	50	104	103	0.966	80 - 120	30	
Vanadium	0.10	5.00	0.24	50	107	106	0.939	80 - 120	30	
Zinc	0.30	5.00	ND	50	103	102	0.976	80 - 120	30	

Torrent LABORATORY, INC.

MS/MSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2111198	**Prep Method:**	3546_BNA	**Prep Date:**	11/19/21	**Prep Batch:**	1137022
Matrix:	**Soil**	**Analytical Method:**	SW8270C	**Analyzed Date:**	11/20/2021	**Analytical Batch:**	461558
Spiked Sample:	2111198-004A						
Units:	ug/Kg						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Phenol	43.8	288	ND	1600	81.1	83.0	2.28	40 - 100	30	
2-Chlorophenol	47.7	288	ND	1600	83.9	85.8	2.21	45 - 105	30	
1,4-Dichlorobenzene	14.6	144	ND	800	83.0	84.7	2.09	35 - 105	30	
N-nitroso-di-n-propylamine	13.2	144	ND	1600	84.5	88.1	4.35	40 - 115	30	
1,2,4-Trichlorobenzene	11.8	144	ND	800	83.5	85.7	2.66	45 - 110	30	
4-Chloro-3-methylphenol	33.8	288	ND	1600	86.4	89.8	4.26	45 - 110	30	
Acenaphthene	10.7	144	ND	800	84.5	88.7	4.77	45 - 110	30	
4-Nitrophenol	54.7	720	ND	1600	97.7	99.1	1.90	15 - 140	30	
2,4-Dinitrotoluene	12.1	144	ND	800	92.1	95.9	4.13	50 - 115	30	
Pentachlorophenol	9.32	144	ND	1600	80.7	82.2	1.54	25 - 120	30	
Pyrene	12.0	144	ND	800	85.8	88.4	2.87	45 - 145	30	
2-Fluorophenol (S)				22200	89.8	90.2		25 - 121		
Phenol-d6 (S)				22200	93.2	93.6		24 - 113		
2,4,6-Tribromophenol (S)				22200	95.1	94.1		19 - 122		
2-Fluorobiphenyl (S)				11100	91.0	92.6		30 - 143		
Nitrobenzene-d5 (S)				11100	87.5	89.2		23 - 120		
p-Terphenyl-d14 (S)				11100	91.7	93.1		18 - 137		

Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - **mg/L** and ***mg/Kg*** (equivalent to PPM - parts per million in **liquid** and ***solid***), **ug/L** and ***ug/Kg*** (equivalent to PPB - parts per billion in **liquid** and ***solid***), **ug/m3**, ***mg/m3***, **ppbv** and ***ppmv*** (all units of measure for reporting concentrations in air), **%** (equivalent to 10000 ppm or 1,000,000 ppb), **ug/Wipe** (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H- Indicates that the recommended holding time for the analyte or compound has been exceeded
J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.

Sample Receipt Checklist

Client Name: Ninyo & Moore

Project Name: Cole Administration Building

Work Order No.: 2111198

Date and Time Received: 11/17/2021 1:40:00PM

Received By: Lorna Imbat

Physically Logged By: Lorna Imbat

Checklist Completed By: Lorna Imbat

Carrier Name: FedEx

Chain of Custody (COC) Information

Chain of custody present?	Yes
Chain of custody signed when relinquished and received?	Yes
Chain of custody agrees with sample labels?	Yes
Custody seals intact on sample bottles?	Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Not Present
Shipping Container/Cooler In Good Condition?	Yes
Samples in proper container/bottle?	Yes
Samples containers intact?	Yes
Sufficient sample volume for indicated test?	Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes			
Container/Temp Blank temperature in compliance?	Yes	Temperature:	4.0	°C
Water-VOA vials have zero headspace?	Yes			
Water-pH acceptable upon receipt?	Yes			

pH Checked by: Lorna Imbat

pH Adjusted by: n/a

Comments:

Torrent LABORATORY, INC.

Login Summary Report

Client ID: TL5144 Ninyo & Moore
Project Name: Cole Administration Building
Project # : 403668001
Report Due Date: 12/1/2021
Comments:
Work Order # : ***2111198***

QC Level: II
TAT Requested: 10 Day:10
Date Received: 11/17/2021
Time Received: 1:40 pm

WO Sample ID	Client Sample ID	Collection Date/Time	Matrix	Scheduled Disposal	Sample On Hold	Test On Hold	Requested Tests	Subbed
2111198-001A	AOC5-S7-0.5	11/16/21 9:57	Soil	05/15/22			SVO_S_8270CFull Dioxins_8290_S Met_S_6010B CAM17 Hg_S_7471B	
2111198-002A	AOC5-S7-2.0	11/16/21 10:00	Soil	05/15/22			SVO_S_8270CFull Met_S_6010B CAM17 Dioxins_8290_S Hg_S_7471B	
2111198-003A	AOC5-S7-5.0	11/16/21 10:02	Soil	05/15/22			SVO_S_8270CFull Dioxins_8290_S Met_S_6010B CAM17 Hg_S_7471B	
2111198-004A	AOC5-S7-5.0 Dup	11/16/21 9:35	Soil	05/15/22			SVO_S_8270CFull Dioxins_8290_S Met_S_6010B CAM17 Hg_S_7471B	
2111198-005A	EB11162021	11/16/21 9:35	Water	05/15/22			Hg_245.1 Met_W_200.7 CAM17	
2111198-005B	EB11162021	11/16/21 9:35	Water	05/15/22			SVOCs_W_8270C Dioxin_8290_W	

Torrent LABORATORY, INC.

Torrent LABORATORY, INC.
483 Sinclair Frontage Road
Milpitas, CA 95035
Phone: 408.263.5258
FAX: 408.263.8293
www.torrentlab.com

Reset

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO: 211198

Company Name: Ninyo & Moore ☐ Env. ☐ Non Env.			Project #: 403668001 PO#: 403576025
Address: 2020 Challenger Drive, Suite 103			Project Name: Cole Aminstration Building
City: Alameda	State: California	Zip Code: 94501	Comments:
Telephone: (510) 343-3000	Cell: (510) 584-7217		SAMPLER: Jorge Contreras
REPORT TO: Nathan Diem	BILL TO:		EMAIL: ndiem@ninyoandmoore.com

TURNAROUND TIME:
☐ 2 - 8 Hours ☐ 2 Work Days ☐ 5 Work Days
☐ Noon - Nxt Day ☐ 3 Work Days ☐ 7 Work Days
☐ 1 Work Day ☐ 4 Work Days ☒ 10 Work Days

SAMPLE TYPE:
☐ Drinking Water
☐ Storm Water ☐ Air
☒ Waste Water ☐ Wipe
☐ Ground Water ☒ Other
☒ Soil ☐ Product / Bulk

REPORT FORMAT:
☐ Level II - Std.
☐ DoD/DoE Level III
☐ DoD/DoE Level III
☐ Excel - EDD ☐ EDF
☐ Client Specific EDD

ANALYSIS REQUESTED

LAB ID	CANISTER I.D.	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Method 8260)	Title 22 Metals (EPA Method 6010B/7471A)	OCPs (EPA Method 8081A)	PCBs (EPA Method 8082A)	Dioxins/Furans (EPA Method 8290A)	SVOCs (EPA Method 8270)			REMARKS
-001	A	AOC5-S7-0.5	11/16/2021 0957	S	1	G			✓			✓	✓			
-002	A	AOC5-S7-2.0	11/16/2021 1000	S	1	G			✓			✓	✓			
-003	A	AOC5-S7-5.0	11/16/2021 1002	S	1	G			✓			✓	✓			
-004	A	AOC5-S7-5.0 DUP	11/16/2021 1004	S	1	G			✓			✓	✓			
-005	A+B	EB11162021	11/16/2021 0935	W	4	G			X			X	X			

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1	Jorge Contreras (ninyo and moore safe location)		11/16/2021	1254	Leslie Jung	Leslie Jung	11/16/21	1254
2		Leslie Jung	11/17/2021	10:38		Ben Kaharik	11-17-2021	10:35

Cooler Temperature 4 °C Samples Received on ice? Yes ☐ No ☐ Method of Shipment Fed Ex

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

QA-F-065, Rev 1.0, TLICD-959

Ben KAHARIK 11-17-2021 1:40 PM — L.D. Imbsat (11-17-21 1:40)

Page 1 of 1

eurofins | Air Toxics

11/30/2021
Mr. Nathan Diem
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda CA 94501

Project Name: Cole Administration Building
Project #: 403668001
Workorder #: 2111530A

Dear Mr. Nathan Diem

The following report includes the data for the above referenced project for sample(s) received on 11/18/2021 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Monica Tran at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Monica Tran

Project Manager

eurofins | Air Toxics

WORK ORDER #: 2111530A

Work Order Summary

CLIENT:	Mr. Nathan Diem Ninyo & Moore 2020 Challenger Drive Suite 103 Alameda, CA 94501	**BILL TO:**	Accounts Payable - Oakland Ninyo & Moore 2020 Challenger Drive Suite 103 Alameda, CA 94501
PHONE:	510-633-5640	**P.O. #**	
FAX:	(510) 633-5640	**PROJECT #**	403668001 Cole Administration Building
DATE RECEIVED:	11/18/2021	**CONTACT:**	Monica Tran
DATE COMPLETED:	11/30/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG4-5	TO-15	5.5 "Hg	9.9 psi
02A	SG4-10	TO-15	5.3 "Hg	9.6 psi
03A	SG1-5	TO-15	5.9 "Hg	9.9 psi
04A	SG1-5 DUP	TO-15	5.9 "Hg	9.7 psi
05A	SG2-10	TO-15	6.7 "Hg	9.8 psi
06A	SG3-5	TO-15	4.7 "Hg	9.9 psi
07A	SG-1-10	TO-15	3.5 "Hg	10 psi
08A	OA-1	TO-15	5.1 "Hg	1.9 psi
09A	Lab Blank	TO-15	NA	NA
09B	Lab Blank	TO-15	NA	NA
10A	CCV	TO-15	NA	NA
10B	CCV	TO-15	NA	NA
11A	LCS	TO-15	NA	NA
11AA	LCSD	TO-15	NA	NA
11B	LCS	TO-15	NA	NA
11BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 11/30/21

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Ninyo & Moore
Workorder# 2111530A

Seven 1 Liter Summa Canister and one 6 Liter Summa Canister HL samples were received on November 18, 2021. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

The number of samples received did not match the information on the Chain of Custody (COC). Sample OA-1 was added to the analytical request.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG4-5

Lab ID#: 2111530A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.1	7.1	10	18
Carbon Disulfide	4.1	6.0	13	18

Client Sample ID: SG4-10

Lab ID#: 2111530A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Hexane	1.0	2.1	3.5	7.4
Cyclohexane	1.0	4.8	3.4	16
2,2,4-Trimethylpentane	1.0	4.8	4.7	22
Toluene	1.0	2.1	3.8	7.8
m,p-Xylene	1.0	1.3	4.4	5.5

Client Sample ID: SG1-5

Lab ID#: 2111530A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.0	3.0	5.1	15

Client Sample ID: SG1-5 DUP

Lab ID#: 2111530A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.1	9.3	10	23
Carbon Disulfide	4.1	23	13	73
Chloroform	1.0	2.8	5.0	14

Client Sample ID: SG2-10

Lab ID#: 2111530A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Hexane	1.1	3.3	3.8	12

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG2-10

Lab ID#: 2111530A-05A

Chloroform	1.1	3.8	5.2	19
Cyclohexane	1.1	4.2	3.7	14
2,2,4-Trimethylpentane	1.1	1.8	5.0	8.7

Client Sample ID: SG3-5

Lab ID#: 2111530A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Toluene	0.99	0.99	3.7	3.7

Client Sample ID: SG-1-10

Lab ID#: 2111530A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	9.5	11	22	25
2-Propanol	3.8	5.1	9.3	12
Chloroform	0.95	1.4	4.6	6.9
Toluene	0.95	1.3	3.6	4.9

Client Sample ID: OA-1

Lab ID#: 2111530A-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	6.8	21	13	39
Acetone	6.8	59	16	140
2-Propanol	2.7	79	6.7	190
2-Butanone (Methyl Ethyl Ketone)	2.7	4.2	8.0	12
cis-1,2-Dichloroethene	0.68	2.7	2.7	11

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Client Sample ID: SG4-5

Lab ID#: 2111530A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112421**	**Date of Collection:**	**11/15/21 9:28:00 AM**
Dil. Factor:	**2.05**	**Date of Analysis:**	**11/25/21 12:41 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	Not Detected	5.1	Not Detected
Freon 114	1.0	Not Detected	7.2	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
Bromomethane	10	Not Detected	40	Not Detected
Chloroethane	4.1	Not Detected	11	Not Detected
Freon 11	1.0	Not Detected	5.8	Not Detected
Ethanol	10	Not Detected	19	Not Detected
Freon 113	1.0	Not Detected	7.8	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Acetone	10	Not Detected	24	Not Detected
2-Propanol	4.1	7.1	10	18
Carbon Disulfide	4.1	6.0	13	18
3-Chloropropene	4.1	Not Detected	13	Not Detected
Methylene Chloride	10	Not Detected	36	Not Detected
Methyl tert-butyl ether	4.1	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Hexane	1.0	Not Detected	3.6	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.1	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Chloroform	1.0	Not Detected	5.0	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.6	Not Detected
Cyclohexane	1.0	Not Detected	3.5	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.4	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.8	Not Detected
Benzene	1.0	Not Detected	3.3	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.1	Not Detected
Heptane	1.0	Not Detected	4.2	Not Detected
Trichloroethene	1.0	Not Detected	5.5	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.7	Not Detected
1,4-Dioxane	4.1	Not Detected	15	Not Detected
Bromodichloromethane	1.0	Not Detected	6.9	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.2	Not Detected
Toluene	1.0	Not Detected	3.9	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.6	Not Detected
Tetrachloroethene	1.0	Not Detected	7.0	Not Detected
2-Hexanone	4.1	Not Detected	17	Not Detected

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Client Sample ID: SG4-5

Lab ID#: 2111530A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112421**	**Date of Collection: 11/15/21 9:28:00 AM**	
Dil. Factor:	**2.05**	**Date of Analysis: 11/25/21 12:41 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.0	Not Detected	8.7	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.9	Not Detected
Chlorobenzene	1.0	Not Detected	4.7	Not Detected
Ethyl Benzene	1.0	Not Detected	4.4	Not Detected
m,p-Xylene	1.0	Not Detected	4.4	Not Detected
o-Xylene	1.0	Not Detected	4.4	Not Detected
Styrene	1.0	Not Detected	4.4	Not Detected
Bromoform	1.0	Not Detected	10	Not Detected
Cumene	1.0	Not Detected	5.0	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.0	Not Detected
Propylbenzene	1.0	Not Detected	5.0	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.0	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.0	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.3	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,2,4-Trichlorobenzene	4.1	Not Detected	30	Not Detected
Hexachlorobutadiene	4.1	Not Detected	44	Not Detected
Naphthalene	2.0	Not Detected	11	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: SG4-10

Lab ID#: 2111530A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112422**	**Date of Collection:**	**11/15/21 10:28:00 A**
Dil. Factor:	**2.01**	**Date of Analysis:**	**11/25/21 01:10 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	Not Detected	5.0	Not Detected
Freon 114	1.0	Not Detected	7.0	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
1,3-Butadiene	1.0	Not Detected	2.2	Not Detected
Bromomethane	10	Not Detected	39	Not Detected
Chloroethane	4.0	Not Detected	11	Not Detected
Freon 11	1.0	Not Detected	5.6	Not Detected
Ethanol	10	Not Detected	19	Not Detected
Freon 113	1.0	Not Detected	7.7	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Acetone	10	Not Detected	24	Not Detected
2-Propanol	4.0	Not Detected	9.9	Not Detected
Carbon Disulfide	4.0	Not Detected	12	Not Detected
3-Chloropropene	4.0	Not Detected	12	Not Detected
Methylene Chloride	10	Not Detected	35	Not Detected
Methyl tert-butyl ether	4.0	Not Detected	14	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Hexane	1.0	2.1	3.5	7.4
1,1-Dichloroethane	1.0	Not Detected	4.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.0	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Chloroform	1.0	Not Detected	4.9	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.5	Not Detected
Cyclohexane	1.0	4.8	3.4	16
Carbon Tetrachloride	1.0	Not Detected	6.3	Not Detected
2,2,4-Trimethylpentane	1.0	4.8	4.7	22
Benzene	1.0	Not Detected	3.2	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.1	Not Detected
Heptane	1.0	Not Detected	4.1	Not Detected
Trichloroethene	1.0	Not Detected	5.4	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.6	Not Detected
1,4-Dioxane	4.0	Not Detected	14	Not Detected
Bromodichloromethane	1.0	Not Detected	6.7	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.1	Not Detected
Toluene	1.0	2.1	3.8	7.8
trans-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.5	Not Detected
Tetrachloroethene	1.0	Not Detected	6.8	Not Detected
2-Hexanone	4.0	Not Detected	16	Not Detected

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Client Sample ID: SG4-10

Lab ID#: 2111530A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112422**	**Date of Collection:**	**11/15/21 10:28:00 A**
Dil. Factor:	**2.01**	**Date of Analysis:**	**11/25/21 01:10 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.0	Not Detected	8.6	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.7	Not Detected
Chlorobenzene	1.0	Not Detected	4.6	Not Detected
Ethyl Benzene	1.0	Not Detected	4.4	Not Detected
m,p-Xylene	1.0	1.3	4.4	5.5
o-Xylene	1.0	Not Detected	4.4	Not Detected
Styrene	1.0	Not Detected	4.3	Not Detected
Bromoform	1.0	Not Detected	10	Not Detected
Cumene	1.0	Not Detected	4.9	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	6.9	Not Detected
Propylbenzene	1.0	Not Detected	4.9	Not Detected
4-Ethyltoluene	1.0	Not Detected	4.9	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	4.9	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	4.9	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.2	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected
1,2,4-Trichlorobenzene	4.0	Not Detected	30	Not Detected
Hexachlorobutadiene	4.0	Not Detected	43	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: SG1-5

Lab ID#: 2111530A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112423**	**Date of Collection:**	**11/15/21 11:44:00 A**
Dil. Factor:	**2.08**	**Date of Analysis:**	**11/25/21 01:40 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	Not Detected	5.1	Not Detected
Freon 114	1.0	Not Detected	7.3	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
Bromomethane	10	Not Detected	40	Not Detected
Chloroethane	4.2	Not Detected	11	Not Detected
Freon 11	1.0	Not Detected	5.8	Not Detected
Ethanol	10	Not Detected	20	Not Detected
Freon 113	1.0	Not Detected	8.0	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Acetone	10	Not Detected	25	Not Detected
2-Propanol	4.2	Not Detected	10	Not Detected
Carbon Disulfide	4.2	Not Detected	13	Not Detected
3-Chloropropene	4.2	Not Detected	13	Not Detected
Methylene Chloride	10	Not Detected	36	Not Detected
Methyl tert-butyl ether	4.2	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Hexane	1.0	Not Detected	3.7	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.2	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.1	Not Detected
Chloroform	1.0	3.0	5.1	15
1,1,1-Trichloroethane	1.0	Not Detected	5.7	Not Detected
Cyclohexane	1.0	Not Detected	3.6	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.5	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.8	Not Detected
Benzene	1.0	Not Detected	3.3	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.2	Not Detected
Heptane	1.0	Not Detected	4.3	Not Detected
Trichloroethene	1.0	Not Detected	5.6	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.8	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected
Bromodichloromethane	1.0	Not Detected	7.0	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.3	Not Detected
Toluene	1.0	Not Detected	3.9	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.7	Not Detected
Tetrachloroethene	1.0	Not Detected	7.0	Not Detected
2-Hexanone	4.2	Not Detected	17	Not Detected

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Client Sample ID: SG1-5

Lab ID#: 2111530A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112423**	**Date of Collection:**	**11/15/21 11:44:00 A**
Dil. Factor:	**2.08**	**Date of Analysis:**	**11/25/21 01:40 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.0	Not Detected	8.8	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	8.0	Not Detected
Chlorobenzene	1.0	Not Detected	4.8	Not Detected
Ethyl Benzene	1.0	Not Detected	4.5	Not Detected
m,p-Xylene	1.0	Not Detected	4.5	Not Detected
o-Xylene	1.0	Not Detected	4.5	Not Detected
Styrene	1.0	Not Detected	4.4	Not Detected
Bromoform	1.0	Not Detected	11	Not Detected
Cumene	1.0	Not Detected	5.1	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.1	Not Detected
Propylbenzene	1.0	Not Detected	5.1	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.1	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.4	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,2,4-Trichlorobenzene	4.2	Not Detected	31	Not Detected
Hexachlorobutadiene	4.2	Not Detected	44	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SG1-5 DUP

Lab ID#: 2111530A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112708**	**Date of Collection:**	**11/15/21 11:55:00 A**
Dil. Factor:	**2.07**	**Date of Analysis:**	**11/27/21 02:47 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	Not Detected	5.1	Not Detected
Freon 114	1.0	Not Detected	7.2	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
Bromomethane	10	Not Detected	40	Not Detected
Chloroethane	4.1	Not Detected	11	Not Detected
Freon 11	1.0	Not Detected	5.8	Not Detected
Ethanol	10	Not Detected	20	Not Detected
Freon 113	1.0	Not Detected	7.9	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Acetone	10	Not Detected	24	Not Detected
2-Propanol	4.1	9.3	10	23
Carbon Disulfide	4.1	23	13	73
3-Chloropropene	4.1	Not Detected	13	Not Detected
Methylene Chloride	10	Not Detected	36	Not Detected
Methyl tert-butyl ether	4.1	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Hexane	1.0	Not Detected	3.6	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.1	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Chloroform	1.0	2.8	5.0	14
1,1,1-Trichloroethane	1.0	Not Detected	5.6	Not Detected
Cyclohexane	1.0	Not Detected	3.6	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.5	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.8	Not Detected
Benzene	1.0	Not Detected	3.3	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.2	Not Detected
Heptane	1.0	Not Detected	4.2	Not Detected
Trichloroethene	1.0	Not Detected	5.6	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.8	Not Detected
1,4-Dioxane	4.1	Not Detected	15	Not Detected
Bromodichloromethane	1.0	Not Detected	6.9	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.2	Not Detected
Toluene	1.0	Not Detected	3.9	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.6	Not Detected
Tetrachloroethene	1.0	Not Detected	7.0	Not Detected
2-Hexanone	4.1	Not Detected	17	Not Detected

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Client Sample ID: SG1-5 DUP

Lab ID#: 2111530A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112708**	**Date of Collection: 11/15/21 11:55:00 A**	
Dil. Factor:	**2.07**	**Date of Analysis: 11/27/21 02:47 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.0	Not Detected	8.8	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	8.0	Not Detected
Chlorobenzene	1.0	Not Detected	4.8	Not Detected
Ethyl Benzene	1.0	Not Detected	4.5	Not Detected
m,p-Xylene	1.0	Not Detected	4.5	Not Detected
o-Xylene	1.0	Not Detected	4.5	Not Detected
Styrene	1.0	Not Detected	4.4	Not Detected
Bromoform	1.0	Not Detected	11	Not Detected
Cumene	1.0	Not Detected	5.1	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.1	Not Detected
Propylbenzene	1.0	Not Detected	5.1	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.1	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.4	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,2,4-Trichlorobenzene	4.1	Not Detected	31	Not Detected
Hexachlorobutadiene	4.1	Not Detected	44	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SG2-10

Lab ID#: 2111530A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112709**	**Date of Collection:**	**11/16/21 3:00:00 PM**
Dil. Factor:	**2.14**	**Date of Analysis:**	**11/27/21 03:16 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.3	Not Detected
Freon 114	1.1	Not Detected	7.5	Not Detected
Chloromethane	11	Not Detected	22	Not Detected
Vinyl Chloride	1.1	Not Detected	2.7	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Chloroethane	4.3	Not Detected	11	Not Detected
Freon 11	1.1	Not Detected	6.0	Not Detected
Ethanol	11	Not Detected	20	Not Detected
Freon 113	1.1	Not Detected	8.2	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Acetone	11	Not Detected	25	Not Detected
2-Propanol	4.3	Not Detected	10	Not Detected
Carbon Disulfide	4.3	Not Detected	13	Not Detected
3-Chloropropene	4.3	Not Detected	13	Not Detected
Methylene Chloride	11	Not Detected	37	Not Detected
Methyl tert-butyl ether	4.3	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Hexane	1.1	3.3	3.8	12
1,1-Dichloroethane	1.1	Not Detected	4.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.3	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Chloroform	1.1	3.8	5.2	19
1,1,1-Trichloroethane	1.1	Not Detected	5.8	Not Detected
Cyclohexane	1.1	4.2	3.7	14
Carbon Tetrachloride	1.1	Not Detected	6.7	Not Detected
2,2,4-Trimethylpentane	1.1	1.8	5.0	8.7
Benzene	1.1	Not Detected	3.4	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.3	Not Detected
Heptane	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
1,2-Dichloropropane	1.1	Not Detected	4.9	Not Detected
1,4-Dioxane	4.3	Not Detected	15	Not Detected
Bromodichloromethane	1.1	Not Detected	7.2	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.4	Not Detected
Toluene	1.1	Not Detected	4.0	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	4.8	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	5.8	Not Detected
Tetrachloroethene	1.1	Not Detected	7.2	Not Detected
2-Hexanone	4.3	Not Detected	18	Not Detected

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Client Sample ID: SG2-10

Lab ID#: 2111530A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112709**	**Date of Collection:**	**11/16/21 3:00:00 PM**
Dil. Factor:	**2.14**	**Date of Analysis:**	**11/27/21 03:16 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.1	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.2	Not Detected
Chlorobenzene	1.1	Not Detected	4.9	Not Detected
Ethyl Benzene	1.1	Not Detected	4.6	Not Detected
m,p-Xylene	1.1	Not Detected	4.6	Not Detected
o-Xylene	1.1	Not Detected	4.6	Not Detected
Styrene	1.1	Not Detected	4.6	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.2	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.3	Not Detected
Propylbenzene	1.1	Not Detected	5.3	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.3	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.3	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.2	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.5	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.4	Not Detected
1,2,4-Trichlorobenzene	4.3	Not Detected	32	Not Detected
Hexachlorobutadiene	4.3	Not Detected	46	Not Detected
Naphthalene	2.1	Not Detected	11	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SG3-5

Lab ID#: 2111530A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112710**	**Date of Collection:**	**11/16/21 4:02:00 PM**
Dil. Factor:	**1.98**	**Date of Analysis:**	**11/27/21 03:45 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.99	Not Detected	4.9	Not Detected
Freon 114	0.99	Not Detected	6.9	Not Detected
Chloromethane	9.9	Not Detected	20	Not Detected
Vinyl Chloride	0.99	Not Detected	2.5	Not Detected
1,3-Butadiene	0.99	Not Detected	2.2	Not Detected
Bromomethane	9.9	Not Detected	38	Not Detected
Chloroethane	4.0	Not Detected	10	Not Detected
Freon 11	0.99	Not Detected	5.6	Not Detected
Ethanol	9.9	Not Detected	19	Not Detected
Freon 113	0.99	Not Detected	7.6	Not Detected
1,1-Dichloroethene	0.99	Not Detected	3.9	Not Detected
Acetone	9.9	Not Detected	24	Not Detected
2-Propanol	4.0	Not Detected	9.7	Not Detected
Carbon Disulfide	4.0	Not Detected	12	Not Detected
3-Chloropropene	4.0	Not Detected	12	Not Detected
Methylene Chloride	9.9	Not Detected	34	Not Detected
Methyl tert-butyl ether	4.0	Not Detected	14	Not Detected
trans-1,2-Dichloroethene	0.99	Not Detected	3.9	Not Detected
Hexane	0.99	Not Detected	3.5	Not Detected
1,1-Dichloroethane	0.99	Not Detected	4.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.0	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	0.99	Not Detected	3.9	Not Detected
Tetrahydrofuran	0.99	Not Detected	2.9	Not Detected
Chloroform	0.99	Not Detected	4.8	Not Detected
1,1,1-Trichloroethane	0.99	Not Detected	5.4	Not Detected
Cyclohexane	0.99	Not Detected	3.4	Not Detected
Carbon Tetrachloride	0.99	Not Detected	6.2	Not Detected
2,2,4-Trimethylpentane	0.99	Not Detected	4.6	Not Detected
Benzene	0.99	Not Detected	3.2	Not Detected
1,2-Dichloroethane	0.99	Not Detected	4.0	Not Detected
Heptane	0.99	Not Detected	4.0	Not Detected
Trichloroethene	0.99	Not Detected	5.3	Not Detected
1,2-Dichloropropane	0.99	Not Detected	4.6	Not Detected
1,4-Dioxane	4.0	Not Detected	14	Not Detected
Bromodichloromethane	0.99	Not Detected	6.6	Not Detected
cis-1,3-Dichloropropene	0.99	Not Detected	4.5	Not Detected
4-Methyl-2-pentanone	0.99	Not Detected	4.0	Not Detected
Toluene	0.99	0.99	3.7	3.7
trans-1,3-Dichloropropene	0.99	Not Detected	4.5	Not Detected
1,1,2-Trichloroethane	0.99	Not Detected	5.4	Not Detected
Tetrachloroethene	0.99	Not Detected	6.7	Not Detected
2-Hexanone	4.0	Not Detected	16	Not Detected

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Client Sample ID: SG3-5

Lab ID#: 2111530A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112710**	**Date of Collection: 11/16/21 4:02:00 PM**	
Dil. Factor:	**1.98**	**Date of Analysis: 11/27/21 03:45 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.99	Not Detected	8.4	Not Detected
1,2-Dibromoethane (EDB)	0.99	Not Detected	7.6	Not Detected
Chlorobenzene	0.99	Not Detected	4.6	Not Detected
Ethyl Benzene	0.99	Not Detected	4.3	Not Detected
m,p-Xylene	0.99	Not Detected	4.3	Not Detected
o-Xylene	0.99	Not Detected	4.3	Not Detected
Styrene	0.99	Not Detected	4.2	Not Detected
Bromoform	0.99	Not Detected	10	Not Detected
Cumene	0.99	Not Detected	4.9	Not Detected
1,1,2,2-Tetrachloroethane	0.99	Not Detected	6.8	Not Detected
Propylbenzene	0.99	Not Detected	4.9	Not Detected
4-Ethyltoluene	0.99	Not Detected	4.9	Not Detected
1,3,5-Trimethylbenzene	0.99	Not Detected	4.9	Not Detected
1,2,4-Trimethylbenzene	0.99	Not Detected	4.9	Not Detected
1,3-Dichlorobenzene	0.99	Not Detected	6.0	Not Detected
1,4-Dichlorobenzene	0.99	Not Detected	6.0	Not Detected
alpha-Chlorotoluene	0.99	Not Detected	5.1	Not Detected
1,2-Dichlorobenzene	0.99	Not Detected	6.0	Not Detected
1,2,4-Trichlorobenzene	4.0	Not Detected	29	Not Detected
Hexachlorobutadiene	4.0	Not Detected	42	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	98	70-130

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Client Sample ID: SG-1-10

Lab ID#: 2111530A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112711**	**Date of Collection: 11/16/21 4:49:00 PM**	
Dil. Factor:	**1.90**	**Date of Analysis: 11/27/21 04:15 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.95	Not Detected	4.7	Not Detected
Freon 114	0.95	Not Detected	6.6	Not Detected
Chloromethane	9.5	Not Detected	20	Not Detected
Vinyl Chloride	0.95	Not Detected	2.4	Not Detected
1,3-Butadiene	0.95	Not Detected	2.1	Not Detected
Bromomethane	9.5	Not Detected	37	Not Detected
Chloroethane	3.8	Not Detected	10	Not Detected
Freon 11	0.95	Not Detected	5.3	Not Detected
Ethanol	9.5	Not Detected	18	Not Detected
Freon 113	0.95	Not Detected	7.3	Not Detected
1,1-Dichloroethene	0.95	Not Detected	3.8	Not Detected
Acetone	9.5	11	22	25
2-Propanol	3.8	5.1	9.3	12
Carbon Disulfide	3.8	Not Detected	12	Not Detected
3-Chloropropene	3.8	Not Detected	12	Not Detected
Methylene Chloride	9.5	Not Detected	33	Not Detected
Methyl tert-butyl ether	3.8	Not Detected	14	Not Detected
trans-1,2-Dichloroethene	0.95	Not Detected	3.8	Not Detected
Hexane	0.95	Not Detected	3.3	Not Detected
1,1-Dichloroethane	0.95	Not Detected	3.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.8	Not Detected	11	Not Detected
cis-1,2-Dichloroethene	0.95	Not Detected	3.8	Not Detected
Tetrahydrofuran	0.95	Not Detected	2.8	Not Detected
Chloroform	0.95	1.4	4.6	6.9
1,1,1-Trichloroethane	0.95	Not Detected	5.2	Not Detected
Cyclohexane	0.95	Not Detected	3.3	Not Detected
Carbon Tetrachloride	0.95	Not Detected	6.0	Not Detected
2,2,4-Trimethylpentane	0.95	Not Detected	4.4	Not Detected
Benzene	0.95	Not Detected	3.0	Not Detected
1,2-Dichloroethane	0.95	Not Detected	3.8	Not Detected
Heptane	0.95	Not Detected	3.9	Not Detected
Trichloroethene	0.95	Not Detected	5.1	Not Detected
1,2-Dichloropropane	0.95	Not Detected	4.4	Not Detected
1,4-Dioxane	3.8	Not Detected	14	Not Detected
Bromodichloromethane	0.95	Not Detected	6.4	Not Detected
cis-1,3-Dichloropropene	0.95	Not Detected	4.3	Not Detected
4-Methyl-2-pentanone	0.95	Not Detected	3.9	Not Detected
Toluene	0.95	1.3	3.6	4.9
trans-1,3-Dichloropropene	0.95	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	0.95	Not Detected	5.2	Not Detected
Tetrachloroethene	0.95	Not Detected	6.4	Not Detected
2-Hexanone	3.8	Not Detected	16	Not Detected

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Client Sample ID: SG-1-10

Lab ID#: 2111530A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112711**	**Date of Collection: 11/16/21 4:49:00 PM**	
Dil. Factor:	**1.90**	**Date of Analysis: 11/27/21 04:15 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.95	Not Detected	8.1	Not Detected
1,2-Dibromoethane (EDB)	0.95	Not Detected	7.3	Not Detected
Chlorobenzene	0.95	Not Detected	4.4	Not Detected
Ethyl Benzene	0.95	Not Detected	4.1	Not Detected
m,p-Xylene	0.95	Not Detected	4.1	Not Detected
o-Xylene	0.95	Not Detected	4.1	Not Detected
Styrene	0.95	Not Detected	4.0	Not Detected
Bromoform	0.95	Not Detected	9.8	Not Detected
Cumene	0.95	Not Detected	4.7	Not Detected
1,1,2,2-Tetrachloroethane	0.95	Not Detected	6.5	Not Detected
Propylbenzene	0.95	Not Detected	4.7	Not Detected
4-Ethyltoluene	0.95	Not Detected	4.7	Not Detected
1,3,5-Trimethylbenzene	0.95	Not Detected	4.7	Not Detected
1,2,4-Trimethylbenzene	0.95	Not Detected	4.7	Not Detected
1,3-Dichlorobenzene	0.95	Not Detected	5.7	Not Detected
1,4-Dichlorobenzene	0.95	Not Detected	5.7	Not Detected
alpha-Chlorotoluene	0.95	Not Detected	4.9	Not Detected
1,2-Dichlorobenzene	0.95	Not Detected	5.7	Not Detected
1,2,4-Trichlorobenzene	3.8	Not Detected	28	Not Detected
Hexachlorobutadiene	3.8	Not Detected	40	Not Detected
Naphthalene	1.9	Not Detected	10	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	98	70-130

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Client Sample ID: OA-1

Lab ID#: 2111530A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112712**	**Date of Collection:**	**11/15/21 4:15:00 PM**
Dil. Factor:	**1.36**	**Date of Analysis:**	**11/27/21 04:44 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.68	Not Detected	3.4	Not Detected
Freon 114	0.68	Not Detected	4.8	Not Detected
Chloromethane	6.8	Not Detected	14	Not Detected
Vinyl Chloride	0.68	Not Detected	1.7	Not Detected
1,3-Butadiene	0.68	Not Detected	1.5	Not Detected
Bromomethane	6.8	Not Detected	26	Not Detected
Chloroethane	2.7	Not Detected	7.2	Not Detected
Freon 11	0.68	Not Detected	3.8	Not Detected
Ethanol	6.8	21	13	39
Freon 113	0.68	Not Detected	5.2	Not Detected
1,1-Dichloroethene	0.68	Not Detected	2.7	Not Detected
Acetone	6.8	59	16	140
2-Propanol	2.7	79	6.7	190
Carbon Disulfide	2.7	Not Detected	8.5	Not Detected
3-Chloropropene	2.7	Not Detected	8.5	Not Detected
Methylene Chloride	6.8	Not Detected	24	Not Detected
Methyl tert-butyl ether	2.7	Not Detected	9.8	Not Detected
trans-1,2-Dichloroethene	0.68	Not Detected	2.7	Not Detected
Hexane	0.68	Not Detected	2.4	Not Detected
1,1-Dichloroethane	0.68	Not Detected	2.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.7	4.2	8.0	12
cis-1,2-Dichloroethene	0.68	2.7	2.7	11
Tetrahydrofuran	0.68	Not Detected	2.0	Not Detected
Chloroform	0.68	Not Detected	3.3	Not Detected
1,1,1-Trichloroethane	0.68	Not Detected	3.7	Not Detected
Cyclohexane	0.68	Not Detected	2.3	Not Detected
Carbon Tetrachloride	0.68	Not Detected	4.3	Not Detected
2,2,4-Trimethylpentane	0.68	Not Detected	3.2	Not Detected
Benzene	0.68	Not Detected	2.2	Not Detected
1,2-Dichloroethane	0.68	Not Detected	2.8	Not Detected
Heptane	0.68	Not Detected	2.8	Not Detected
Trichloroethene	0.68	Not Detected	3.6	Not Detected
1,2-Dichloropropane	0.68	Not Detected	3.1	Not Detected
1,4-Dioxane	2.7	Not Detected	9.8	Not Detected
Bromodichloromethane	0.68	Not Detected	4.6	Not Detected
cis-1,3-Dichloropropene	0.68	Not Detected	3.1	Not Detected
4-Methyl-2-pentanone	0.68	Not Detected	2.8	Not Detected
Toluene	0.68	Not Detected	2.6	Not Detected
trans-1,3-Dichloropropene	0.68	Not Detected	3.1	Not Detected
1,1,2-Trichloroethane	0.68	Not Detected	3.7	Not Detected
Tetrachloroethene	0.68	Not Detected	4.6	Not Detected
2-Hexanone	2.7	Not Detected	11	Not Detected

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Client Sample ID: OA-1

Lab ID#: 2111530A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112712**	**Date of Collection: 11/15/21 4:15:00 PM**	
Dil. Factor:	**1.36**	**Date of Analysis: 11/27/21 04:44 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.68	Not Detected	5.8	Not Detected
1,2-Dibromoethane (EDB)	0.68	Not Detected	5.2	Not Detected
Chlorobenzene	0.68	Not Detected	3.1	Not Detected
Ethyl Benzene	0.68	Not Detected	3.0	Not Detected
m,p-Xylene	0.68	Not Detected	3.0	Not Detected
o-Xylene	0.68	Not Detected	3.0	Not Detected
Styrene	0.68	Not Detected	2.9	Not Detected
Bromoform	0.68	Not Detected	7.0	Not Detected
Cumene	0.68	Not Detected	3.3	Not Detected
1,1,2,2-Tetrachloroethane	0.68	Not Detected	4.7	Not Detected
Propylbenzene	0.68	Not Detected	3.3	Not Detected
4-Ethyltoluene	0.68	Not Detected	3.3	Not Detected
1,3,5-Trimethylbenzene	0.68	Not Detected	3.3	Not Detected
1,2,4-Trimethylbenzene	0.68	Not Detected	3.3	Not Detected
1,3-Dichlorobenzene	0.68	Not Detected	4.1	Not Detected
1,4-Dichlorobenzene	0.68	Not Detected	4.1	Not Detected
alpha-Chlorotoluene	0.68	Not Detected	3.5	Not Detected
1,2-Dichlorobenzene	0.68	Not Detected	4.1	Not Detected
1,2,4-Trichlorobenzene	2.7	Not Detected	20	Not Detected
Hexachlorobutadiene	2.7	Not Detected	29	Not Detected
Naphthalene	1.4	Not Detected	7.1	Not Detected

Container Type: 6 Liter Summa Canister HL

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	98	70-130

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Client Sample ID: Lab Blank

Lab ID#: 2111530A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112406**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/24/21 02:22 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	5.0	Not Detected	9.4	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 2111530A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112406**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/24/21 02:22 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Naphthalene	1.0	Not Detected	5.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: Lab Blank

Lab ID#: 2111530A-09B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112705**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/27/21 11:52 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	5.0	Not Detected	9.4	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 2111530A-09B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112705**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/27/21 11:52 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Naphthalene	1.0	Not Detected	5.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: CCV

Lab ID#: 2111530A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112402**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/24/21 12:08 PM**

Compound	%Recovery
Freon 12	99
Freon 114	95
Chloromethane	115
Vinyl Chloride	103
1,3-Butadiene	113
Bromomethane	91
Chloroethane	97
Freon 11	97
Ethanol	101
Freon 113	96
1,1-Dichloroethene	94
Acetone	96
2-Propanol	99
Carbon Disulfide	98
3-Chloropropene	102
Methylene Chloride	101
Methyl tert-butyl ether	94
trans-1,2-Dichloroethene	96
Hexane	99
1,1-Dichloroethane	102
2-Butanone (Methyl Ethyl Ketone)	95
cis-1,2-Dichloroethene	91
Tetrahydrofuran	94
Chloroform	102
1,1,1-Trichloroethane	98
Cyclohexane	90
Carbon Tetrachloride	98
2,2,4-Trimethylpentane	97
Benzene	98
1,2-Dichloroethane	104
Heptane	97
Trichloroethene	97
1,2-Dichloropropane	95
1,4-Dioxane	92
Bromodichloromethane	103
cis-1,3-Dichloropropene	97
4-Methyl-2-pentanone	86
Toluene	97
trans-1,3-Dichloropropene	103
1,1,2-Trichloroethane	101
Tetrachloroethene	103
2-Hexanone	93

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Client Sample ID: CCV

Lab ID#: 2111530A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112402**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/24/21 12:08 PM**	

Compound	%Recovery
Dibromochloromethane	107
1,2-Dibromoethane (EDB)	104
Chlorobenzene	101
Ethyl Benzene	98
m,p-Xylene	97
o-Xylene	98
Styrene	98
Bromoform	106
Cumene	99
1,1,2,2-Tetrachloroethane	94
Propylbenzene	100
4-Ethyltoluene	100
1,3,5-Trimethylbenzene	99
1,2,4-Trimethylbenzene	98
1,3-Dichlorobenzene	99
1,4-Dichlorobenzene	98
alpha-Chlorotoluene	98
1,2-Dichlorobenzene	98
1,2,4-Trichlorobenzene	86
Hexachlorobutadiene	90
Naphthalene	79

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: CCV

Lab ID#: 2111530A-10B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112702**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/27/21 09:41 AM**

Compound	%Recovery
Freon 12	95
Freon 114	94
Chloromethane	112
Vinyl Chloride	98
1,3-Butadiene	110
Bromomethane	92
Chloroethane	100
Freon 11	95
Ethanol	104
Freon 113	94
1,1-Dichloroethene	92
Acetone	94
2-Propanol	97
Carbon Disulfide	97
3-Chloropropene	100
Methylene Chloride	100
Methyl tert-butyl ether	93
trans-1,2-Dichloroethene	96
Hexane	99
1,1-Dichloroethane	101
2-Butanone (Methyl Ethyl Ketone)	96
cis-1,2-Dichloroethene	92
Tetrahydrofuran	96
Chloroform	101
1,1,1-Trichloroethane	98
Cyclohexane	89
Carbon Tetrachloride	100
2,2,4-Trimethylpentane	98
Benzene	99
1,2-Dichloroethane	104
Heptane	97
Trichloroethene	100
1,2-Dichloropropane	96
1,4-Dioxane	92
Bromodichloromethane	104
cis-1,3-Dichloropropene	99
4-Methyl-2-pentanone	87
Toluene	98
trans-1,3-Dichloropropene	104
1,1,2-Trichloroethane	100
Tetrachloroethene	104
2-Hexanone	93

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Client Sample ID: CCV

Lab ID#: 2111530A-10B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112702**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/27/21 09:41 AM**	

Compound	%Recovery
Dibromochloromethane	107
1,2-Dibromoethane (EDB)	104
Chlorobenzene	101
Ethyl Benzene	97
m,p-Xylene	98
o-Xylene	98
Styrene	98
Bromoform	107
Cumene	98
1,1,2,2-Tetrachloroethane	93
Propylbenzene	99
4-Ethyltoluene	99
1,3,5-Trimethylbenzene	100
1,2,4-Trimethylbenzene	98
1,3-Dichlorobenzene	98
1,4-Dichlorobenzene	99
alpha-Chlorotoluene	98
1,2-Dichlorobenzene	97
1,2,4-Trichlorobenzene	84
Hexachlorobutadiene	90
Naphthalene	77

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: LCS

Lab ID#: 2111530A-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112403**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/24/21 12:36 PM**	

Compound	%Recovery	Method Limits
Freon 12	97	70-130
Freon 114	96	70-130
Chloromethane	114	70-130
Vinyl Chloride	100	70-130
1,3-Butadiene	110	70-130
Bromomethane	90	70-130
Chloroethane	98	70-130
Freon 11	97	70-130
Ethanol	110	70-130
Freon 113	98	70-130
1,1-Dichloroethene	93	70-130
Acetone	94	70-130
2-Propanol	107	70-130
Carbon Disulfide	98	70-130
3-Chloropropene	99	70-130
Methylene Chloride	98	70-130
Methyl tert-butyl ether	96	70-130
trans-1,2-Dichloroethene	97	70-130
Hexane	100	70-130
1,1-Dichloroethane	102	70-130
2-Butanone (Methyl Ethyl Ketone)	95	70-130
cis-1,2-Dichloroethene	90	70-130
Tetrahydrofuran	96	70-130
Chloroform	99	70-130
1,1,1-Trichloroethane	102	70-130
Cyclohexane	93	70-130
Carbon Tetrachloride	102	70-130
2,2,4-Trimethylpentane	99	70-130
Benzene	99	70-130
1,2-Dichloroethane	106	70-130
Heptane	99	70-130
Trichloroethene	100	70-130
1,2-Dichloropropane	96	70-130
1,4-Dioxane	95	70-130
Bromodichloromethane	103	70-130
cis-1,3-Dichloropropene	100	70-130
4-Methyl-2-pentanone	90	70-130
Toluene	98	70-130
trans-1,3-Dichloropropene	107	70-130
1,1,2-Trichloroethane	107	70-130
Tetrachloroethene	107	70-130
2-Hexanone	98	70-130

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Client Sample ID: LCS

Lab ID#: 2111530A-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112403**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/24/21 12:36 PM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	110	70-130
1,2-Dibromoethane (EDB)	107	70-130
Chlorobenzene	104	70-130
Ethyl Benzene	100	70-130
m,p-Xylene	100	70-130
o-Xylene	101	70-130
Styrene	102	70-130
Bromoform	109	70-130
Cumene	100	70-130
1,1,2,2-Tetrachloroethane	99	70-130
Propylbenzene	103	70-130
4-Ethyltoluene	102	70-130
1,3,5-Trimethylbenzene	103	70-130
1,2,4-Trimethylbenzene	101	70-130
1,3-Dichlorobenzene	102	70-130
1,4-Dichlorobenzene	100	70-130
alpha-Chlorotoluene	100	70-130
1,2-Dichlorobenzene	101	70-130
1,2,4-Trichlorobenzene	79	70-130
Hexachlorobutadiene	83	70-130
Naphthalene	73	60-140

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: LCSD

Lab ID#: 2111530A-11AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112404**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/24/21 01:04 PM**	

Compound	%Recovery	Method Limits
Freon 12	97	70-130
Freon 114	94	70-130
Chloromethane	116	70-130
Vinyl Chloride	97	70-130
1,3-Butadiene	114	70-130
Bromomethane	90	70-130
Chloroethane	97	70-130
Freon 11	96	70-130
Ethanol	106	70-130
Freon 113	97	70-130
1,1-Dichloroethene	91	70-130
Acetone	93	70-130
2-Propanol	108	70-130
Carbon Disulfide	98	70-130
3-Chloropropene	102	70-130
Methylene Chloride	98	70-130
Methyl tert-butyl ether	96	70-130
trans-1,2-Dichloroethene	96	70-130
Hexane	99	70-130
1,1-Dichloroethane	102	70-130
2-Butanone (Methyl Ethyl Ketone)	95	70-130
cis-1,2-Dichloroethene	92	70-130
Tetrahydrofuran	94	70-130
Chloroform	100	70-130
1,1,1-Trichloroethane	101	70-130
Cyclohexane	93	70-130
Carbon Tetrachloride	102	70-130
2,2,4-Trimethylpentane	100	70-130
Benzene	101	70-130
1,2-Dichloroethane	106	70-130
Heptane	99	70-130
Trichloroethene	101	70-130
1,2-Dichloropropane	98	70-130
1,4-Dioxane	94	70-130
Bromodichloromethane	104	70-130
cis-1,3-Dichloropropene	101	70-130
4-Methyl-2-pentanone	89	70-130
Toluene	98	70-130
trans-1,3-Dichloropropene	106	70-130
1,1,2-Trichloroethane	107	70-130
Tetrachloroethene	107	70-130
2-Hexanone	97	70-130

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Client Sample ID: LCSD

Lab ID#: 2111530A-11AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112404**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/24/21 01:04 PM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	110	70-130
1,2-Dibromoethane (EDB)	106	70-130
Chlorobenzene	104	70-130
Ethyl Benzene	102	70-130
m,p-Xylene	100	70-130
o-Xylene	100	70-130
Styrene	101	70-130
Bromoform	108	70-130
Cumene	102	70-130
1,1,2,2-Tetrachloroethane	100	70-130
Propylbenzene	104	70-130
4-Ethyltoluene	104	70-130
1,3,5-Trimethylbenzene	103	70-130
1,2,4-Trimethylbenzene	102	70-130
1,3-Dichlorobenzene	103	70-130
1,4-Dichlorobenzene	101	70-130
alpha-Chlorotoluene	102	70-130
1,2-Dichlorobenzene	102	70-130
1,2,4-Trichlorobenzene	89	70-130
Hexachlorobutadiene	93	70-130
Naphthalene	85	60-140

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: LCS

Lab ID#: 2111530A-11B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112703**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/27/21 10:08 AM**	

Compound	%Recovery	Method Limits
Freon 12	95	70-130
Freon 114	94	70-130
Chloromethane	116	70-130
Vinyl Chloride	97	70-130
1,3-Butadiene	111	70-130
Bromomethane	92	70-130
Chloroethane	98	70-130
Freon 11	96	70-130
Ethanol	107	70-130
Freon 113	96	70-130
1,1-Dichloroethene	94	70-130
Acetone	92	70-130
2-Propanol	107	70-130
Carbon Disulfide	98	70-130
3-Chloropropene	102	70-130
Methylene Chloride	98	70-130
Methyl tert-butyl ether	95	70-130
trans-1,2-Dichloroethene	97	70-130
Hexane	100	70-130
1,1-Dichloroethane	102	70-130
2-Butanone (Methyl Ethyl Ketone)	94	70-130
cis-1,2-Dichloroethene	91	70-130
Tetrahydrofuran	94	70-130
Chloroform	99	70-130
1,1,1-Trichloroethane	101	70-130
Cyclohexane	92	70-130
Carbon Tetrachloride	100	70-130
2,2,4-Trimethylpentane	101	70-130
Benzene	100	70-130
1,2-Dichloroethane	105	70-130
Heptane	100	70-130
Trichloroethene	101	70-130
1,2-Dichloropropane	98	70-130
1,4-Dioxane	94	70-130
Bromodichloromethane	104	70-130
cis-1,3-Dichloropropene	100	70-130
4-Methyl-2-pentanone	88	70-130
Toluene	100	70-130
trans-1,3-Dichloropropene	105	70-130
1,1,2-Trichloroethane	107	70-130
Tetrachloroethene	107	70-130
2-Hexanone	96	70-130

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Client Sample ID: LCS

Lab ID#: 2111530A-11B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112703**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/27/21 10:08 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	110	70-130
1,2-Dibromoethane (EDB)	107	70-130
Chlorobenzene	103	70-130
Ethyl Benzene	101	70-130
m,p-Xylene	100	70-130
o-Xylene	100	70-130
Styrene	101	70-130
Bromoform	109	70-130
Cumene	101	70-130
1,1,2,2-Tetrachloroethane	99	70-130
Propylbenzene	104	70-130
4-Ethyltoluene	102	70-130
1,3,5-Trimethylbenzene	102	70-130
1,2,4-Trimethylbenzene	101	70-130
1,3-Dichlorobenzene	102	70-130
1,4-Dichlorobenzene	100	70-130
alpha-Chlorotoluene	100	70-130
1,2-Dichlorobenzene	100	70-130
1,2,4-Trichlorobenzene	80	70-130
Hexachlorobutadiene	84	70-130
Naphthalene	74	60-140

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: LCSD

Lab ID#: 2111530A-11BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/27/21 10:36 AM**	

Compound	%Recovery	Method Limits
Freon 12	97	70-130
Freon 114	95	70-130
Chloromethane	113	70-130
Vinyl Chloride	99	70-130
1,3-Butadiene	114	70-130
Bromomethane	90	70-130
Chloroethane	99	70-130
Freon 11	97	70-130
Ethanol	109	70-130
Freon 113	98	70-130
1,1-Dichloroethene	93	70-130
Acetone	95	70-130
2-Propanol	108	70-130
Carbon Disulfide	99	70-130
3-Chloropropene	104	70-130
Methylene Chloride	98	70-130
Methyl tert-butyl ether	97	70-130
trans-1,2-Dichloroethene	97	70-130
Hexane	100	70-130
1,1-Dichloroethane	104	70-130
2-Butanone (Methyl Ethyl Ketone)	95	70-130
cis-1,2-Dichloroethene	92	70-130
Tetrahydrofuran	96	70-130
Chloroform	101	70-130
1,1,1-Trichloroethane	102	70-130
Cyclohexane	93	70-130
Carbon Tetrachloride	104	70-130
2,2,4-Trimethylpentane	102	70-130
Benzene	100	70-130
1,2-Dichloroethane	104	70-130
Heptane	99	70-130
Trichloroethene	100	70-130
1,2-Dichloropropane	95	70-130
1,4-Dioxane	93	70-130
Bromodichloromethane	104	70-130
cis-1,3-Dichloropropene	100	70-130
4-Methyl-2-pentanone	88	70-130
Toluene	98	70-130
trans-1,3-Dichloropropene	106	70-130
1,1,2-Trichloroethane	107	70-130
Tetrachloroethene	108	70-130
2-Hexanone	97	70-130

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Client Sample ID: LCSD

Lab ID#: 2111530A-11BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p112704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/27/21 10:36 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	110	70-130
1,2-Dibromoethane (EDB)	105	70-130
Chlorobenzene	103	70-130
Ethyl Benzene	100	70-130
m,p-Xylene	100	70-130
o-Xylene	99	70-130
Styrene	101	70-130
Bromoform	110	70-130
Cumene	100	70-130
1,1,2,2-Tetrachloroethane	99	70-130
Propylbenzene	103	70-130
4-Ethyltoluene	103	70-130
1,3,5-Trimethylbenzene	102	70-130
1,2,4-Trimethylbenzene	101	70-130
1,3-Dichlorobenzene	102	70-130
1,4-Dichlorobenzene	100	70-130
alpha-Chlorotoluene	101	70-130
1,2-Dichlorobenzene	101	70-130
1,2,4-Trichlorobenzene	91	70-130
Hexachlorobutadiene	94	70-130
Naphthalene	84	60-140

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	102	70-130

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11/30/2021
Mr. Nathan Diem
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda CA 94501

Project Name: Cole Administration Building
Project #: 403668001
Workorder #: 2111530B

Dear Mr. Nathan Diem

The following report includes the data for the above referenced project for sample(s) received on 11/18/2021 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Monica Tran at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Monica Tran

Project Manager

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WORK ORDER #: 2111530B

Work Order Summary

CLIENT:	Mr. Nathan Diem Ninyo & Moore 2020 Challenger Drive Suite 103 Alameda, CA 94501	**BILL TO:**	Accounts Payable - Oakland Ninyo & Moore 2020 Challenger Drive Suite 103 Alameda, CA 94501
PHONE:	510-633-5640	**P.O. #**	
FAX:	(510) 633-5640	**PROJECT #**	403668001 Cole Administration Building
DATE RECEIVED:	11/18/2021	**CONTACT:**	Monica Tran
DATE COMPLETED:	11/30/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG4-5	Modified ASTM D-1946	5.5 "Hg	9.9 psi
02A	SG4-10	Modified ASTM D-1946	5.3 "Hg	9.6 psi
03A	SG1-5	Modified ASTM D-1946	5.9 "Hg	9.9 psi
04A	SG1-5 DUP	Modified ASTM D-1946	5.9 "Hg	9.7 psi
05A	SG2-10	Modified ASTM D-1946	6.7 "Hg	9.8 psi
06A	SG3-5	Modified ASTM D-1946	4.7 "Hg	9.9 psi
07A	SG-1-10	Modified ASTM D-1946	3.5 "Hg	10 psi
08A	OA-1	Modified ASTM D-1946	5.1 "Hg	1.9 psi
09A	Lab Blank	Modified ASTM D-1946	NA	NA
09B	Lab Blank	Modified ASTM D-1946	NA	NA
10A	CCV	Modified ASTM D-1946	NA	NA
11A	LCS	Modified ASTM D-1946	NA	NA
11AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 11/30/21

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
Modified ASTM D-1946
Ninyo & Moore
Workorder# 2111530B

Seven 1 Liter Summa Canister and one 6 Liter Summa Canister HL samples were received on November 18, 2021. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the EATL modifications.

Requirement	***ASTM D-1946***	***ATL Modifications***
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A minimum of 5-point calibration curve is performed. Quantitation is based on average Response Factor.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

The number of samples received did not match the information on the Chain of Custody (COC).

Sample OA-1 was added to the analytical request.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.
File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: SG4-5

Lab ID#: 2111530B-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.20	20
Carbon Dioxide	0.020	0.34

Client Sample ID: SG4-10

Lab ID#: 2111530B-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.20	19
Methane	0.00020	0.00083
Carbon Dioxide	0.020	1.5

Client Sample ID: SG1-5

Lab ID#: 2111530B-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.21	18
Carbon Dioxide	0.021	2.3

Client Sample ID: SG1-5 DUP

Lab ID#: 2111530B-04A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.21	18
Carbon Dioxide	0.021	2.3

Client Sample ID: SG2-10

Lab ID#: 2111530B-05A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	3.8
Methane	0.00022	0.00061
Carbon Dioxide	0.022	4.1

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Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: SG3-5

Lab ID#: 2111530B-06A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.20	19
Carbon Dioxide	0.020	0.47

Client Sample ID: SG-1-10

Lab ID#: 2111530B-07A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.19	16
Carbon Dioxide	0.019	0.26
Helium	0.095	18

Client Sample ID: OA-1

Lab ID#: 2111530B-08A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.14	21
Methane	0.00014	0.00030
Carbon Dioxide	0.014	0.052

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Client Sample ID: SG4-5

Lab ID#: 2111530B-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10112928**	**Date of Collection: 11/15/21 9:28:00 AM**	
Dil. Factor:	**2.05**	**Date of Analysis: 11/29/21 04:23 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.20	20
Methane	0.00020	Not Detected
Carbon Dioxide	0.020	0.34
Helium	0.10	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG4-10

Lab ID#: 2111530B-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10112929**	**Date of Collection: 11/15/21 10:28:00 A**	
Dil. Factor:	**2.01**	**Date of Analysis: 11/29/21 04:47 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.20	19
Methane	0.00020	0.00083
Carbon Dioxide	0.020	1.5
Helium	0.10	Not Detected

Container Type: 1 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: SG1-5

Lab ID#: 2111530B-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10112930**	**Date of Collection: 11/15/21 11:44:00 A**	
Dil. Factor:	**2.08**	**Date of Analysis: 11/29/21 05:11 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.21	18
Methane	0.00021	Not Detected
Carbon Dioxide	0.021	2.3
Helium	0.10	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG1-5 DUP

Lab ID#: 2111530B-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10112931**	**Date of Collection:**	**11/15/21 11:55:00 A**
Dil. Factor:	**2.07**	**Date of Analysis:**	**11/29/21 05:34 PM**

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.21	18
Methane	0.00021	Not Detected
Carbon Dioxide	0.021	2.3
Helium	0.10	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG2-10

Lab ID#: 2111530B-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10112932**	**Date of Collection: 11/16/21 3:00:00 PM**	
Dil. Factor:	**2.15**	**Date of Analysis: 11/29/21 06:00 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	3.8
Methane	0.00022	0.00061
Carbon Dioxide	0.022	4.1
Helium	0.11	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG3-5

Lab ID#: 2111530B-06A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10112933**	**Date of Collection: 11/16/21 4:02:00 PM**	
Dil. Factor:	**1.98**	**Date of Analysis: 11/29/21 06:26 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.20	19
Methane	0.00020	Not Detected
Carbon Dioxide	0.020	0.47
Helium	0.099	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-1-10

Lab ID#: 2111530B-07A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10112934**	**Date of Collection: 11/16/21 4:49:00 PM**	
Dil. Factor:	**1.90**	**Date of Analysis: 11/29/21 06:51 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.19	16
Methane	0.00019	Not Detected
Carbon Dioxide	0.019	0.26
Helium	0.095	18

Container Type: 1 Liter Summa Canister

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Client Sample ID: OA-1

Lab ID#: 2111530B-08A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10112935**	**Date of Collection: 11/15/21 4:15:00 PM**	
Dil. Factor:	**1.36**	**Date of Analysis: 11/29/21 07:16 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.14	21
Methane	0.00014	0.00030
Carbon Dioxide	0.014	0.052
Helium	0.068	Not Detected

Container Type: 6 Liter Summa Canister HL

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Client Sample ID: Lab Blank

Lab ID#: 2111530B-09A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10112926**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/29/21 03:26 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.010	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: Lab Blank

Lab ID#: 2111530B-09B

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10112927c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/29/21 03:59 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.050	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: CCV

Lab ID#: 2111530B-10A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10112924**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/29/21 02:33 PM**

Compound	%Recovery
Oxygen	96
Methane	98
Carbon Dioxide	105
Helium	100

Container Type: NA - Not Applicable

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 2111530B-11A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10112925**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/29/21 03:00 PM**	

Compound	%Recovery	Method Limits
Oxygen	96	85-115
Methane	98	85-115
Carbon Dioxide	104	85-115
Helium	111	85-115

Container Type: NA - Not Applicable

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 2111530B-11AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10112949**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/30/21 01:38 AM**	

Compound	%Recovery	Method Limits
Oxygen	96	85-115
Methane	100	85-115
Carbon Dioxide	103	85-115
Helium	112	85-115

Container Type: NA - Not Applicable

Ninyo & Moore
2020 Challenger Drive, Suite 103
Alameda, California 94501
Tel: 510-343-3000

RE: Cole Administration Building

Work Order No.: 2112034 Rev: 1

Dear Nathan Diem:

Torrent Laboratory, Inc. received 1 sample(s) on December 03, 2021 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991 If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.



Kathie Evans
Project Manager

December 08, 2021
Date

Date: 12/8/2021

Client: Ninyo & Moore

Project: Cole Administration Building

Work Order: 2112034

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

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Oxygen, CO2 and methane data is pending.

REVISIONS

Report revised to include Helium data.

Rev. 1 (12/10/21)

Sample Result Summary

Report prepared for: Nathan Diem
Ninyo & Moore

Date Received: 12/03/21
Date Reported: 12/08/21

SG1-10 2112034-001

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3
Helium	D1946	4.2	0.0094	2.1	0.093%
Carbon Disulfide	ETO15	1	0.37	1.6	2.8
Acetone	ETO15	1	0.40	12	25
Chloroform	ETO15	1	0.97	2.4	6.9
2-Butanone (MEK)	ETO15	1	0.39	1.5	3.9

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 12/03/21, 2:30 pm
Date Reported: 12/08/21

Client Sample ID:	SG1-10	**Lab Sample ID:**	2112034-001A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Air
Project Number:	403668001		
Date/Time Sampled:	12/03/21 / 9:49	**Certified Clean WO # :**	
Canister/Tube ID:	A12261	**Received PSI :**	14.6
Collection Volume (L):		**Corrected PSI :**	
SDG:			

Prep Method:	FG-P	**Prep Batch Date/Time:**	12/8/21 2:34:00PM
Prep Batch ID:	1137562	**Prep Analyst:**	BPATEL

Parameters:	Analysis Method	DF	MDL %	PQL %	Results %	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
The results shown below are reported using their MDL.											
Helium	D1946	4.20	0.0094	2.1	0.093		J	12/08/21	15:00	BA	462044

Prep Method:	TO15-P	**Prep Batch Date/Time:**	12/6/21 7:00:00AM
Prep Batch ID:	1137475	**Prep Analyst:**	BPATEL

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	ETO15	1.00	1.6	2.5	ND	ND		12/06/21	16:08	BA	461966
1,1-Difluoroethane	ETO15	1.00	0.35	14	ND	ND		12/06/21	16:08	BA	461966
1,2-Dichlorotetrafluoroethane	ETO15	1.00	1.4	3.5	ND	ND		12/06/21	16:08	BA	461966
Chloromethane	ETO15	1.00	2.0	4.1	ND	ND		12/06/21	16:08	BA	461966
Vinyl Chloride	ETO15	1.00	0.23	1.3	ND	ND		12/06/21	16:08	BA	461966
1,3-Butadiene	ETO15	1.00	0.34	1.1	ND	ND		12/06/21	16:08	BA	461966
Bromomethane	ETO15	1.00	0.66	1.9	ND	ND		12/06/21	16:08	BA	461966
Chloroethane	ETO15	1.00	0.81	1.3	ND	ND		12/06/21	16:08	BA	461966
Trichlorofluoromethane	ETO15	1.00	0.56	2.8	ND	ND		12/06/21	16:08	BA	461966
1,1-Dichloroethene	ETO15	1.00	0.83	2.0	ND	ND		12/06/21	16:08	BA	461966
Freon 113	ETO15	1.00	1.0	3.8	ND	ND		12/06/21	16:08	BA	461966
Carbon Disulfide	ETO15	1.00	0.37	1.6	2.8	0.90		12/06/21	16:08	BA	461966
2-Propanol (Isopropyl Alcohol)	ETO15	1.00	1.3	12	ND	ND		12/06/21	16:08	BA	461966
Methylene Chloride	ETO15	1.00	0.70	10	ND	ND		12/06/21	16:08	BA	461966
Acetone	ETO15	1.00	0.40	12	25	10.50		12/06/21	16:08	BA	461966
trans-1,2-Dichloroethene	ETO15	1.00	0.48	2.0	ND	ND		12/06/21	16:08	BA	461966
Hexane	ETO15	1.00	0.46	1.8	ND	ND		12/06/21	16:08	BA	461966
MTBE	ETO15	1.00	0.44	1.8	ND	ND		12/06/21	16:08	BA	461966
tert-Butanol	ETO15	1.00	0.62	1.5	ND	ND		12/06/21	16:08	BA	461966
Diisopropyl ether (DIPE)	ETO15	1.00	0.74	2.1	ND	ND		12/06/21	16:08	BA	461966
1,1-Dichloroethane	ETO15	1.00	0.54	2.0	ND	ND		12/06/21	16:08	BA	461966
ETBE	ETO15	1.00	0.33	2.1	ND	ND		12/06/21	16:08	BA	461966
cis-1,2-Dichloroethene	ETO15	1.00	0.83	2.0	ND	ND		12/06/21	16:08	BA	461966
Chloroform	ETO15	1.00	0.97	2.4	6.9	1.41		12/06/21	16:08	BA	461966

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 12/03/21, 2:30 pm
Date Reported: 12/08/21

Client Sample ID:	SG1-10	**Lab Sample ID:**	2112034-001A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Air
Project Number:	403668001		
Date/Time Sampled:	12/03/21 / 9:49	**Certified Clean WO # :**	
Canister/Tube ID:	A12261	**Received PSI :**	14.6
Collection Volume (L):		**Corrected PSI :**	
SDG:			

Prep Method:	TO15-P	**Prep Batch Date/Time:**	12/6/21	7:00:00AM
Prep Batch ID:	1137475	**Prep Analyst:**	BPATEL	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Vinyl Acetate	ETO15	1.00	0.76	1.8	ND	ND		12/06/21	16:08	BA	461966
Carbon Tetrachloride	ETO15	1.00	1.1	3.1	ND	ND		12/06/21	16:08	BA	461966
1,1,1-Trichloroethane	ETO15	1.00	0.79	2.7	ND	ND		12/06/21	16:08	BA	461966
2-Butanone (MEK)	ETO15	1.00	0.39	1.5	3.9	1.32		12/06/21	16:08	BA	461966
Ethyl Acetate	ETO15	1.00	0.48	1.8	ND	ND		12/06/21	16:08	BA	461966
Tetrahydrofuran	ETO15	1.00	0.45	1.5	ND	ND		12/06/21	16:08	BA	461966
Benzene	ETO15	1.00	0.44	1.6	ND	ND		12/06/21	16:08	BA	461966
TAME	ETO15	1.00	0.67	2.1	ND	ND		12/06/21	16:08	BA	461966
1,2-Dichloroethane (EDC)	ETO15	1.00	0.42	2.0	ND	ND		12/06/21	16:08	BA	461966
Trichloroethylene	ETO15	1.00	0.81	2.7	ND	ND		12/06/21	16:08	BA	461966
1,2-Dichloropropane	ETO15	1.00	0.76	2.3	ND	ND		12/06/21	16:08	BA	461966
Bromodichloromethane	ETO15	1.00	0.74	3.4	ND	ND		12/06/21	16:08	BA	461966
1,4-Dioxane	ETO15	1.00	1.8	3.6	ND	ND		12/06/21	16:08	BA	461966
trans-1,3-Dichloropropene	ETO15	1.00	1.1	2.3	ND	ND		12/06/21	16:08	BA	461966
Toluene	ETO15	1.00	0.75	1.9	ND	ND		12/06/21	16:08	BA	461966
4-Methyl-2-Pentanone (MIBK)	ETO15	1.00	0.75	2.1	ND	ND		12/06/21	16:08	BA	461966
cis-1,3-Dichloropropene	ETO15	1.00	0.42	2.3	ND	ND		12/06/21	16:08	BA	461966
Tetrachloroethylene	ETO15	1.00	1.5	3.4	ND	ND		12/06/21	16:08	BA	461966
1,1,2-Trichloroethane	ETO15	1.00	0.58	2.7	ND	ND		12/06/21	16:08	BA	461966
Dibromochloromethane	ETO15	1.00	1.1	4.3	ND	ND		12/06/21	16:08	BA	461966
1,2-Dibromoethane (EDB)	ETO15	1.00	0.74	3.8	ND	ND		12/06/21	16:08	BA	461966
2-Hexanone	ETO15	1.00	0.65	2.1	ND	ND		12/06/21	16:08	BA	461966
Ethyl Benzene	ETO15	1.00	0.63	2.2	ND	ND		12/06/21	16:08	BA	461966
Chlorobenzene	ETO15	1.00	0.60	2.3	ND	ND		12/06/21	16:08	BA	461966
1,1,1,2-Tetrachloroethane	ETO15	1.00	0.84	3.4	ND	ND		12/06/21	16:08	BA	461966
m,p-Xylene	ETO15	1.00	0.98	2.2	ND	ND		12/06/21	16:08	BA	461966
o-Xylene	ETO15	1.00	0.30	2.2	ND	ND		12/06/21	16:08	BA	461966
Styrene	ETO15	1.00	0.46	2.1	ND	ND		12/06/21	16:08	BA	461966
Bromoform	ETO15	1.00	1.3	5.2	ND	ND		12/06/21	16:08	BA	461966
1,1,2,2-Tetrachloroethane	ETO15	1.00	0.82	3.4	ND	ND		12/06/21	16:08	BA	461966
4-Ethyl Toluene	ETO15	1.00	0.55	2.5	ND	ND		12/06/21	16:08	BA	461966
1,3,5-Trimethylbenzene	ETO15	1.00	0.30	2.5	ND	ND		12/06/21	16:08	BA	461966
1,2,4-Trimethylbenzene	ETO15	1.00	0.60	2.5	ND	ND		12/06/21	16:08	BA	461966

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 12/03/21, 2:30 pm
Date Reported: 12/08/21

Client Sample ID:	SG1-10	**Lab Sample ID:**	2112034-001A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Air
Project Number:	403668001		
Date/Time Sampled:	12/03/21 / 9:49	**Certified Clean WO # :**	
Canister/Tube ID:	A12261	**Received PSI :**	14.6
Collection Volume (L):		**Corrected PSI :**	
SDG:			

Prep Method:	TO15-P	**Prep Batch Date/Time:**	12/6/21	7:00:00AM
Prep Batch ID:	1137475	**Prep Analyst:**	BPATEL	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
1,4-Dichlorobenzene	ETO15	1.00	0.75	3.0	ND	ND		12/06/21	16:08	BA	461966
1,3-Dichlorobenzene	ETO15	1.00	1.3	3.0	ND	ND		12/06/21	16:08	BA	461966
1,2-Dichlorobenzene	ETO15	1.00	1.1	3.0	ND	ND		12/06/21	16:08	BA	461966
Hexachlorobutadiene	ETO15	1.00	1.9	5.3	ND	ND		12/06/21	16:08	BA	461966
1,2,4-Trichlorobenzene	ETO15	1.00	2.2	3.7	ND	ND		12/06/21	16:08	BA	461966
Naphthalene	ETO15	1.00	1.3	2.6	ND	ND		12/06/21	16:08	BA	461966
(S) 4-Bromofluorobenzene	ETO15	1.00	50	150	100 %			12/06/21	16:08	BA	461966

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2112034	**Prep Method:**	TO15-P	**Prep Date:**	12/06/21	**Prep Batch:**	1137475
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/6/2021	**Analytical Batch:**	461966
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.32	0.50	ND	
1,1-Difluoroethane	0.13	5.0	ND	
1,2-Dichlorotetrafluoroethane	0.20	0.50	ND	
Chloromethane	0.99	2.0	ND	
Vinyl Chloride	0.088	0.50	ND	
1,3-Butadiene	0.15	0.50	ND	
Bromomethane	0.17	0.50	ND	
Chloroethane	0.31	0.50	ND	
Trichlorofluoromethane	0.099	0.50	ND	
1,1-Dichloroethene	0.21	0.50	ND	
Freon 113	0.13	0.50	ND	
Carbon Disulfide	0.12	0.50	ND	
2-Propanol (Isopropyl Alcohol)	0.52	5.0	ND	
Methylene Chloride	0.20	3.0	ND	
Acetone	0.17	5.0	ND	
trans-1,2-Dichloroethene	0.12	0.50	ND	
Hexane	0.13	0.50	ND	
MTBE	0.12	0.50	ND	
tert-Butanol	0.20	0.50	ND	
Diisopropyl ether (DIPE)	0.18	0.50	ND	
1,1-Dichloroethane	0.13	0.50	ND	
ETBE	0.078	0.50	ND	
cis-1,2-Dichloroethene	0.21	0.50	ND	
Chloroform	0.20	0.50	ND	
Vinyl Acetate	0.22	0.50	ND	
Carbon Tetrachloride	0.18	0.50	ND	
1,1,1-Trichloroethane	0.15	0.50	ND	
2-Butanone (MEK)	0.13	0.50	ND	
Ethyl Acetate	0.13	0.50	0.27	
Tetrahydrofuran	0.15	0.50	ND	
Benzene	0.14	0.50	ND	
TAME	0.16	0.50	ND	
1,2-Dichloroethane (EDC)	0.10	0.50	ND	
Trichloroethylene	0.15	0.50	ND	
1,2-Dichloropropane	0.17	0.50	ND	
Bromodichloromethane	0.11	0.50	ND	
1,4-Dioxane	0.50	1.0	ND	
trans-1,3-Dichloropropene	0.23	0.50	ND	
Toluene	0.20	0.50	ND	
4-Methyl-2-Pentanone (MIBK)	0.18	0.50	ND	
cis-1,3-Dichloropropene	0.093	0.50	ND	
Tetrachloroethylene	0.22	0.50	ND	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2112034	**Prep Method:**	TO15-P	**Prep Date:**	12/06/21	**Prep Batch:**	1137475
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/6/2021	**Analytical Batch:**	461966
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
1,1,2-Trichloroethane	0.11	0.50	ND	
Dibromochloromethane	0.13	0.50	ND	
1,2-Dibromoethane (EDB)	0.096	0.50	ND	
2-Hexanone	0.16	0.50	ND	
Ethyl Benzene	0.15	0.50	ND	
Chlorobenzene	0.13	0.50	ND	
1,1,1,2-Tetrachloroethane	0.12	0.50	ND	
m,p-Xylene	0.23	0.50	ND	
o-Xylene	0.070	0.50	ND	
Styrene	0.11	0.50	ND	
Bromoform	0.13	0.50	ND	
1,1,2,2-Tetrachloroethane	0.12	0.50	ND	
4-Ethyl Toluene	0.11	0.50	ND	
1,3,5-Trimethylbenzene	0.061	0.50	ND	
1,2,4-Trimethylbenzene	0.12	0.50	ND	
1,4-Dichlorobenzene	0.12	0.50	ND	
1,3-Dichlorobenzene	0.22	0.50	ND	
1,2-Dichlorobenzene	0.18	0.50	ND	
Hexachlorobutadiene	0.17	0.50	ND	
1,2,4-Trichlorobenzene	0.29	0.50	ND	
Naphthalene	0.24	0.50	ND	
Cyclohexane	0.50	0.50	ND	
Benzyl Chloride	0.20	0.50	ND	
Heptane	0.13	0.50	ND	
(S) 4-Bromofluorobenzene			97	

Work Order:	2112034	**Prep Method:**	FG-P	**Prep Date:**	12/07/21	**Prep Batch:**	1137518
Matrix:	Air	**Analytical Method:**	D1946	**Analyzed Date:**	12/7/2021	**Analytical Batch:**	461999
Units:	ppmv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Ethene	110	500	ND	
Ethane	130	500	ND	
Hydrogen	180	500	ND	
Oxygen	110	500	ND	
Methane	23	50	ND	
Carbon Monoxide	200	500	ND	

MB Summary Report

Work Order:	2112034	**Prep Method:**	FG-P	**Prep Date:**	12/08/21	**Prep Batch:**	1137562
Matrix:	Air	**Analytical Method:**	D1946	**Analyzed Date:**	12/8/2021	**Analytical Batch:**	462044
Units:	ppmv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Helium	22	5000	ND		

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2112034	**Prep Method:**	TO15-P	**Prep Date:**	12/06/21	**Prep Batch:**	1137475
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/6/2021	**Analytical Batch:**	461966
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.21	0.50	ND	8.00	121	121	0.310	65 - 135	30	
Benzene	0.14	0.50	ND	8.00	98.2	95.8	2.58	65 - 135	30	
Trichloroethylene	0.15	0.50	ND	8.00	97.8	95.0	2.98	65 - 135	30	
Toluene	0.20	0.50	ND	8.00	92.3	91.0	1.36	65 - 135	30	
Chlorobenzene	0.13	0.50	ND	8.00	96.1	96.7	0.648	65 - 135	30	
(S) 4-Bromofluorobenzene				20.0	103	108		50 - 150		

Work Order:	2112034	**Prep Method:**	FG-P	**Prep Date:**	12/07/21	**Prep Batch:**	1137518
Matrix:	Air	**Analytical Method:**	D1946	**Analyzed Date:**	12/7/2021	**Analytical Batch:**	461999
Units:	ppmv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Ethene	110	500	ND	2500	75.6	68.7	9.42	65 - 135	30	
Ethane	130	500	ND	2500	77.2	70.6	9.21	65 - 135	30	
Hydrogen	180	500	ND	2500	89.1	86.2	3.19	65 - 135	30	
Oxygen	110	500	ND	2500	110	98.6	11.1	65 - 135	30	
Methane	230	500	ND	2500	113	119	4.81	65 - 135	30	
Carbon Monoxide	200	500	ND	2500	82.5	83.0	0.484	65 - 135	30	

Work Order:	2112034	**Prep Method:**	FG-P	**Prep Date:**	12/08/21	**Prep Batch:**	1137562
Matrix:	Air	**Analytical Method:**	D1946	**Analyzed Date:**	12/9/2021	**Analytical Batch:**	462044
Units:	ppmv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Helium	22	100	ND	5000	97.1	84.0	14.4	65 - 135	30	

Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - **mg/L** and ***mg/Kg*** (equivalent to PPM - parts per million in **liquid** and ***solid***), **ug/L** and ***ug/Kg*** (equivalent to PPB - parts per billion in **liquid** and ***solid***), **ug/m3**, ***mg/m3***, **ppbv** and ***ppmv*** (all units of measure for reporting concentrations in air), **%** (equivalent to 10000 ppm or 1,000,000 ppb), **ug/Wipe** (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H- Indicates that the recommended holding time for the analyte or compound has been exceeded
J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.

Sample Receipt Checklist

Client Name: Ninyo & Moore

Project Name: Cole Administration Building

Work Order No.: 2112034

Date and Time Received: 12/3/2021 2:30:00PM

Received By: ke

Physically Logged By: Lorna Imbat

Checklist Completed By: Lorna Imbat

Carrier Name: FedEx City

Chain of Custody (COC) Information

Chain of custody present?	Yes
Chain of custody signed when relinquished and received?	Yes
Chain of custody agrees with sample labels?	Yes
Custody seals intact on sample bottles?	Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Not Present
Shipping Container/Cooler In Good Condition?	Yes
Samples in proper container/bottle?	Yes
Samples containers intact?	Yes
Sufficient sample volume for indicated test?	Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes
Container/Temp Blank temperature in compliance?	Temperature: °C
Water-VOA vials have zero headspace?	No VOA vials submitted
Water-pH acceptable upon receipt?	N/A

pH Checked by: n/a

pH Adjusted by: n/a

Comments:

Login Summary Report

Client ID: TL5144 Ninyo & Moore
Project Name: Cole Administration Building
Project # : 403668001
Report Due Date: 12/8/2021

QC Level: II
TAT Requested: 3 Day Std:3
Date Received: 12/3/2021
Time Received: 2:30 pm

Comments:

Work Order # : ***2112034***

WO Sample ID	Client Sample ID	Collection Date/Time	Matrix	Scheduled Disposal	Sample On Hold	Test On Hold	Requested Tests	Subbed
2112034-001A	SG1-10	12/03/21 9:49	Air				VOC_A_TO15 VOC_A_FG D1946 VOC_A_FG D1946 EDD	

Sample Note: TO-15,O2,CO2 CH4 and Helium

Torrent LABORATORY, INC.

Torrent LABORATORY, INC.
483 Sinclair Frontage Road
Milpitas, CA 95035
Phone: 408.263.5258
FAX: 408.263.8293
www.torrentlab.com

Reset

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO: 2112034

Company Name: 2020 Challenger Drive, Suite 103 ☐	☐ Env. ☐ Special	Project #: 403668001	PO #:
Address: 2020 Challenger Drive, Suite 103		Project Name: Cole Administration Building	
City: Alameda	State: CA	Zip Code: 94501	Comments:
Telephone: 510-343-3000	Cell: 510-584-7217	SAMPLER: Daysi Nemecio	Quote #:
REPORT TO: Nathan Diem	BILL TO: Nathan Diem	EMAIL: ndiem@ninyoandmoore.com	

TURNAROUND TIME:
☐ 2 - 8 Hours ☐ 2 Work Days ☐ 5 Work Days
☐ Noon - Nxt Day ☒ 3 Work Days ☐ 7 Work Days
☐ 1 Work Day ☐ 4 Work Days ☐ 10 Work Days

SAMPLE TYPE:
☐ Indoor Air
☐ Ambient Air
☒ Soil/Gas Vapor
☐ Other

REPORT FORMAT:
☐ Level II - Std.
☒ Excel - EDD
☐ EDF ☐ Std.-EDD
☐ QC Level III
☐ QC Level IV

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	CANISTER I.D.	Initial Vac.	Final Vac.	Flow Controller #	TO 15 VOCs	TO 15 SIM	TO 17	O_2, CO_2, CH_4 ASTM D1946	Helium (Tracer gas)		REMARKS
-001A	SG1-10	12/3/21 9:49	Air	1	6L (1L)	A12261	-30"Hg	-3.0"Hg	FC1	☒	☐	☐	X	X		
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1	Daysi Nemecio	Daysi Nemecio	12/3/21	11:34	Fed Ex			
2	Fed Ex				Karma	Ed B	12-3-21	14:30

Were Samples Received in Good Condition? ☒ Yes ☐ NO Samples on Ice? ☐ Yes ☐ NO Method of Shipment: Fed Ex City Sample seals intact? ☐ Yes ☐ NO ☐ ~~N/A~~

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

Log In By: _____ Date: _____ Labeled By: _____ Date: _____

Temp _____ °C

Page ___ of ___ Rev. 5

QA-F-066, TLICD-960

Summas rec'd @ ambient

Ninyo & Moore
2020 Challenger Drive, Suite 103
Alameda, California 94501
Tel: 510-343-3000

RE: Cole Administration Building

Work Order No.: 2112034 Rev: 2

Dear Nathan Diem:

Torrent Laboratory, Inc. received 1 sample(s) on December 03, 2021 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991 If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.



Kathie Evans
Project Manager

December 08, 2021
Date

Date: 12/8/2021

Client: Ninyo & Moore

Project: Cole Administration Building

Work Order: 2112034

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Laboratory, Inc.

Oxygen, CO2 and methane data is pending.

REVISIONS

Report revised to include Helium data.

Rev. 1 (12/10/21)

Report revised to include CO2, Oxygen and methane data.

Rev. 2 (12/23/21)

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Nathan Diem
Ninyo & Moore

Date Received: 12/03/21
Date Reported: 12/08/21

SG1-10

2112034-001

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3
Carbon Dioxide	D1946	7.3	0.073	0.37	1.6%
Oxygen	D1946	7.3	0.077	0.37	16%
Helium	D1946	4.2	0.0094	2.1	0.093%
Carbon Disulfide	ETO15	1	0.37	1.6	2.8
Acetone	ETO15	1	0.40	12	25
Chloroform	ETO15	1	0.97	2.4	6.9
2-Butanone (MEK)	ETO15	1	0.39	1.5	3.9

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 12/03/21, 2:30 pm
Date Reported: 12/08/21

Client Sample ID:	SG1-10	**Lab Sample ID:**	2112034-001A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Air
Project Number:	403668001		
Date/Time Sampled:	12/03/21 / 9:49	**Certified Clean WO # :**	
Canister/Tube ID:	A12261	**Received PSI :**	14.6
Collection Volume (L):		**Corrected PSI :**	
SDG:			

Prep Method: FG-P **Prep Batch Date/Time:** 12/8/21 2:34:00PM
Prep Batch ID: 1137562 **Prep Analyst:** BPATEL

Parameters:	Analysis Method	DF	MDL %	PQL %	Results %	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
The results shown below are reported using their MDL.											
Helium	D1946	4.20	0.0094	2.1	0.093		J	12/08/21	15:00	BA	462044

Prep Method: FG-P **Prep Batch Date/Time:** 12/7/21 10:27:00AM
Prep Batch ID: 1137518 **Prep Analyst:** BPATEL

Parameters:	Analysis Method	DF	MDL %	PQL %	Results %	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Carbon Dioxide	D1946	7.30	0.073	0.37	1.6			12/07/21	17:23	BP	461999
Oxygen	D1946	7.30	0.077	0.37	16			12/07/21	17:23	BP	461999
Methane	D1946	7.30	0.017	0.037	ND			12/07/21	17:23	BP	461999

Prep Method: TO15-P **Prep Batch Date/Time:** 12/6/21 7:00:00AM
Prep Batch ID: 1137475 **Prep Analyst:** BPATEL

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	ETO15	1.00	1.6	2.5	ND	ND		12/06/21	16:08	BA	461966
1,1-Difluoroethane	ETO15	1.00	0.35	14	ND	ND		12/06/21	16:08	BA	461966
1,2-Dichlorotetrafluoroethane	ETO15	1.00	1.4	3.5	ND	ND		12/06/21	16:08	BA	461966
Chloromethane	ETO15	1.00	2.0	4.1	ND	ND		12/06/21	16:08	BA	461966
Vinyl Chloride	ETO15	1.00	0.23	1.3	ND	ND		12/06/21	16:08	BA	461966
1,3-Butadiene	ETO15	1.00	0.34	1.1	ND	ND		12/06/21	16:08	BA	461966
Bromomethane	ETO15	1.00	0.66	1.9	ND	ND		12/06/21	16:08	BA	461966
Chloroethane	ETO15	1.00	0.81	1.3	ND	ND		12/06/21	16:08	BA	461966
Trichlorofluoromethane	ETO15	1.00	0.56	2.8	ND	ND		12/06/21	16:08	BA	461966
1,1-Dichloroethene	ETO15	1.00	0.83	2.0	ND	ND		12/06/21	16:08	BA	461966
Freon 113	ETO15	1.00	1.0	3.8	ND	ND		12/06/21	16:08	BA	461966
Carbon Disulfide	ETO15	1.00	0.37	1.6	2.8	0.90		12/06/21	16:08	BA	461966
2-Propanol (Isopropyl Alcohol)	ETO15	1.00	1.3	12	ND	ND		12/06/21	16:08	BA	461966
Methylene Chloride	ETO15	1.00	0.70	10	ND	ND		12/06/21	16:08	BA	461966
Acetone	ETO15	1.00	0.40	12	25	10.50		12/06/21	16:08	BA	461966
trans-1,2-Dichloroethene	ETO15	1.00	0.48	2.0	ND	ND		12/06/21	16:08	BA	461966
Hexane	ETO15	1.00	0.46	1.8	ND	ND		12/06/21	16:08	BA	461966
MTBE	ETO15	1.00	0.44	1.8	ND	ND		12/06/21	16:08	BA	461966

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 12/03/21, 2:30 pm
Date Reported: 12/08/21

Client Sample ID:	SG1-10	**Lab Sample ID:**	2112034-001A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Air
Project Number:	403668001		
Date/Time Sampled:	12/03/21 / 9:49	**Certified Clean WO # :**	
Canister/Tube ID:	A12261	**Received PSI :**	14.6
Collection Volume (L):		**Corrected PSI :**	
SDG:			

Prep Method:	TO15-P	**Prep Batch Date/Time:**	12/6/21	7:00:00AM
Prep Batch ID:	1137475	**Prep Analyst:**	BPATEL	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
tert-Butanol	ETO15	1.00	0.62	1.5	ND	ND		12/06/21	16:08	BA	461966
Diisopropyl ether (DIPE)	ETO15	1.00	0.74	2.1	ND	ND		12/06/21	16:08	BA	461966
1,1-Dichloroethane	ETO15	1.00	0.54	2.0	ND	ND		12/06/21	16:08	BA	461966
ETBE	ETO15	1.00	0.33	2.1	ND	ND		12/06/21	16:08	BA	461966
cis-1,2-Dichloroethene	ETO15	1.00	0.83	2.0	ND	ND		12/06/21	16:08	BA	461966
Chloroform	ETO15	1.00	0.97	2.4	6.9	1.41		12/06/21	16:08	BA	461966
Vinyl Acetate	ETO15	1.00	0.76	1.8	ND	ND		12/06/21	16:08	BA	461966
Carbon Tetrachloride	ETO15	1.00	1.1	3.1	ND	ND		12/06/21	16:08	BA	461966
1,1,1-Trichloroethane	ETO15	1.00	0.79	2.7	ND	ND		12/06/21	16:08	BA	461966
2-Butanone (MEK)	ETO15	1.00	0.39	1.5	3.9	1.32		12/06/21	16:08	BA	461966
Ethyl Acetate	ETO15	1.00	0.48	1.8	ND	ND		12/06/21	16:08	BA	461966
Tetrahydrofuran	ETO15	1.00	0.45	1.5	ND	ND		12/06/21	16:08	BA	461966
Benzene	ETO15	1.00	0.44	1.6	ND	ND		12/06/21	16:08	BA	461966
TAME	ETO15	1.00	0.67	2.1	ND	ND		12/06/21	16:08	BA	461966
1,2-Dichloroethane (EDC)	ETO15	1.00	0.42	2.0	ND	ND		12/06/21	16:08	BA	461966
Trichloroethylene	ETO15	1.00	0.81	2.7	ND	ND		12/06/21	16:08	BA	461966
1,2-Dichloropropane	ETO15	1.00	0.76	2.3	ND	ND		12/06/21	16:08	BA	461966
Bromodichloromethane	ETO15	1.00	0.74	3.4	ND	ND		12/06/21	16:08	BA	461966
1,4-Dioxane	ETO15	1.00	1.8	3.6	ND	ND		12/06/21	16:08	BA	461966
trans-1,3-Dichloropropene	ETO15	1.00	1.1	2.3	ND	ND		12/06/21	16:08	BA	461966
Toluene	ETO15	1.00	0.75	1.9	ND	ND		12/06/21	16:08	BA	461966
4-Methyl-2-Pentanone (MIBK)	ETO15	1.00	0.75	2.1	ND	ND		12/06/21	16:08	BA	461966
cis-1,3-Dichloropropene	ETO15	1.00	0.42	2.3	ND	ND		12/06/21	16:08	BA	461966
Tetrachloroethylene	ETO15	1.00	1.5	3.4	ND	ND		12/06/21	16:08	BA	461966
1,1,2-Trichloroethane	ETO15	1.00	0.58	2.7	ND	ND		12/06/21	16:08	BA	461966
Dibromochloromethane	ETO15	1.00	1.1	4.3	ND	ND		12/06/21	16:08	BA	461966
1,2-Dibromoethane (EDB)	ETO15	1.00	0.74	3.8	ND	ND		12/06/21	16:08	BA	461966
2-Hexanone	ETO15	1.00	0.65	2.1	ND	ND		12/06/21	16:08	BA	461966
Ethyl Benzene	ETO15	1.00	0.63	2.2	ND	ND		12/06/21	16:08	BA	461966
Chlorobenzene	ETO15	1.00	0.60	2.3	ND	ND		12/06/21	16:08	BA	461966
1,1,1,2-Tetrachloroethane	ETO15	1.00	0.84	3.4	ND	ND		12/06/21	16:08	BA	461966
m,p-Xylene	ETO15	1.00	0.98	2.2	ND	ND		12/06/21	16:08	BA	461966
o-Xylene	ETO15	1.00	0.30	2.2	ND	ND		12/06/21	16:08	BA	461966
Styrene	ETO15	1.00	0.46	2.1	ND	ND		12/06/21	16:08	BA	461966
Bromoform	ETO15	1.00	1.3	5.2	ND	ND		12/06/21	16:08	BA	461966
1,1,2,2-Tetrachloroethane	ETO15	1.00	0.82	3.4	ND	ND		12/06/21	16:08	BA	461966
4-Ethyl Toluene	ETO15	1.00	0.55	2.5	ND	ND		12/06/21	16:08	BA	461966

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Nathan Diem
Ninyo & Moore

Date/Time Received: 12/03/21, 2:30 pm
Date Reported: 12/08/21

Client Sample ID:	SG1-10	**Lab Sample ID:**	2112034-001A
Project Name/Location:	Cole Administration Building	**Sample Matrix:**	Air
Project Number:	403668001		
Date/Time Sampled:	12/03/21 / 9:49	**Certified Clean WO # :**	
Canister/Tube ID:	A12261	**Received PSI :**	14.6
Collection Volume (L):		**Corrected PSI :**	
SDG:			

Prep Method:	TO15-P	**Prep Batch Date/Time:**	12/6/21	7:00:00AM
Prep Batch ID:	1137475	**Prep Analyst:**	BPATEL	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
1,3,5-Trimethylbenzene	ETO15	1.00	0.30	2.5	ND	ND		12/06/21	16:08	BA	461966
1,2,4-Trimethylbenzene	ETO15	1.00	0.60	2.5	ND	ND		12/06/21	16:08	BA	461966
1,4-Dichlorobenzene	ETO15	1.00	0.75	3.0	ND	ND		12/06/21	16:08	BA	461966
1,3-Dichlorobenzene	ETO15	1.00	1.3	3.0	ND	ND		12/06/21	16:08	BA	461966
1,2-Dichlorobenzene	ETO15	1.00	1.1	3.0	ND	ND		12/06/21	16:08	BA	461966
Hexachlorobutadiene	ETO15	1.00	1.9	5.3	ND	ND		12/06/21	16:08	BA	461966
1,2,4-Trichlorobenzene	ETO15	1.00	2.2	3.7	ND	ND		12/06/21	16:08	BA	461966
Naphthalene	ETO15	1.00	1.3	2.6	ND	ND		12/06/21	16:08	BA	461966
(S) 4-Bromofluorobenzene	ETO15	1.00	50	150	100 %			12/06/21	16:08	BA	461966

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	2112034	**Prep Method:**	TO15-P	**Prep Date:**	12/06/21	**Prep Batch:**	1137475
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/6/2021	**Analytical Batch:**	461966
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.32	0.50	ND	
1,1-Difluoroethane	0.13	5.0	ND	
1,2-Dichlorotetrafluoroethane	0.20	0.50	ND	
Chloromethane	0.99	2.0	ND	
Vinyl Chloride	0.088	0.50	ND	
1,3-Butadiene	0.15	0.50	ND	
Bromomethane	0.17	0.50	ND	
Chloroethane	0.31	0.50	ND	
Trichlorofluoromethane	0.099	0.50	ND	
1,1-Dichloroethene	0.21	0.50	ND	
Freon 113	0.13	0.50	ND	
Carbon Disulfide	0.12	0.50	ND	
2-Propanol (Isopropyl Alcohol)	0.52	5.0	ND	
Methylene Chloride	0.20	3.0	ND	
Acetone	0.17	5.0	ND	
trans-1,2-Dichloroethene	0.12	0.50	ND	
Hexane	0.13	0.50	ND	
MTBE	0.12	0.50	ND	
tert-Butanol	0.20	0.50	ND	
Diisopropyl ether (DIPE)	0.18	0.50	ND	
1,1-Dichloroethane	0.13	0.50	ND	
ETBE	0.078	0.50	ND	
cis-1,2-Dichloroethene	0.21	0.50	ND	
Chloroform	0.20	0.50	ND	
Vinyl Acetate	0.22	0.50	ND	
Carbon Tetrachloride	0.18	0.50	ND	
1,1,1-Trichloroethane	0.15	0.50	ND	
2-Butanone (MEK)	0.13	0.50	ND	
Ethyl Acetate	0.13	0.50	0.27	
Tetrahydrofuran	0.15	0.50	ND	
Benzene	0.14	0.50	ND	
TAME	0.16	0.50	ND	
1,2-Dichloroethane (EDC)	0.10	0.50	ND	
Trichloroethylene	0.15	0.50	ND	
1,2-Dichloropropane	0.17	0.50	ND	
Bromodichloromethane	0.11	0.50	ND	
1,4-Dioxane	0.50	1.0	ND	
trans-1,3-Dichloropropene	0.23	0.50	ND	
Toluene	0.20	0.50	ND	
4-Methyl-2-Pentanone (MIBK)	0.18	0.50	ND	
cis-1,3-Dichloropropene	0.093	0.50	ND	
Tetrachloroethylene	0.22	0.50	ND	
1,1,2-Trichloroethane	0.11	0.50	ND	
Dibromochloromethane	0.13	0.50	ND	
1,2-Dibromoethane (EDB)	0.096	0.50	ND	

MB Summary Report

Work Order:	2112034	**Prep Method:**	TO15-P	**Prep Date:**	12/06/21	**Prep Batch:**	1137475
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/6/2021	**Analytical Batch:**	461966
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
2-Hexanone	0.16	0.50	ND	
Ethyl Benzene	0.15	0.50	ND	
Chlorobenzene	0.13	0.50	ND	
1,1,1,2-Tetrachloroethane	0.12	0.50	ND	
m,p-Xylene	0.23	0.50	ND	
o-Xylene	0.070	0.50	ND	
Styrene	0.11	0.50	ND	
Bromoform	0.13	0.50	ND	
1,1,2,2-Tetrachloroethane	0.12	0.50	ND	
4-Ethyl Toluene	0.11	0.50	ND	
1,3,5-Trimethylbenzene	0.061	0.50	ND	
1,2,4-Trimethylbenzene	0.12	0.50	ND	
1,4-Dichlorobenzene	0.12	0.50	ND	
1,3-Dichlorobenzene	0.22	0.50	ND	
1,2-Dichlorobenzene	0.18	0.50	ND	
Hexachlorobutadiene	0.17	0.50	ND	
1,2,4-Trichlorobenzene	0.29	0.50	ND	
Naphthalene	0.24	0.50	ND	
Cyclohexane	0.50	0.50	ND	
Benzyl Chloride	0.20	0.50	ND	
Heptane	0.13	0.50	ND	
(S) 4-Bromofluorobenzene			97	

Work Order:	2112034	**Prep Method:**	FG-P	**Prep Date:**	12/07/21	**Prep Batch:**	1137518
Matrix:	Air	**Analytical Method:**	D1946	**Analyzed Date:**	12/21/2021	**Analytical Batch:**	461999
Units:	ppmv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Carbon Dioxide	100	500	ND	
Oxygen	110	500	ND	
Methane	23	50	ND	

Work Order:	2112034	**Prep Method:**	FG-P	**Prep Date:**	12/08/21	**Prep Batch:**	1137562
Matrix:	Air	**Analytical Method:**	D1946	**Analyzed Date:**	12/8/2021	**Analytical Batch:**	462044
Units:	ppmv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Helium	22	5000	ND	

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2112034	**Prep Method:**	TO15-P	**Prep Date:**	12/06/21	**Prep Batch:**	1137475
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/6/2021	**Analytical Batch:**	461966
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.21	0.50	ND	8.00	121	121	0.310	65 - 135	30	
Benzene	0.14	0.50	ND	8.00	98.2	95.8	2.58	65 - 135	30	
Trichloroethylene	0.15	0.50	ND	8.00	97.8	95.0	2.98	65 - 135	30	
Toluene	0.20	0.50	ND	8.00	92.3	91.0	1.36	65 - 135	30	
Chlorobenzene	0.13	0.50	ND	8.00	96.1	96.7	0.648	65 - 135	30	
(S) 4-Bromofluorobenzene				20.0	103	108		50 - 150		

Work Order:	2112034	**Prep Method:**	FG-P	**Prep Date:**	12/07/21	**Prep Batch:**	1137518
Matrix:	Air	**Analytical Method:**	D1946	**Analyzed Date:**	12/22/2021	**Analytical Batch:**	461999
Units:	ppmv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Carbon Dioxide	100	500	ND	2500	90.3	72.4	22.1	65 - 135	30	
Oxygen	110	500	ND	2500	98.5	106	7.81	65 - 135	30	
Methane	230	500	ND	2500	89.0	85.2	4.59	65 - 135	30	

Work Order:	2112034	**Prep Method:**	FG-P	**Prep Date:**	12/08/21	**Prep Batch:**	1137562
Matrix:	Air	**Analytical Method:**	D1946	**Analyzed Date:**	12/9/2021	**Analytical Batch:**	462044
Units:	ppmv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Helium	22	100	ND	5000	97.1	84.0	14.4	65 - 135	30	

Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - **mg/L** and ***mg/Kg*** (equivalent to PPM - parts per million in **liquid** and ***solid***), **ug/L** and ***ug/Kg*** (equivalent to PPB - parts per billion in **liquid** and ***solid***), **ug/m3**, ***mg/m3***, **ppbv** and ***ppmv*** (all units of measure for reporting concentrations in air), **%** (equivalent to 10000 ppm or 1,000,000 ppb), **ug/Wipe** (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H- Indicates that the recommended holding time for the analyte or compound has been exceeded
J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.

Sample Receipt Checklist

Client Name: Ninyo & Moore

Project Name: Cole Administration Building

Work Order No.: 2112034

Date and Time Received: 12/3/2021 2:30:00PM

Received By: ke

Physically Logged By: Lorna Imbat

Checklist Completed By: Lorna Imbat

Carrier Name: FedEx City

Chain of Custody (COC) Information

Chain of custody present?	Yes
Chain of custody signed when relinquished and received?	Yes
Chain of custody agrees with sample labels?	Yes
Custody seals intact on sample bottles?	Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Not Present
Shipping Container/Cooler In Good Condition?	Yes
Samples in proper container/bottle?	Yes
Samples containers intact?	Yes
Sufficient sample volume for indicated test?	Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes
Container/Temp Blank temperature in compliance?	Temperature: °C
Water-VOA vials have zero headspace?	No VOA vials submitted
Water-pH acceptable upon receipt?	N/A

pH Checked by: n/a

pH Adjusted by: n/a

Comments:

Login Summary Report

Client ID:	TL5144 Ninyo & Moore	**QC Level:**	II
Project Name:	Cole Administration Building	**TAT Requested:**	3 Day Std:3
Project # :	403668001	**Date Received:**	12/3/2021
Report Due Date:	12/8/2021	**Time Received:**	2:30 pm

Comments:

Work Order # : ***2112034***

WO Sample ID	Client Sample ID	Collection Date/Time	Matrix	Scheduled Disposal	Sample On Hold	Test On Hold	Requested Tests	Subbed
2112034-001A	SG1-10	12/03/21 9:49	Air				VOC_A_TO15 VOC_A_FG D1946 EDD VOC_A_FG D1946	

Sample Note: TO-15,O2,CO2 CH4 and Helium

Torrent LABORATORY, INC.

Torrent LABORATORY, INC.
483 Sinclair Frontage Road
Milpitas, CA 95035
Phone: 408.263.5258
FAX: 408.263.8293
www.torrentlab.com

Reset

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO: 2112034

Company Name: 2020 Challenger Drive, Suite 103 ☐		☐ Env. ☐ Special	Project #: 403668001 PO #:
Address: 2020 Challenger Drive, Suite 103			Project Name: Cole Administration Building
City: Alameda	State: CA	Zip Code: 94501	Comments:
Telephone: 510-343-3000	Cell: 510-584-7217		SAMPLER: Daysi Nemecio Quote #:
REPORT TO: Nathan Diem	BILL TO: Nathan Diem		EMAIL: ndiem@ninyoandmoore.com

TURNAROUND TIME:
☐ 2 - 8 Hours ☐ 2 Work Days ☐ 5 Work Days
☐ Noon - Nxt Day ☒ 3 Work Days ☐ 7 Work Days
☐ 1 Work Day ☐ 4 Work Days ☐ 10 Work Days

SAMPLE TYPE:
☐ Indoor Air
☐ Ambient Air
☒ Soil/Gas Vapor
☐ Other

REPORT FORMAT:
☐ Level II - Std.
☒ Excel - EDD
☐ EDF ☐ Std.-EDD
☐ QC Level III
☐ QC Level IV

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	CANISTER I.D.	Initial Vac.	Final Vac.	Flow Controller #	TO 15 VOCs	TO 15 SIM	TO 17	O_2, CO_2, CH_4 ASTM D1946	Helium (Tracer gas)		REMARKS
001A	SG1-10	12/3/21 9:49	Air	1	6L (1L)	A12261	-30"Hg	-3.0"Hg	FC1	☒	☐	☐	X	X		
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				
					6L 1L					☐	☐	☐				

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1	Daysi Nemecio	Daysi Nemecio	12/3/21	11:34	Fed Ex			
2	Fed Ex				Karma	Ed B	12-3-21	14:30

Were Samples Received in Good Condition? ☒ Yes ☐ NO Samples on Ice? ☐ Yes ☐ NO Method of Shipment Fed Ex City Sample seals intact? ☐ Yes ☐ NO ☐ ~~N/A~~

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

Log In By:_____ Date:_____ Labeled By:_____ Date:_____ Temp _____ °C Page ___ of ___ Rev. 5

QA-F-066, TLICD-960

Summas rec'd @ ambient

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-80878-1
Client Project/Site: Cole School PEA
Revision: 1

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/14/2021 3:13:12 PM

Justinn Gonzales, Project Manager I
(925)484-1919
Justinn.Gonzales@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
P	The %RPD between the primary and confirmation column/detector is >40%. The higher value has been reported
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 320-80878-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-80878-1

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 11/18/2021. The report (revision 1) is being revised due to: Report samples to MDL per client request.

Receipt
The samples were received on 10/27/2021 12:54 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.3º C.

GC Semi VOA
Method 8081A: The following samples were diluted due to the nature of the sample matrix: (320-80878-A-25-B MS), (320-80878-A-25-C MSD), (320-80878-A-33-C MS) and (320-80878-A-33-D MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8081A: The following samples were diluted due to the nature of the sample matrix : AOC1/AOC2-S5-0.5 (320-80878-6), AOC1-S6-0.5 (320-80878-8), AOC1/AOC7-S8-0.5 (320-80878-10), AOC1/AOC8-S10-0.5 (320-80878-13), AOC2-S12-0.5 (320-80878-17), AOC3/AOC8-S1A-0.5 (320-80878-25), AOC3-S1B-0.5 (320-80878-27), AOC3-S1C-0.5 (320-80878-29), AOC3-S2B-0.5 (320-80878-31) and AOC3-S2C-0.5 (320-80878-33). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8081A: The %RPD between the primary and confirmation column exceeded 40% for 4,4'-DDD and Endrin ketone for the following samples: (320-80878-A-25-B MS) and (320-80878-A-25-C MSD). The primary column values have been reported and qualified in accordance with the laboratory's SOP.

Method 8081A: The %RPD between the primary and confirmation column exceeded 40% for cis-Chlordane and 4,4'-DDE for the following samples: AOC1-S3-0.5 (320-80878-1), AOC1/AOC8-S4-0.5 (320-80878-3) and AOC1/AOC8-S4-0.5DUP (320-80878-4). The primary column values have been reported and qualified in accordance with the laboratory's SOP.

Method 8081A: The DCB Decachlorobiphenyl surrogate recovery for the following samples was outside acceptance limits (low biased) on the primary column: (LCS 320-537878/3-A). The recovery is within acceptance limits on the other column therefore, the data have been reported from confirmation column.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC1-S3-0.5 (320-80878-1), AOC1/AOC8-S4-0.5 (320-80878-3), AOC1/AOC8-S4-0.5DUP (320-80878-4), AOC1/AOC7-S8-2 (320-80878-11), AOC1/AOC7-S8-2DUP (320-80878-12) and AOC1-S11-0.5 (320-80878-15), AOC2-S12-0.5DUP (320-80878-18), AOC2/AOC3-S13/S3I-0.5 (320-80878-21), AOC2-S14-0.5 (320-80878-23), AOC3-S1B-2 (320-80878-28), AOC3-S1C-2 (320-80878-30) and AOC3-S2B-2 (320-80878-32). Elevated reporting limits (RLs) are provided.

Method 8081A: Surrogate recovery for the following samples were outside control limits: AOC1-S3-0.5 (320-80878-1), AOC1/AOC8-S4-0.5 (320-80878-3), AOC1/AOC8-S4-2 (320-80878-5), AOC1/AOC7-S8-2DUP (320-80878-12), AOC1/AOC8-S10-2 (320-80878-14), AOC2-S12-0.5DUP (320-80878-18), AOC2/AOC3-S13/S3I-0.5 (320-80878-21), AOC2-S14-2 (320-80878-24), AOC3/AOC8-S1A-2 (320-80878-26) and AOC3-S2B-2 (320-80878-32). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8082: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 320-539070 and analytical batch 320-543265 was outside control limits. Sample non-homogeneity is suspected.

Method 8082: Surrogate recovery for the following samples were outside control limits: AOC1-S3-0.5 (320-80878-1), AOC1/AOC7-S8-0.5 (320-80878-10), AOC1/AOC8-S10-0.5 (320-80878-13), AOC1-S11-0.5 (320-80878-15) and AOC2-S12-0.5 (320-80878-17). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Job ID: 320-80878-1 (Continued)

Laboratory: Eurofins TestAmerica, Sacramento (Continued)

Method 8082: The continuing calibration verification (CCV) associated with batch 320-543551 recovered above the upper control limit for PCB-1254. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: AOC1-S3-0.5 (320-80878-1), AOC1/AOC8-S4-0.5 (320-80878-3), AOC1/AOC8-S4-0.5DUP (320-80878-4), AOC1/AOC2-S5-0.5 (320-80878-6), AOC1-S6-0.5 (320-80878-8), AOC1/AOC7-S8-0.5 (320-80878-10), AOC1/AOC8-S10-0.5 (320-80878-13), AOC1-S11-0.5 (320-80878-15), AOC2-S12-0.5 (320-80878-17), (CCV 320-543551/4), (LCS 320-539050/2-A), (MB 320-539050/1-A), (320-80878-A-17-D MS) and (320-80878-A-17-E MSD).

Method 8082: EPA Method 8082/8082A requires a minimum of 3 peaks to be used for PCB quantitation. Due to the presence of matrix interferences in the following sample(s), only four peaks were used for quantitation.

Method 8082: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-539050 and analytical batch 320-543551 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-538884 and analytical batch 320-539464 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-191082. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1-S3-0.5 — Lab Sample ID: 320-80878-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDD	1.3	J p	3.4	0.45	ug/Kg	2		8081A	Total/NA
4,4'-DDE	3.6	p	3.4	0.41	ug/Kg	2		8081A	Total/NA
4,4'-DDT	0.51	J p	3.4	0.49	ug/Kg	2		8081A	Total/NA
cis-Chlordane	5.5	P	3.4	0.36	ug/Kg	2		8081A	Total/NA
Dieldrin	2.3	J	3.4	0.39	ug/Kg	2		8081A	Total/NA
trans-Chlordane	1.5	J	3.4	1.2	ug/Kg	2		8081A	Total/NA
PCB-1260	6.0	J	33	2.7	ug/Kg	1		8082	Total/NA
Lead	250		0.50	0.13	mg/Kg	1		6010B	Total/NA
Arsenic	3.3		1.0	0.65	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1-S3-2 — Lab Sample ID: 320-80878-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDE	0.29	J	1.7	0.21	ug/Kg	1		8081A	Total/NA
4,4'-DDT	1.0	J	1.7	0.25	ug/Kg	1		8081A	Total/NA
cis-Chlordane	0.70	J P	1.7	0.18	ug/Kg	1		8081A	Total/NA
Dieldrin	0.24	J	1.7	0.20	ug/Kg	1		8081A	Total/NA

Client Sample ID: AOC1/AOC8-S4-0.5 — Lab Sample ID: 320-80878-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDE	15		8.2	1.0	ug/Kg	5		8081A	Total/NA
4,4'-DDT	31		8.2	1.2	ug/Kg	5		8081A	Total/NA
cis-Chlordane	62	P	8.2	0.86	ug/Kg	5		8081A	Total/NA
Dieldrin	45		8.2	0.96	ug/Kg	5		8081A	Total/NA
trans-Chlordane	23		8.2	2.9	ug/Kg	5		8081A	Total/NA
Heptachlor epoxide	5.6	J	8.2	0.86	ug/Kg	5		8081A	Total/NA
PCB-1260	43		32	2.6	ug/Kg	1		8082	Total/NA
Lead	730		0.97	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	7.4		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1/AOC8-S4-0.5DUP — Lab Sample ID: 320-80878-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDE	13		8.0	0.98	ug/Kg	5		8081A	Total/NA
4,4'-DDT	27		8.0	1.2	ug/Kg	5		8081A	Total/NA
cis-Chlordane	70	P	8.0	0.84	ug/Kg	5		8081A	Total/NA
Dieldrin	18		8.0	0.94	ug/Kg	5		8081A	Total/NA
trans-Chlordane	25		8.0	2.8	ug/Kg	5		8081A	Total/NA
Heptachlor epoxide	4.8	J	8.0	0.84	ug/Kg	5		8081A	Total/NA
PCB-1260	37		31	2.5	ug/Kg	1		8082	Total/NA
Lead	620		0.99	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	9.2		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1/AOC8-S4-2 — Lab Sample ID: 320-80878-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-Chlordane	0.51	J P	1.7	0.18	ug/Kg	1		8081A	Total/NA
Dieldrin	0.28	J	1.7	0.20	ug/Kg	1		8081A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1/AOC2-S5-0.5 — Lab Sample ID: 320-80878-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.1		1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	3.4		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1/AOC2-S5-2 — Lab Sample ID: 320-80878-7

No Detections.

Client Sample ID: AOC1-S6-0.5 — Lab Sample ID: 320-80878-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	4.0	J	17	2.5	ug/Kg	10		8081A	Total/NA
Lead	140		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	3.8		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1-S6-2 — Lab Sample ID: 320-80878-9

No Detections.

Client Sample ID: AOC1/AOC7-S8-0.5 — Lab Sample ID: 320-80878-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	56		0.99	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	1.9	J	2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1/AOC7-S8-2 — Lab Sample ID: 320-80878-11

No Detections.

Client Sample ID: AOC1/AOC7-S8-2DUP — Lab Sample ID: 320-80878-12

No Detections.

Client Sample ID: AOC1/AOC8-S10-0.5 — Lab Sample ID: 320-80878-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDD	2.6	J	17	2.3	ug/Kg	10		8081A	Total/NA
4,4'-DDE	3.9	J P	17	2.1	ug/Kg	10		8081A	Total/NA
4,4'-DDT	2.7	J	17	2.5	ug/Kg	10		8081A	Total/NA
PCB-1254	4.3	J	33	3.8	ug/Kg	1		8082	Total/NA
Lead	70		0.97	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	2.7		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1/AOC8-S10-2 — Lab Sample ID: 320-80878-14

No Detections.

Client Sample ID: AOC1-S11-0.5 — Lab Sample ID: 320-80878-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDE	3.2	J	8.2	1.0	ug/Kg	5		8081A	Total/NA
4,4'-DDT	4.7	J	8.2	1.2	ug/Kg	5		8081A	Total/NA
cis-Chlordane	4.8	J P	8.2	0.87	ug/Kg	5		8081A	Total/NA
Dieldrin	2.9	J	8.2	0.97	ug/Kg	5		8081A	Total/NA
PCB-1260	27	J p	32	2.6	ug/Kg	1		8082	Total/NA
Lead	450		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	4.1		2.0	1.3	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1-S11-2 — Lab Sample ID: 320-80878-16

No Detections.

Client Sample ID: AOC2-S12-0.5 — Lab Sample ID: 320-80878-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	54		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	3.4		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC2-S12-0.5DUP — Lab Sample ID: 320-80878-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	52		1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	3.1		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC2-S12-2 — Lab Sample ID: 320-80878-19

No Detections.

Client Sample ID: AOC2-S12-2DUP — Lab Sample ID: 320-80878-20

No Detections.

Client Sample ID: AOC2/AOC3-S13/S3I-0.5 — Lab Sample ID: 320-80878-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	14		1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	18		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC2/AOC3-S13/S3I-2 — Lab Sample ID: 320-80878-22

No Detections.

Client Sample ID: AOC2-S14-0.5 — Lab Sample ID: 320-80878-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	69		0.95	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	2.9		1.9	1.2	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC2-S14-2 — Lab Sample ID: 320-80878-24

No Detections.

Client Sample ID: AOC3/AOC8-S1A-0.5 — Lab Sample ID: 320-80878-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	12		2.5	2.3	mg/Kg	1		6010B	Total/NA
Barium	78		0.50	0.22	mg/Kg	1		6010B	Total/NA
Cadmium	0.45	J	0.50	0.20	mg/Kg	1		6010B	Total/NA
Cobalt	7.6		1.0	0.23	mg/Kg	1		6010B	Total/NA
Chromium	16		1.0	0.18	mg/Kg	1		6010B	Total/NA
Copper	26		1.0	0.51	mg/Kg	1		6010B	Total/NA
Molybdenum	0.46	J	0.50	0.45	mg/Kg	1		6010B	Total/NA
Nickel	15		0.50	0.43	mg/Kg	1		6010B	Total/NA
Selenium	2.4	J	5.0	1.9	mg/Kg	1		6010B	Total/NA
Vanadium	25		1.0	0.17	mg/Kg	1		6010B	Total/NA
Zinc	84		10	5.1	mg/Kg	1		6010B	Total/NA
Lead	60		5.0	0.97	mg/Kg	1		6010B	Total/NA
Mercury	0.14		0.079	0.013	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC3/AOC8-S1A-2 — Lab Sample ID: 320-80878-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Heptachlor	0.17	J	1.7	0.15	ug/Kg	1		8081A	Total/NA

Client Sample ID: AOC3-S1B-0.5 — Lab Sample ID: 320-80878-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDE	18	J	32	4.0	ug/Kg	20		8081A	Total/NA
Lead	120	F2 B	1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	5.6		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S1B-2 — Lab Sample ID: 320-80878-28

No Detections.

Client Sample ID: AOC3-S1C-0.5 — Lab Sample ID: 320-80878-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	180	B	0.99	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	4.0		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S1C-2 — Lab Sample ID: 320-80878-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	1.7	J	8.0	1.2	ug/Kg	5		8081A	Total/NA

Client Sample ID: AOC3-S2B-0.5 — Lab Sample ID: 320-80878-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	160	B	0.96	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	2.7		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S2B-2 — Lab Sample ID: 320-80878-32

No Detections.

Client Sample ID: AOC3-S2C-0.5 — Lab Sample ID: 320-80878-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	640	B	0.95	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	5.2		1.9	1.2	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S2C-2 — Lab Sample ID: 320-80878-34

No Detections.

Client Sample ID: EB10262021 — Lab Sample ID: 320-80878-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.0017	J	0.010	0.0012	mg/L	1		6010B	Total/NA
Vanadium	0.0021	J	0.010	0.0017	mg/L	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AOC1-S3-0.5

Date Collected: 10/26/21 08:43
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-1

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**1.3**	**J p**	3.4	0.45	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
4,4'-DDE	**3.6**	**p**	3.4	0.41	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
4,4'-DDT	**0.51**	**J p**	3.4	0.49	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
Aldrin	ND		3.4	0.28	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
alpha-BHC	ND		3.4	0.32	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
cis-Chlordane	**5.5**	**P**	3.4	0.36	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
beta-BHC	ND		3.4	0.43	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
Chlordane (technical)	ND		39	19	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
delta-BHC	ND		3.4	0.69	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
Dieldrin	**2.3**	**J**	3.4	0.39	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
Endosulfan I	ND		3.4	0.36	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
Endosulfan II	ND		3.4	0.36	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
Endosulfan sulfate	ND		3.4	0.69	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
Endrin	ND		3.4	0.39	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
Endrin aldehyde	ND		3.4	1.1	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
Endrin ketone	ND		3.4	0.53	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
trans-Chlordane	**1.5**	**J**	3.4	1.2	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
gamma-BHC (Lindane)	ND		3.4	0.28	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
Heptachlor	ND		3.4	0.30	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
Heptachlor epoxide	ND		3.4	0.36	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
Methoxychlor	ND		6.7	1.1	ug/Kg		11/02/21 04:39	11/09/21 15:36	2
Toxaphene	ND		130	44	ug/Kg		11/02/21 04:39	11/09/21 15:36	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*21*	*S1-*	*46 - 109*	*11/02/21 04:39*	*11/09/21 15:36*	*2*
DCB Decachlorobiphenyl	*32*	*S1-*	*46 - 109*	*11/02/21 04:39*	*11/09/21 15:36*	*2*
Tetrachloro-m-xylene	*63*		*47 - 107*	*11/02/21 04:39*	*11/09/21 15:36*	*2*
Tetrachloro-m-xylene	*62*		*47 - 107*	*11/02/21 04:39*	*11/09/21 15:36*	*2*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/02/21 04:41	11/17/21 15:01	1
PCB-1221	ND		33	3.6	ug/Kg		11/02/21 04:41	11/17/21 15:01	1
PCB-1232	ND		33	4.7	ug/Kg		11/02/21 04:41	11/17/21 15:01	1
PCB-1242	ND		33	5.8	ug/Kg		11/02/21 04:41	11/17/21 15:01	1
PCB-1248	ND		33	2.4	ug/Kg		11/02/21 04:41	11/17/21 15:01	1
PCB-1254	ND		33	3.8	ug/Kg		11/02/21 04:41	11/17/21 15:01	1
PCB-1260	**6.0**	**J**	33	2.7	ug/Kg		11/02/21 04:41	11/17/21 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*25*	*S1-*	*52 - 138*	*11/02/21 04:41*	*11/17/21 15:01*	*1*
Tetrachloro-m-xylene	*66*		*56 - 114*	*11/02/21 04:41*	*11/17/21 15:01*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**250**		0.50	0.13	mg/Kg		10/29/21 13:31	11/02/21 09:37	1
Arsenic	**3.3**		1.0	0.65	mg/Kg		10/29/21 13:31	11/02/21 09:37	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1-S3-2
Date Collected: 10/26/21 08:45
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-2
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
4,4'-DDE	**0.29**	**J**	1.7	0.21	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
4,4'-DDT	**1.0**	**J**	1.7	0.25	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
Aldrin	ND		1.7	0.14	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
cis-Chlordane	**0.70**	**J P**	1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
Dieldrin	**0.24**	**J**	1.7	0.20	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
Endrin	ND		1.7	0.20	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/02/21 04:39	11/09/21 15:55	1
Toxaphene	ND		67	22	ug/Kg		11/02/21 04:39	11/09/21 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*54*		*46 - 109*	*11/02/21 04:39*	*11/09/21 15:55*	*1*
DCB Decachlorobiphenyl	*57*		*46 - 109*	*11/02/21 04:39*	*11/09/21 15:55*	*1*
Tetrachloro-m-xylene	*62*		*47 - 107*	*11/02/21 04:39*	*11/09/21 15:55*	*1*
Tetrachloro-m-xylene	*65*		*47 - 107*	*11/02/21 04:39*	*11/09/21 15:55*	*1*

Client Sample ID: AOC1/AOC8-S4-0.5

Date Collected: 10/26/21 08:52
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-3

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.2	1.1	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
4,4'-DDE	**15**		8.2	1.0	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
4,4'-DDT	**31**		8.2	1.2	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
Aldrin	ND		8.2	0.67	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
alpha-BHC	ND		8.2	0.77	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
cis-Chlordane	**62**	**P**	8.2	0.86	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
beta-BHC	ND		8.2	1.1	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
Chlordane (technical)	ND		96	45	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
delta-BHC	ND		8.2	1.7	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
Dieldrin	**45**		8.2	0.96	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
Endosulfan I	ND		8.2	0.86	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
Endosulfan II	ND		8.2	0.86	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
Endosulfan sulfate	ND		8.2	1.7	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
Endrin	ND		8.2	0.96	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
Endrin aldehyde	ND		8.2	2.7	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
Endrin ketone	ND		8.2	1.3	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
trans-Chlordane	**23**		8.2	2.9	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
gamma-BHC (Lindane)	ND		8.2	0.67	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
Heptachlor	ND		8.2	0.72	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
Heptachlor epoxide	**5.6**	**J**	8.2	0.86	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
Methoxychlor	ND		16	2.7	ug/Kg		11/02/21 04:39	11/09/21 16:14	5
Toxaphene	ND		320	110	ug/Kg		11/02/21 04:39	11/09/21 16:14	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*46 - 109*	*11/02/21 04:39*	*11/09/21 16:14*	*5*
DCB Decachlorobiphenyl	*124*	*S1+*	*46 - 109*	*11/02/21 04:39*	*11/09/21 16:14*	*5*
Tetrachloro-m-xylene	*81*		*47 - 107*	*11/02/21 04:39*	*11/09/21 16:14*	*5*
Tetrachloro-m-xylene	*79*		*47 - 107*	*11/02/21 04:39*	*11/09/21 16:14*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.4	ug/Kg		11/02/21 04:41	11/17/21 15:21	1
PCB-1221	ND		32	3.5	ug/Kg		11/02/21 04:41	11/17/21 15:21	1
PCB-1232	ND		32	4.6	ug/Kg		11/02/21 04:41	11/17/21 15:21	1
PCB-1242	ND		32	5.7	ug/Kg		11/02/21 04:41	11/17/21 15:21	1
PCB-1248	ND		32	2.3	ug/Kg		11/02/21 04:41	11/17/21 15:21	1
PCB-1254	ND		32	3.7	ug/Kg		11/02/21 04:41	11/17/21 15:21	1
PCB-1260	**43**		32	2.6	ug/Kg		11/02/21 04:41	11/17/21 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*52 - 138*	*11/02/21 04:41*	*11/17/21 15:21*	*1*
Tetrachloro-m-xylene	*81*		*56 - 114*	*11/02/21 04:41*	*11/17/21 15:21*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**730**		0.97	0.25	mg/Kg		10/29/21 13:31	11/02/21 09:56	1
Arsenic	**7.4**		1.9	1.3	mg/Kg		10/29/21 13:31	11/02/21 09:56	1

Client Sample ID: AOC1/AOC8-S4-0.5DUP

Date Collected: 10/26/21 08:52
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-4

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.0	1.1	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
4,4'-DDE	**13**		8.0	0.98	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
4,4'-DDT	**27**		8.0	1.2	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
Aldrin	ND		8.0	0.66	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
alpha-BHC	ND		8.0	0.75	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
cis-Chlordane	**70**	**P**	8.0	0.84	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
beta-BHC	ND		8.0	1.0	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
Chlordane (technical)	ND		94	44	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
delta-BHC	ND		8.0	1.6	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
Dieldrin	**18**		8.0	0.94	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
Endosulfan I	ND		8.0	0.84	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
Endosulfan II	ND		8.0	0.84	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
Endosulfan sulfate	ND		8.0	1.6	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
Endrin	ND		8.0	0.94	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
Endrin aldehyde	ND		8.0	2.7	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
Endrin ketone	ND		8.0	1.3	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
trans-Chlordane	**25**		8.0	2.8	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
gamma-BHC (Lindane)	ND		8.0	0.66	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
Heptachlor	ND		8.0	0.70	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
Heptachlor epoxide	**4.8**	**J**	8.0	0.84	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
Methoxychlor	ND		16	2.6	ug/Kg		11/02/21 04:39	11/09/21 16:33	5
Toxaphene	ND		310	110	ug/Kg		11/02/21 04:39	11/09/21 16:33	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*92*		*46 - 109*	*11/02/21 04:39*	*11/09/21 16:33*	*5*
DCB Decachlorobiphenyl	*106*		*46 - 109*	*11/02/21 04:39*	*11/09/21 16:33*	*5*
Tetrachloro-m-xylene	*85*		*47 - 107*	*11/02/21 04:39*	*11/09/21 16:33*	*5*
Tetrachloro-m-xylene	*81*		*47 - 107*	*11/02/21 04:39*	*11/09/21 16:33*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/02/21 04:41	11/17/21 15:42	1
PCB-1221	ND		31	3.4	ug/Kg		11/02/21 04:41	11/17/21 15:42	1
PCB-1232	ND		31	4.5	ug/Kg		11/02/21 04:41	11/17/21 15:42	1
PCB-1242	ND		31	5.5	ug/Kg		11/02/21 04:41	11/17/21 15:42	1
PCB-1248	ND		31	2.3	ug/Kg		11/02/21 04:41	11/17/21 15:42	1
PCB-1254	ND		31	3.6	ug/Kg		11/02/21 04:41	11/17/21 15:42	1
PCB-1260	**37**		31	2.5	ug/Kg		11/02/21 04:41	11/17/21 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*52 - 138*	*11/02/21 04:41*	*11/17/21 15:42*	*1*
Tetrachloro-m-xylene	*78*		*56 - 114*	*11/02/21 04:41*	*11/17/21 15:42*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**620**		0.99	0.26	mg/Kg		10/29/21 13:31	11/02/21 10:00	1
Arsenic	**9.2**		2.0	1.3	mg/Kg		10/29/21 13:31	11/02/21 10:00	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1/AOC8-S4-2
Date Collected: 10/26/21 08:54
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-5
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
Aldrin	ND		1.7	0.14	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
cis-Chlordane	**0.51**	**J P**	1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
Chlordane (technical)	ND		20	9.2	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
Dieldrin	**0.28**	**J**	1.7	0.20	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
Endrin	ND		1.7	0.20	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
Methoxychlor	ND		3.3	0.55	ug/Kg		11/02/21 04:39	11/09/21 16:52	1
Toxaphene	ND		66	22	ug/Kg		11/02/21 04:39	11/09/21 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*29*	*S1-*	*46 - 109*	*11/02/21 04:39*	*11/09/21 16:52*	*1*
DCB Decachlorobiphenyl	*36*	*S1-*	*46 - 109*	*11/02/21 04:39*	*11/09/21 16:52*	*1*
Tetrachloro-m-xylene	*45*	*S1-*	*47 - 107*	*11/02/21 04:39*	*11/09/21 16:52*	*1*
Tetrachloro-m-xylene	*47*		*47 - 107*	*11/02/21 04:39*	*11/09/21 16:52*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1/AOC2-S5-0.5

Date Collected: 10/26/21 10:50
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-6

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
Aldrin	ND		16	1.3	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
alpha-BHC	ND		16	1.5	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
beta-BHC	ND		16	2.1	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
Chlordane (technical)	ND		190	90	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
delta-BHC	ND		16	3.4	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
Dieldrin	ND		16	1.9	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
Endosulfan I	ND		16	1.7	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
Endosulfan II	ND		16	1.7	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
Endrin	ND		16	1.9	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
Endrin ketone	ND		16	2.6	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
Heptachlor	ND		16	1.4	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
Methoxychlor	ND		33	5.4	ug/Kg		11/02/21 04:39	11/09/21 17:11	10
Toxaphene	ND		640	220	ug/Kg		11/02/21 04:39	11/09/21 17:11	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*68*		*46 - 109*	*11/02/21 04:39*	*11/09/21 17:11*	*10*
DCB Decachlorobiphenyl	*74*		*46 - 109*	*11/02/21 04:39*	*11/09/21 17:11*	*10*
Tetrachloro-m-xylene	*104*		*47 - 107*	*11/02/21 04:39*	*11/09/21 17:11*	*10*
Tetrachloro-m-xylene	*93*		*47 - 107*	*11/02/21 04:39*	*11/09/21 17:11*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/02/21 04:41	11/17/21 16:02	1
PCB-1221	ND		32	3.5	ug/Kg		11/02/21 04:41	11/17/21 16:02	1
PCB-1232	ND		32	4.6	ug/Kg		11/02/21 04:41	11/17/21 16:02	1
PCB-1242	ND		32	5.7	ug/Kg		11/02/21 04:41	11/17/21 16:02	1
PCB-1248	ND		32	2.3	ug/Kg		11/02/21 04:41	11/17/21 16:02	1
PCB-1254	ND		32	3.7	ug/Kg		11/02/21 04:41	11/17/21 16:02	1
PCB-1260	ND		32	2.6	ug/Kg		11/02/21 04:41	11/17/21 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*63*		*52 - 138*	*11/02/21 04:41*	*11/17/21 16:02*	*1*
Tetrachloro-m-xylene	*71*		*56 - 114*	*11/02/21 04:41*	*11/17/21 16:02*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**9.1**		1.0	0.26	mg/Kg		10/29/21 13:31	11/02/21 10:04	1
Arsenic	**3.4**		2.0	1.3	mg/Kg		10/29/21 13:31	11/02/21 10:04	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1/AOC2-S5-2

Date Collected: 10/26/21 11:00
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-7

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
Aldrin	ND		1.6	0.13	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
Chlordane (technical)	ND		19	9.0	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
delta-BHC	ND		1.6	0.34	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
Endosulfan sulfate	ND		1.6	0.34	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
Endrin	ND		1.6	0.19	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
Endrin aldehyde	ND		1.6	0.55	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
trans-Chlordane	ND		1.6	0.58	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/02/21 04:39	11/09/21 17:29	1
Toxaphene	ND		64	22	ug/Kg		11/02/21 04:39	11/09/21 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*67*		*46 - 109*	*11/02/21 04:39*	*11/09/21 17:29*	*1*
DCB Decachlorobiphenyl	*54*		*46 - 109*	*11/02/21 04:39*	*11/09/21 17:29*	*1*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/02/21 04:39*	*11/09/21 17:29*	*1*
Tetrachloro-m-xylene	*75*		*47 - 107*	*11/02/21 04:39*	*11/09/21 17:29*	*1*

Client Sample ID: AOC1-S6-0.5

Date Collected: 10/26/21 11:32
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-8

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.3	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
4,4'-DDE	ND		17	2.1	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
4,4'-DDT	**4.0**	**J**	17	2.5	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
Aldrin	ND		17	1.4	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
alpha-BHC	ND		17	1.6	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
beta-BHC	ND		17	2.2	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
Chlordane (technical)	ND		200	94	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
delta-BHC	ND		17	3.5	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
Dieldrin	ND		17	2.0	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
Endosulfan I	ND		17	1.8	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
Endosulfan II	ND		17	1.8	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
Endosulfan sulfate	ND		17	3.5	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
Endrin	ND		17	2.0	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
Endrin aldehyde	ND		17	5.7	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
Endrin ketone	ND		17	2.7	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
trans-Chlordane	ND		17	6.0	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
Heptachlor	ND		17	1.5	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
Methoxychlor	ND		34	5.6	ug/Kg		11/02/21 04:39	11/09/21 17:48	10
Toxaphene	ND		670	220	ug/Kg		11/02/21 04:39	11/09/21 17:48	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*103*		*46 - 109*	*11/02/21 04:39*	*11/09/21 17:48*	*10*
DCB Decachlorobiphenyl	*98*		*46 - 109*	*11/02/21 04:39*	*11/09/21 17:48*	*10*
Tetrachloro-m-xylene	*94*		*47 - 107*	*11/02/21 04:39*	*11/09/21 17:48*	*10*
Tetrachloro-m-xylene	*94*		*47 - 107*	*11/02/21 04:39*	*11/09/21 17:48*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/02/21 04:41	11/17/21 16:23	1
PCB-1221	ND		33	3.6	ug/Kg		11/02/21 04:41	11/17/21 16:23	1
PCB-1232	ND		33	4.8	ug/Kg		11/02/21 04:41	11/17/21 16:23	1
PCB-1242	ND		33	5.9	ug/Kg		11/02/21 04:41	11/17/21 16:23	1
PCB-1248	ND		33	2.4	ug/Kg		11/02/21 04:41	11/17/21 16:23	1
PCB-1254	ND		33	3.8	ug/Kg		11/02/21 04:41	11/17/21 16:23	1
PCB-1260	ND		33	2.7	ug/Kg		11/02/21 04:41	11/17/21 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*52 - 138*	*11/02/21 04:41*	*11/17/21 16:23*	*1*
Tetrachloro-m-xylene	*64*		*56 - 114*	*11/02/21 04:41*	*11/17/21 16:23*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**140**		0.98	0.25	mg/Kg		10/29/21 13:31	11/02/21 14:42	1
Arsenic	**3.8**		2.0	1.3	mg/Kg		10/29/21 13:31	11/01/21 12:32	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1-S6-2
Date Collected: 10/26/21 11:35
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-9
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
Aldrin	ND		1.7	0.14	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
Endrin	ND		1.7	0.20	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/02/21 04:39	11/09/21 18:07	1
Toxaphene	ND		67	22	ug/Kg		11/02/21 04:39	11/09/21 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*69*		*46 - 109*	*11/02/21 04:39*	*11/09/21 18:07*	*1*
DCB Decachlorobiphenyl	*46*		*46 - 109*	*11/02/21 04:39*	*11/09/21 18:07*	*1*
Tetrachloro-m-xylene	*52*		*47 - 107*	*11/02/21 04:39*	*11/09/21 18:07*	*1*
Tetrachloro-m-xylene	*67*		*47 - 107*	*11/02/21 04:39*	*11/09/21 18:07*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1/AOC7-S8-0.5

Date Collected: 10/26/21 11:53
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-10

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.3	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
4,4'-DDE	ND		17	2.1	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
4,4'-DDT	ND		17	2.5	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
Aldrin	ND		17	1.4	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
alpha-BHC	ND		17	1.6	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
beta-BHC	ND		17	2.2	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
Chlordane (technical)	ND		200	92	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
delta-BHC	ND		17	3.4	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
Dieldrin	ND		17	2.0	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
Endosulfan I	ND		17	1.8	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
Endosulfan II	ND		17	1.8	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
Endosulfan sulfate	ND		17	3.4	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
Endrin	ND		17	2.0	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
Endrin aldehyde	ND		17	5.6	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
Endrin ketone	ND		17	2.7	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
trans-Chlordane	ND		17	5.9	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
Heptachlor	ND		17	1.5	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
Methoxychlor	ND		33	5.5	ug/Kg		11/02/21 04:39	11/09/21 18:26	10
Toxaphene	ND		660	220	ug/Kg		11/02/21 04:39	11/09/21 18:26	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*58*		*46 - 109*	*11/02/21 04:39*	*11/09/21 18:26*	*10*
DCB Decachlorobiphenyl	*55*		*46 - 109*	*11/02/21 04:39*	*11/09/21 18:26*	*10*
Tetrachloro-m-xylene	*66*		*47 - 107*	*11/02/21 04:39*	*11/09/21 18:26*	*10*
Tetrachloro-m-xylene	*63*		*47 - 107*	*11/02/21 04:39*	*11/09/21 18:26*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/02/21 04:41	11/17/21 16:43	1
PCB-1221	ND		32	3.6	ug/Kg		11/02/21 04:41	11/17/21 16:43	1
PCB-1232	ND		32	4.7	ug/Kg		11/02/21 04:41	11/17/21 16:43	1
PCB-1242	ND		32	5.8	ug/Kg		11/02/21 04:41	11/17/21 16:43	1
PCB-1248	ND		32	2.4	ug/Kg		11/02/21 04:41	11/17/21 16:43	1
PCB-1254	ND		32	3.7	ug/Kg		11/02/21 04:41	11/17/21 16:43	1
PCB-1260	ND		32	2.7	ug/Kg		11/02/21 04:41	11/17/21 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*53*		*52 - 138*	*11/02/21 04:41*	*11/17/21 16:43*	*1*
Tetrachloro-m-xylene	*46*	*S1-*	*56 - 114*	*11/02/21 04:41*	*11/17/21 16:43*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**56**		0.99	0.26	mg/Kg		10/29/21 13:31	11/02/21 15:00	1
Arsenic	**1.9**	**J**	2.0	1.3	mg/Kg		10/29/21 13:31	11/01/21 12:59	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1/AOC7-S8-2
Date Collected: 10/26/21 11:58
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-11
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.2	0.44	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
4,4'-DDE	ND		3.2	0.40	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
4,4'-DDT	ND		3.2	0.48	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
Aldrin	ND		3.2	0.27	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
alpha-BHC	ND		3.2	0.31	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
cis-Chlordane	ND		3.2	0.34	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
beta-BHC	ND		3.2	0.42	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
Chlordane (technical)	ND		38	18	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
delta-BHC	ND		3.2	0.67	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
Dieldrin	ND		3.2	0.38	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
Endosulfan I	ND		3.2	0.34	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
Endosulfan II	ND		3.2	0.34	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
Endosulfan sulfate	ND		3.2	0.67	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
Endrin	ND		3.2	0.38	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
Endrin aldehyde	ND		3.2	1.1	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
Endrin ketone	ND		3.2	0.52	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
trans-Chlordane	ND		3.2	1.1	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
gamma-BHC (Lindane)	ND		3.2	0.27	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
Heptachlor	ND		3.2	0.29	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
Heptachlor epoxide	ND		3.2	0.34	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
Methoxychlor	ND		6.5	1.1	ug/Kg		11/02/21 04:39	11/09/21 18:45	2
Toxaphene	ND		130	43	ug/Kg		11/02/21 04:39	11/09/21 18:45	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*52*		*46 - 109*	*11/02/21 04:39*	*11/09/21 18:45*	*2*
DCB Decachlorobiphenyl	*54*		*46 - 109*	*11/02/21 04:39*	*11/09/21 18:45*	*2*
Tetrachloro-m-xylene	*65*		*47 - 107*	*11/02/21 04:39*	*11/09/21 18:45*	*2*
Tetrachloro-m-xylene	*67*		*47 - 107*	*11/02/21 04:39*	*11/09/21 18:45*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1/AOC7-S8-2DUP
Date Collected: 10/26/21 11:58
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-12
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.4	0.45	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
4,4'-DDE	ND		3.4	0.41	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
4,4'-DDT	ND		3.4	0.49	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
Aldrin	ND		3.4	0.28	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
alpha-BHC	ND		3.4	0.32	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
cis-Chlordane	ND		3.4	0.35	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
beta-BHC	ND		3.4	0.43	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
Chlordane (technical)	ND		39	19	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
delta-BHC	ND		3.4	0.69	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
Dieldrin	ND		3.4	0.39	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
Endosulfan I	ND		3.4	0.35	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
Endosulfan II	ND		3.4	0.35	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
Endosulfan sulfate	ND		3.4	0.69	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
Endrin	ND		3.4	0.39	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
Endrin aldehyde	ND		3.4	1.1	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
Endrin ketone	ND		3.4	0.53	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
trans-Chlordane	ND		3.4	1.2	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
gamma-BHC (Lindane)	ND		3.4	0.28	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
Heptachlor	ND		3.4	0.30	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
Heptachlor epoxide	ND		3.4	0.35	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
Methoxychlor	ND		6.7	1.1	ug/Kg		11/02/21 04:39	11/09/21 19:04	2
Toxaphene	ND		130	44	ug/Kg		11/02/21 04:39	11/09/21 19:04	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*43*	*S1-*	*46 - 109*	*11/02/21 04:39*	*11/09/21 19:04*	*2*
DCB Decachlorobiphenyl	*49*		*46 - 109*	*11/02/21 04:39*	*11/09/21 19:04*	*2*
Tetrachloro-m-xylene	*52*		*47 - 107*	*11/02/21 04:39*	*11/09/21 19:04*	*2*
Tetrachloro-m-xylene	*54*		*47 - 107*	*11/02/21 04:39*	*11/09/21 19:04*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1/AOC8-S10-0.5

Date Collected: 10/26/21 12:57
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-13

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**2.6**	**J**	17	2.3	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
4,4'-DDE	**3.9**	**J P**	17	2.1	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
4,4'-DDT	**2.7**	**J**	17	2.5	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
Aldrin	ND		17	1.4	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
alpha-BHC	ND		17	1.6	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
beta-BHC	ND		17	2.2	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
Chlordane (technical)	ND		200	93	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
delta-BHC	ND		17	3.5	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
Dieldrin	ND		17	2.0	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
Endosulfan I	ND		17	1.8	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
Endosulfan II	ND		17	1.8	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
Endosulfan sulfate	ND		17	3.5	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
Endrin	ND		17	2.0	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
Endrin aldehyde	ND		17	5.6	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
Endrin ketone	ND		17	2.7	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
trans-Chlordane	ND		17	5.9	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
Heptachlor	ND		17	1.5	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
Methoxychlor	ND		34	5.5	ug/Kg		11/02/21 04:39	11/09/21 19:23	10
Toxaphene	ND		660	220	ug/Kg		11/02/21 04:39	11/09/21 19:23	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*46 - 109*	*11/02/21 04:39*	*11/09/21 19:23*	*10*
DCB Decachlorobiphenyl	*50*		*46 - 109*	*11/02/21 04:39*	*11/09/21 19:23*	*10*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/02/21 04:39*	*11/09/21 19:23*	*10*
Tetrachloro-m-xylene	*70*		*47 - 107*	*11/02/21 04:39*	*11/09/21 19:23*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/02/21 04:41	11/17/21 17:04	1
PCB-1221	ND		33	3.6	ug/Kg		11/02/21 04:41	11/17/21 17:04	1
PCB-1232	ND		33	4.7	ug/Kg		11/02/21 04:41	11/17/21 17:04	1
PCB-1242	ND		33	5.8	ug/Kg		11/02/21 04:41	11/17/21 17:04	1
PCB-1248	ND		33	2.4	ug/Kg		11/02/21 04:41	11/17/21 17:04	1
PCB-1254	**4.3**	**J**	33	3.8	ug/Kg		11/02/21 04:41	11/17/21 17:04	1
PCB-1260	ND		33	2.7	ug/Kg		11/02/21 04:41	11/17/21 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*52 - 138*	*11/02/21 04:41*	*11/17/21 17:04*	*1*
Tetrachloro-m-xylene	*52*	*S1-*	*56 - 114*	*11/02/21 04:41*	*11/17/21 17:04*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**70**		0.97	0.25	mg/Kg		10/29/21 13:31	11/02/21 15:12	1
Arsenic	**2.7**		1.9	1.3	mg/Kg		10/29/21 13:31	11/01/21 13:02	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1/AOC8-S10-2
Date Collected: 10/26/21 13:01
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-14
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
Aldrin	ND		1.7	0.14	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
Endrin	ND		1.7	0.20	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/02/21 04:39	11/09/21 19:41	1
Toxaphene	ND		67	22	ug/Kg		11/02/21 04:39	11/09/21 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*45*	*S1-*	*46 - 109*	*11/02/21 04:39*	*11/09/21 19:41*	*1*
DCB Decachlorobiphenyl	*41*	*S1-*	*46 - 109*	*11/02/21 04:39*	*11/09/21 19:41*	*1*
Tetrachloro-m-xylene	*67*		*47 - 107*	*11/02/21 04:39*	*11/09/21 19:41*	*1*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/02/21 04:39*	*11/09/21 19:41*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1-S11-0.5

Date Collected: 10/26/21 09:16
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-15

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.2	1.1	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
4,4'-DDE	**3.2**	**J**	8.2	1.0	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
4,4'-DDT	**4.7**	**J**	8.2	1.2	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
Aldrin	ND		8.2	0.68	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
alpha-BHC	ND		8.2	0.77	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
cis-Chlordane	**4.8**	**J P**	8.2	0.87	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
beta-BHC	ND		8.2	1.1	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
Chlordane (technical)	ND		97	45	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
delta-BHC	ND		8.2	1.7	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
Dieldrin	**2.9**	**J**	8.2	0.97	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
Endosulfan I	ND		8.2	0.87	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
Endosulfan II	ND		8.2	0.87	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
Endosulfan sulfate	ND		8.2	1.7	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
Endrin	ND		8.2	0.97	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
Endrin aldehyde	ND		8.2	2.8	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
Endrin ketone	ND		8.2	1.3	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
trans-Chlordane	ND		8.2	2.9	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
gamma-BHC (Lindane)	ND		8.2	0.68	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
Heptachlor	ND		8.2	0.72	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
Heptachlor epoxide	ND		8.2	0.87	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
Methoxychlor	ND		16	2.7	ug/Kg		11/02/21 04:39	11/09/21 20:00	5
Toxaphene	ND		320	110	ug/Kg		11/02/21 04:39	11/09/21 20:00	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*74*		*46 - 109*	*11/02/21 04:39*	*11/09/21 20:00*	*5*
DCB Decachlorobiphenyl	*57*		*46 - 109*	*11/02/21 04:39*	*11/09/21 20:00*	*5*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/02/21 04:39*	*11/09/21 20:00*	*5*
Tetrachloro-m-xylene	*71*		*47 - 107*	*11/02/21 04:39*	*11/09/21 20:00*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/02/21 04:41	11/17/21 17:24	1
PCB-1221	ND		32	3.5	ug/Kg		11/02/21 04:41	11/17/21 17:24	1
PCB-1232	ND		32	4.6	ug/Kg		11/02/21 04:41	11/17/21 17:24	1
PCB-1242	ND		32	5.7	ug/Kg		11/02/21 04:41	11/17/21 17:24	1
PCB-1248	ND		32	2.4	ug/Kg		11/02/21 04:41	11/17/21 17:24	1
PCB-1254	ND		32	3.7	ug/Kg		11/02/21 04:41	11/17/21 17:24	1
PCB-1260	**27**	**J p**	32	2.6	ug/Kg		11/02/21 04:41	11/17/21 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*75*		*52 - 138*	*11/02/21 04:41*	*11/17/21 17:24*	*1*
Tetrachloro-m-xylene	*54*	*S1-*	*56 - 114*	*11/02/21 04:41*	*11/17/21 17:24*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**450**		0.98	0.25	mg/Kg		10/29/21 13:31	11/02/21 15:16	1
Arsenic	**4.1**		2.0	1.3	mg/Kg		10/29/21 13:31	11/01/21 13:06	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1-S11-2
Date Collected: 10/26/21 09:18
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-16
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
4,4'-DDT	ND		1.7	0.24	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
Aldrin	ND		1.7	0.14	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
Chlordane (technical)	ND		20	9.2	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
Endrin	ND		1.7	0.20	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
Endrin ketone	ND		1.7	0.26	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
Methoxychlor	ND		3.3	0.55	ug/Kg		11/02/21 04:39	11/09/21 20:19	1
Toxaphene	ND		66	22	ug/Kg		11/02/21 04:39	11/09/21 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*60*		*46 - 109*	*11/02/21 04:39*	*11/09/21 20:19*	*1*
DCB Decachlorobiphenyl	*62*		*46 - 109*	*11/02/21 04:39*	*11/09/21 20:19*	*1*
Tetrachloro-m-xylene	*63*		*47 - 107*	*11/02/21 04:39*	*11/09/21 20:19*	*1*
Tetrachloro-m-xylene	*70*		*47 - 107*	*11/02/21 04:39*	*11/09/21 20:19*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC2-S12-0.5

Date Collected: 10/26/21 09:36
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-17

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
Aldrin	ND		16	1.3	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
alpha-BHC	ND		16	1.5	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
beta-BHC	ND		16	2.1	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
Chlordane (technical)	ND		190	91	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
delta-BHC	ND		16	3.4	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
Dieldrin	ND		16	1.9	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
Endosulfan I	ND		16	1.7	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
Endosulfan II	ND		16	1.7	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
Endrin	ND		16	1.9	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
Endrin ketone	ND		16	2.6	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
Heptachlor	ND		16	1.4	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
Methoxychlor	ND		33	5.4	ug/Kg		11/02/21 04:39	11/09/21 21:16	10
Toxaphene	ND		650	220	ug/Kg		11/02/21 04:39	11/09/21 21:16	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*584*	*S1+*	*46 - 109*	*11/02/21 04:39*	*11/09/21 21:16*	*10*
DCB Decachlorobiphenyl	*47*		*46 - 109*	*11/02/21 04:39*	*11/09/21 21:16*	*10*
Tetrachloro-m-xylene	*71*		*47 - 107*	*11/02/21 04:39*	*11/09/21 21:16*	*10*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/02/21 04:39*	*11/09/21 21:16*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/02/21 04:41	11/17/21 17:45	1
PCB-1221	ND		32	3.5	ug/Kg		11/02/21 04:41	11/17/21 17:45	1
PCB-1232	ND		32	4.6	ug/Kg		11/02/21 04:41	11/17/21 17:45	1
PCB-1242	ND		32	5.7	ug/Kg		11/02/21 04:41	11/17/21 17:45	1
PCB-1248	ND		32	2.4	ug/Kg		11/02/21 04:41	11/17/21 17:45	1
PCB-1254	ND		32	3.7	ug/Kg		11/02/21 04:41	11/17/21 17:45	1
PCB-1260	ND	F1	32	2.6	ug/Kg		11/02/21 04:41	11/17/21 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*52 - 138*	*11/02/21 04:41*	*11/17/21 17:45*	*1*
Tetrachloro-m-xylene	*52*	*S1-*	*56 - 114*	*11/02/21 04:41*	*11/17/21 17:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**54**		0.98	0.25	mg/Kg		10/29/21 13:31	11/02/21 15:19	1
Arsenic	**3.4**		2.0	1.3	mg/Kg		10/29/21 13:31	11/01/21 13:10	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC2-S12-0.5DUP

Date Collected: 10/26/21 09:36
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-18

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.1	1.1	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
4,4'-DDE	ND		8.1	1.0	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
4,4'-DDT	ND		8.1	1.2	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
Aldrin	ND		8.1	0.66	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
alpha-BHC	ND		8.1	0.76	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
cis-Chlordane	ND		8.1	0.85	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
beta-BHC	ND		8.1	1.0	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
Chlordane (technical)	ND		95	45	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
delta-BHC	ND		8.1	1.7	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
Dieldrin	ND		8.1	0.95	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
Endosulfan I	ND		8.1	0.85	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
Endosulfan II	ND		8.1	0.85	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
Endosulfan sulfate	ND		8.1	1.7	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
Endrin	ND		8.1	0.95	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
Endrin aldehyde	ND		8.1	2.7	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
Endrin ketone	ND		8.1	1.3	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
trans-Chlordane	ND		8.1	2.8	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
gamma-BHC (Lindane)	ND		8.1	0.66	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
Heptachlor	ND		8.1	0.71	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
Heptachlor epoxide	ND		8.1	0.85	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
Methoxychlor	ND		16	2.7	ug/Kg		11/02/21 06:18	11/08/21 13:52	5
Toxaphene	ND		320	110	ug/Kg		11/02/21 06:18	11/08/21 13:52	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*192*	*S1+*	*46 - 109*	*11/02/21 06:18*	*11/08/21 13:52*	*5*
DCB Decachlorobiphenyl	*50*		*46 - 109*	*11/02/21 06:18*	*11/08/21 13:52*	*5*
Tetrachloro-m-xylene	*70*		*47 - 107*	*11/02/21 06:18*	*11/08/21 13:52*	*5*
Tetrachloro-m-xylene	*75*		*47 - 107*	*11/02/21 06:18*	*11/08/21 13:52*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/02/21 06:48	11/16/21 17:58	1
PCB-1221	ND		31	3.4	ug/Kg		11/02/21 06:48	11/16/21 17:58	1
PCB-1232	ND		31	4.5	ug/Kg		11/02/21 06:48	11/16/21 17:58	1
PCB-1242	ND		31	5.6	ug/Kg		11/02/21 06:48	11/16/21 17:58	1
PCB-1248	ND		31	2.3	ug/Kg		11/02/21 06:48	11/16/21 17:58	1
PCB-1254	ND		31	3.6	ug/Kg		11/02/21 06:48	11/16/21 17:58	1
PCB-1260	ND		31	2.6	ug/Kg		11/02/21 06:48	11/16/21 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*52 - 138*	*11/02/21 06:48*	*11/16/21 17:58*	*1*
Tetrachloro-m-xylene	*74*		*56 - 114*	*11/02/21 06:48*	*11/16/21 17:58*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**52**		1.0	0.26	mg/Kg		10/29/21 13:31	11/02/21 15:23	1
Arsenic	**3.1**		2.0	1.3	mg/Kg		10/29/21 13:31	11/01/21 13:14	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC2-S12-2
Date Collected: 10/26/21 09:41
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-19
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
Aldrin	ND		1.7	0.14	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
Endrin	ND		1.7	0.20	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
Methoxychlor	ND		3.4	0.55	ug/Kg		11/02/21 06:18	11/08/21 14:11	1
Toxaphene	ND		66	22	ug/Kg		11/02/21 06:18	11/08/21 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*70*		*46 - 109*	*11/02/21 06:18*	*11/08/21 14:11*	*1*
DCB Decachlorobiphenyl	*47*		*46 - 109*	*11/02/21 06:18*	*11/08/21 14:11*	*1*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/02/21 06:18*	*11/08/21 14:11*	*1*
Tetrachloro-m-xylene	*67*		*47 - 107*	*11/02/21 06:18*	*11/08/21 14:11*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC2-S12-2DUP
Date Collected: 10/26/21 09:41
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-20
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
Aldrin	ND		1.7	0.14	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
Chlordane (technical)	ND		20	9.2	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
Endrin	ND		1.7	0.20	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
Endrin ketone	ND		1.7	0.26	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
Methoxychlor	ND		3.3	0.55	ug/Kg		11/02/21 06:18	11/08/21 14:30	1
Toxaphene	ND		66	22	ug/Kg		11/02/21 06:18	11/08/21 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*63*		*46 - 109*	*11/02/21 06:18*	*11/08/21 14:30*	*1*
DCB Decachlorobiphenyl	*67*		*46 - 109*	*11/02/21 06:18*	*11/08/21 14:30*	*1*
Tetrachloro-m-xylene	*71*		*47 - 107*	*11/02/21 06:18*	*11/08/21 14:30*	*1*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/02/21 06:18*	*11/08/21 14:30*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC2/AOC3-S13/S3I-0.5

Date Collected: 10/26/21 10:02
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-21

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.3	0.45	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
4,4'-DDE	ND		3.3	0.41	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
4,4'-DDT	ND		3.3	0.49	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
Aldrin	ND		3.3	0.27	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
alpha-BHC	ND		3.3	0.31	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
cis-Chlordane	ND		3.3	0.35	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
beta-BHC	ND		3.3	0.43	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
Chlordane (technical)	ND		39	18	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
delta-BHC	ND		3.3	0.68	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
Dieldrin	ND		3.3	0.39	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
Endosulfan I	ND		3.3	0.35	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
Endosulfan II	ND		3.3	0.35	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
Endosulfan sulfate	ND		3.3	0.68	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
Endrin	ND		3.3	0.39	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
Endrin aldehyde	ND		3.3	1.1	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
Endrin ketone	ND		3.3	0.53	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
trans-Chlordane	ND		3.3	1.2	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
gamma-BHC (Lindane)	ND		3.3	0.27	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
Heptachlor	ND		3.3	0.29	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
Heptachlor epoxide	ND		3.3	0.35	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
Methoxychlor	ND		6.6	1.1	ug/Kg		11/02/21 06:18	11/08/21 14:49	2
Toxaphene	ND		130	44	ug/Kg		11/02/21 06:18	11/08/21 14:49	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*53*		*46 - 109*	*11/02/21 06:18*	*11/08/21 14:49*	*2*
DCB Decachlorobiphenyl	*40*	*S1-*	*46 - 109*	*11/02/21 06:18*	*11/08/21 14:49*	*2*
Tetrachloro-m-xylene	*76*		*47 - 107*	*11/02/21 06:18*	*11/08/21 14:49*	*2*
Tetrachloro-m-xylene	*74*		*47 - 107*	*11/02/21 06:18*	*11/08/21 14:49*	*2*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/02/21 06:48	11/16/21 18:19	1
PCB-1221	ND		32	3.5	ug/Kg		11/02/21 06:48	11/16/21 18:19	1
PCB-1232	ND		32	4.7	ug/Kg		11/02/21 06:48	11/16/21 18:19	1
PCB-1242	ND		32	5.7	ug/Kg		11/02/21 06:48	11/16/21 18:19	1
PCB-1248	ND		32	2.4	ug/Kg		11/02/21 06:48	11/16/21 18:19	1
PCB-1254	ND		32	3.7	ug/Kg		11/02/21 06:48	11/16/21 18:19	1
PCB-1260	ND		32	2.6	ug/Kg		11/02/21 06:48	11/16/21 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*69*		*52 - 138*	*11/02/21 06:48*	*11/16/21 18:19*	*1*
Tetrachloro-m-xylene	*81*		*56 - 114*	*11/02/21 06:48*	*11/16/21 18:19*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**14**		1.0	0.26	mg/Kg		10/29/21 13:31	11/02/21 15:27	1
Arsenic	**18**		2.0	1.3	mg/Kg		10/29/21 13:31	11/01/21 13:18	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC2/AOC3-S13/S3I-2
Date Collected: 10/26/21 10:04
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-22
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.22	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
4,4'-DDE	ND		1.7	0.20	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
4,4'-DDT	ND		1.7	0.24	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
Aldrin	ND		1.7	0.14	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
cis-Chlordane	ND		1.7	0.17	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
beta-BHC	ND		1.7	0.21	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
Chlordane (technical)	ND		19	9.1	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
Dieldrin	ND		1.7	0.19	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
Endosulfan I	ND		1.7	0.17	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
Endosulfan II	ND		1.7	0.17	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
Endrin	ND		1.7	0.19	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
Endrin aldehyde	ND		1.7	0.55	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
Endrin ketone	ND		1.7	0.26	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
trans-Chlordane	ND		1.7	0.58	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
Heptachlor epoxide	ND		1.7	0.17	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/02/21 06:18	11/08/21 15:08	1
Toxaphene	ND		65	22	ug/Kg		11/02/21 06:18	11/08/21 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*61*		*46 - 109*	*11/02/21 06:18*	*11/08/21 15:08*	*1*
DCB Decachlorobiphenyl	*46*		*46 - 109*	*11/02/21 06:18*	*11/08/21 15:08*	*1*
Tetrachloro-m-xylene	*61*		*47 - 107*	*11/02/21 06:18*	*11/08/21 15:08*	*1*
Tetrachloro-m-xylene	*59*		*47 - 107*	*11/02/21 06:18*	*11/08/21 15:08*	*1*

Client Sample ID: AOC2-S14-0.5

Date Collected: 10/26/21 10:27
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-23

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.1	1.1	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
4,4'-DDE	ND		8.1	1.0	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
4,4'-DDT	ND		8.1	1.2	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
Aldrin	ND		8.1	0.67	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
alpha-BHC	ND		8.1	0.76	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
cis-Chlordane	ND		8.1	0.86	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
beta-BHC	ND		8.1	1.0	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
Chlordane (technical)	ND		95	45	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
delta-BHC	ND		8.1	1.7	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
Dieldrin	ND		8.1	0.95	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
Endosulfan I	ND		8.1	0.86	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
Endosulfan II	ND		8.1	0.86	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
Endosulfan sulfate	ND		8.1	1.7	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
Endrin	ND		8.1	0.95	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
Endrin aldehyde	ND		8.1	2.7	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
Endrin ketone	ND		8.1	1.3	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
trans-Chlordane	ND		8.1	2.9	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
gamma-BHC (Lindane)	ND		8.1	0.67	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
Heptachlor	ND		8.1	0.71	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
Heptachlor epoxide	ND		8.1	0.86	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
Methoxychlor	ND		16	2.7	ug/Kg		11/02/21 06:18	11/08/21 15:27	5
Toxaphene	ND		320	110	ug/Kg		11/02/21 06:18	11/08/21 15:27	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*73*		*46 - 109*	*11/02/21 06:18*	*11/08/21 15:27*	*5*
DCB Decachlorobiphenyl	*48*		*46 - 109*	*11/02/21 06:18*	*11/08/21 15:27*	*5*
Tetrachloro-m-xylene	*81*		*47 - 107*	*11/02/21 06:18*	*11/08/21 15:27*	*5*
Tetrachloro-m-xylene	*80*		*47 - 107*	*11/02/21 06:18*	*11/08/21 15:27*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/02/21 06:48	11/16/21 18:39	1
PCB-1221	ND		31	3.4	ug/Kg		11/02/21 06:48	11/16/21 18:39	1
PCB-1232	ND		31	4.6	ug/Kg		11/02/21 06:48	11/16/21 18:39	1
PCB-1242	ND		31	5.6	ug/Kg		11/02/21 06:48	11/16/21 18:39	1
PCB-1248	ND		31	2.3	ug/Kg		11/02/21 06:48	11/16/21 18:39	1
PCB-1254	ND		31	3.6	ug/Kg		11/02/21 06:48	11/16/21 18:39	1
PCB-1260	ND		31	2.6	ug/Kg		11/02/21 06:48	11/16/21 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*62*		*52 - 138*	*11/02/21 06:48*	*11/16/21 18:39*	*1*
Tetrachloro-m-xylene	*70*		*56 - 114*	*11/02/21 06:48*	*11/16/21 18:39*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**69**		0.95	0.25	mg/Kg		10/29/21 13:31	11/02/21 15:31	1
Arsenic	**2.9**		1.9	1.2	mg/Kg		10/29/21 13:31	11/01/21 13:21	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC2-S14-2
Date Collected: 10/26/21 10:29
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-24
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
4,4'-DDT	ND		1.6	0.23	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
Aldrin	ND		1.6	0.13	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
Chlordane (technical)	ND		19	8.8	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
Endrin	ND		1.6	0.19	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
Endrin aldehyde	ND		1.6	0.53	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
Endrin ketone	ND		1.6	0.25	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
trans-Chlordane	ND		1.6	0.56	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
Methoxychlor	ND		3.2	0.53	ug/Kg		11/02/21 06:18	11/08/21 15:46	1
Toxaphene	ND		63	21	ug/Kg		11/02/21 06:18	11/08/21 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*40*	*S1-*	*46 - 109*	*11/02/21 06:18*	*11/08/21 15:46*	*1*
DCB Decachlorobiphenyl	*45*	*S1-*	*46 - 109*	*11/02/21 06:18*	*11/08/21 15:46*	*1*
Tetrachloro-m-xylene	*57*		*47 - 107*	*11/02/21 06:18*	*11/08/21 15:46*	*1*
Tetrachloro-m-xylene	*58*		*47 - 107*	*11/02/21 06:18*	*11/08/21 15:46*	*1*

Client Sample ID: AOC3/AOC8-S1A-0.5

Date Collected: 10/26/21 14:11
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-25

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.4	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
4,4'-DDE	ND	F1	33	4.1	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
4,4'-DDT	ND	F1	33	4.8	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
Aldrin	ND		33	2.7	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
alpha-BHC	ND		33	3.1	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
cis-Chlordane	ND	F1	33	3.5	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
beta-BHC	ND		33	4.3	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
Chlordane (technical)	ND		390	180	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
delta-BHC	ND		33	6.8	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
Dieldrin	ND	F1	33	3.9	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
Endosulfan I	ND	F1	33	3.5	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
Endosulfan II	ND	F1	33	3.5	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
Endosulfan sulfate	ND	F1	33	6.8	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
Endrin	ND	F1	33	3.9	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
Endrin aldehyde	ND	F1	33	11	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
Endrin ketone	ND	F1	33	5.2	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
trans-Chlordane	ND	F1	33	12	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
Heptachlor	ND		33	2.9	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
Heptachlor epoxide	ND	F1	33	3.5	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
Methoxychlor	ND	F1	66	11	ug/Kg		10/28/21 10:38	10/29/21 23:14	20
Toxaphene	ND		1300	430	ug/Kg		10/28/21 10:38	10/29/21 23:14	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*209*	*S1+*	*46 - 109*	*10/28/21 10:38*	*10/29/21 23:14*	*20*
DCB Decachlorobiphenyl	*31*	*S1- p*	*46 - 109*	*10/28/21 10:38*	*10/29/21 23:14*	*20*
Tetrachloro-m-xylene	*81*		*47 - 107*	*10/28/21 10:38*	*10/29/21 23:14*	*20*
Tetrachloro-m-xylene	*72*		*47 - 107*	*10/28/21 10:38*	*10/29/21 23:14*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/02/21 06:48	11/16/21 19:00	1
PCB-1221	ND		31	3.4	ug/Kg		11/02/21 06:48	11/16/21 19:00	1
PCB-1232	ND		31	4.5	ug/Kg		11/02/21 06:48	11/16/21 19:00	1
PCB-1242	ND		31	5.6	ug/Kg		11/02/21 06:48	11/16/21 19:00	1
PCB-1248	ND		31	2.3	ug/Kg		11/02/21 06:48	11/16/21 19:00	1
PCB-1254	ND		31	3.6	ug/Kg		11/02/21 06:48	11/16/21 19:00	1
PCB-1260	ND		31	2.5	ug/Kg		11/02/21 06:48	11/16/21 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*61*		*52 - 138*	*11/02/21 06:48*	*11/16/21 19:00*	*1*
Tetrachloro-m-xylene	*69*		*56 - 114*	*11/02/21 06:48*	*11/16/21 19:00*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.23	mg/Kg		11/08/21 15:30	11/09/21 12:48	1
Arsenic	**12**		2.5	2.3	mg/Kg		11/08/21 15:30	11/09/21 12:48	1
Barium	**78**		0.50	0.22	mg/Kg		11/08/21 15:30	11/09/21 12:48	1
Beryllium	ND		0.25	0.17	mg/Kg		11/08/21 15:30	11/09/21 12:48	1
Cadmium	**0.45**	**J**	0.50	0.20	mg/Kg		11/08/21 15:30	11/09/21 12:48	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC3/AOC8-S1A-0.5

Date Collected: 10/26/21 14:11
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-25

Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	7.6		1.0	0.23	mg/Kg		11/08/21 15:30	11/09/21 12:48	1
Chromium	16		1.0	0.18	mg/Kg		11/08/21 15:30	11/09/21 12:48	1
Copper	26		1.0	0.51	mg/Kg		11/08/21 15:30	11/09/21 12:48	1
Molybdenum	0.46	J	0.50	0.45	mg/Kg		11/08/21 15:30	11/09/21 12:48	1
Nickel	15		0.50	0.43	mg/Kg		11/08/21 15:30	11/09/21 12:48	1
Antimony	ND		3.0	1.4	mg/Kg		11/08/21 15:30	11/09/21 12:48	1
Selenium	2.4	J	5.0	1.9	mg/Kg		11/08/21 15:30	11/09/21 12:48	1
Thallium	ND		5.0	1.5	mg/Kg		11/08/21 15:30	11/09/21 12:48	1
Vanadium	25		1.0	0.17	mg/Kg		11/08/21 15:30	11/09/21 12:48	1
Zinc	84		10	5.1	mg/Kg		11/08/21 15:30	11/09/21 12:48	1
Lead	60		5.0	0.97	mg/Kg		11/08/21 15:30	11/09/21 12:48	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.079	0.013	mg/Kg		11/08/21 11:07	11/08/21 18:20	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC3/AOC8-S1A-2

Date Collected: 10/26/21 14:18
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-26

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
Aldrin	ND		1.7	0.14	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
Endrin	ND		1.7	0.20	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
Heptachlor	**0.17**	**J**	1.7	0.15	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
Methoxychlor	ND		3.4	0.55	ug/Kg		11/02/21 06:18	11/08/21 16:24	1
Toxaphene	ND		66	22	ug/Kg		11/02/21 06:18	11/08/21 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*42*	*S1-*	*46 - 109*	*11/02/21 06:18*	*11/08/21 16:24*	*1*
DCB Decachlorobiphenyl	*45*	*S1-*	*46 - 109*	*11/02/21 06:18*	*11/08/21 16:24*	*1*
Tetrachloro-m-xylene	*60*		*47 - 107*	*11/02/21 06:18*	*11/08/21 16:24*	*1*
Tetrachloro-m-xylene	*62*		*47 - 107*	*11/02/21 06:18*	*11/08/21 16:24*	*1*

Client Sample ID: AOC3-S1B-0.5

Date Collected: 10/26/21 14:24
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-27

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		32	4.4	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
4,4'-DDE	**18**	**J**	32	4.0	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
4,4'-DDT	ND		32	4.8	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
Aldrin	ND		32	2.7	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
alpha-BHC	ND		32	3.0	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
cis-Chlordane	ND		32	3.4	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
beta-BHC	ND		32	4.2	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
Chlordane (technical)	ND		380	180	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
delta-BHC	ND		32	6.7	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
Dieldrin	ND		32	3.8	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
Endosulfan I	ND		32	3.4	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
Endosulfan II	ND		32	3.4	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
Endosulfan sulfate	ND		32	6.7	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
Endrin	ND		32	3.8	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
Endrin aldehyde	ND		32	11	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
Endrin ketone	ND		32	5.1	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
trans-Chlordane	ND		32	11	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
gamma-BHC (Lindane)	ND		32	2.7	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
Heptachlor	ND		32	2.9	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
Heptachlor epoxide	ND		32	3.4	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
Methoxychlor	ND		65	11	ug/Kg		11/02/21 06:18	11/08/21 16:42	20
Toxaphene	ND		1300	430	ug/Kg		11/02/21 06:18	11/08/21 16:42	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*46 - 109*	*11/02/21 06:18*	*11/08/21 16:42*	*20*
DCB Decachlorobiphenyl	*47*		*46 - 109*	*11/02/21 06:18*	*11/08/21 16:42*	*20*
Tetrachloro-m-xylene	*70*		*47 - 107*	*11/02/21 06:18*	*11/08/21 16:42*	*20*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/02/21 06:18*	*11/08/21 16:42*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/02/21 06:48	11/16/21 19:20	1
PCB-1221	ND		31	3.4	ug/Kg		11/02/21 06:48	11/16/21 19:20	1
PCB-1232	ND		31	4.6	ug/Kg		11/02/21 06:48	11/16/21 19:20	1
PCB-1242	ND		31	5.6	ug/Kg		11/02/21 06:48	11/16/21 19:20	1
PCB-1248	ND		31	2.3	ug/Kg		11/02/21 06:48	11/16/21 19:20	1
PCB-1254	ND		31	3.6	ug/Kg		11/02/21 06:48	11/16/21 19:20	1
PCB-1260	ND		31	2.6	ug/Kg		11/02/21 06:48	11/16/21 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*73*		*52 - 138*	*11/02/21 06:48*	*11/16/21 19:20*	*1*
Tetrachloro-m-xylene	*71*		*56 - 114*	*11/02/21 06:48*	*11/16/21 19:20*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**120**	**F2 B**	1.0	0.26	mg/Kg		11/01/21 13:39	11/02/21 12:21	1
Arsenic	**5.6**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 12:21	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC3-S1B-2
Date Collected: 10/26/21 14:26
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-28
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.2	0.44	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
4,4'-DDE	ND		3.2	0.40	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
4,4'-DDT	ND		3.2	0.47	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
Aldrin	ND		3.2	0.27	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
alpha-BHC	ND		3.2	0.30	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
cis-Chlordane	ND		3.2	0.34	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
beta-BHC	ND		3.2	0.42	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
Chlordane (technical)	ND		38	18	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
delta-BHC	ND		3.2	0.66	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
Dieldrin	ND		3.2	0.38	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
Endosulfan I	ND		3.2	0.34	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
Endosulfan II	ND		3.2	0.34	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
Endosulfan sulfate	ND		3.2	0.66	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
Endrin	ND		3.2	0.38	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
Endrin aldehyde	ND		3.2	1.1	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
Endrin ketone	ND		3.2	0.51	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
trans-Chlordane	ND		3.2	1.1	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
gamma-BHC (Lindane)	ND		3.2	0.27	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
Heptachlor	ND		3.2	0.28	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
Heptachlor epoxide	ND		3.2	0.34	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
Methoxychlor	ND		6.5	1.1	ug/Kg		11/02/21 06:18	11/08/21 17:01	2
Toxaphene	ND		130	43	ug/Kg		11/02/21 06:18	11/08/21 17:01	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*46*		*46 - 109*	*11/02/21 06:18*	*11/08/21 17:01*	*2*
DCB Decachlorobiphenyl	*50*		*46 - 109*	*11/02/21 06:18*	*11/08/21 17:01*	*2*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/02/21 06:18*	*11/08/21 17:01*	*2*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/02/21 06:18*	*11/08/21 17:01*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC3-S1C-0.5

Date Collected: 10/26/21 14:30
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-29

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.3	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
4,4'-DDE	ND		17	2.1	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
4,4'-DDT	ND		17	2.5	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
Aldrin	ND		17	1.4	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
alpha-BHC	ND		17	1.6	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
beta-BHC	ND		17	2.2	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
Chlordane (technical)	ND		200	93	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
delta-BHC	ND		17	3.5	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
Dieldrin	ND		17	2.0	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
Endosulfan I	ND		17	1.8	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
Endosulfan II	ND		17	1.8	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
Endosulfan sulfate	ND		17	3.5	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
Endrin	ND		17	2.0	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
Endrin aldehyde	ND		17	5.6	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
Endrin ketone	ND		17	2.7	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
trans-Chlordane	ND		17	5.9	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
Heptachlor	ND		17	1.5	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
Methoxychlor	ND		34	5.5	ug/Kg		11/02/21 06:18	11/08/21 17:20	10
Toxaphene	ND		660	220	ug/Kg		11/02/21 06:18	11/08/21 17:20	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*73*		*46 - 109*	*11/02/21 06:18*	*11/08/21 17:20*	*10*
DCB Decachlorobiphenyl	*50*		*46 - 109*	*11/02/21 06:18*	*11/08/21 17:20*	*10*
Tetrachloro-m-xylene	*81*		*47 - 107*	*11/02/21 06:18*	*11/08/21 17:20*	*10*
Tetrachloro-m-xylene	*86*		*47 - 107*	*11/02/21 06:18*	*11/08/21 17:20*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/02/21 06:48	11/16/21 19:41	1
PCB-1221	ND		33	3.6	ug/Kg		11/02/21 06:48	11/16/21 19:41	1
PCB-1232	ND		33	4.7	ug/Kg		11/02/21 06:48	11/16/21 19:41	1
PCB-1242	ND		33	5.8	ug/Kg		11/02/21 06:48	11/16/21 19:41	1
PCB-1248	ND		33	2.4	ug/Kg		11/02/21 06:48	11/16/21 19:41	1
PCB-1254	ND		33	3.8	ug/Kg		11/02/21 06:48	11/16/21 19:41	1
PCB-1260	ND		33	2.7	ug/Kg		11/02/21 06:48	11/16/21 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*52 - 138*	*11/02/21 06:48*	*11/16/21 19:41*	*1*
Tetrachloro-m-xylene	*70*		*56 - 114*	*11/02/21 06:48*	*11/16/21 19:41*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**180**	**B**	0.99	0.26	mg/Kg		11/01/21 13:39	11/02/21 12:39	1
Arsenic	**4.0**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 12:39	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC3-S1C-2
Date Collected: 10/26/21 15:09
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-30
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.0	1.1	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
4,4'-DDE	ND		8.0	0.98	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
4,4'-DDT	**1.7**	**J**	8.0	1.2	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
Aldrin	ND		8.0	0.66	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
alpha-BHC	ND		8.0	0.75	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
cis-Chlordane	ND		8.0	0.84	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
beta-BHC	ND		8.0	1.0	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
Chlordane (technical)	ND		94	44	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
delta-BHC	ND		8.0	1.6	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
Dieldrin	ND		8.0	0.94	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
Endosulfan I	ND		8.0	0.84	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
Endosulfan II	ND		8.0	0.84	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
Endosulfan sulfate	ND		8.0	1.6	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
Endrin	ND		8.0	0.94	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
Endrin aldehyde	ND		8.0	2.7	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
Endrin ketone	ND		8.0	1.3	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
trans-Chlordane	ND		8.0	2.8	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
gamma-BHC (Lindane)	ND		8.0	0.66	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
Heptachlor	ND		8.0	0.70	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
Heptachlor epoxide	ND		8.0	0.84	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
Methoxychlor	ND		16	2.6	ug/Kg		11/02/21 06:18	11/08/21 17:39	5
Toxaphene	ND		310	110	ug/Kg		11/02/21 06:18	11/08/21 17:39	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*46 - 109*	*11/02/21 06:18*	*11/08/21 17:39*	*5*
DCB Decachlorobiphenyl	*70*		*46 - 109*	*11/02/21 06:18*	*11/08/21 17:39*	*5*
Tetrachloro-m-xylene	*82*		*47 - 107*	*11/02/21 06:18*	*11/08/21 17:39*	*5*
Tetrachloro-m-xylene	*79*		*47 - 107*	*11/02/21 06:18*	*11/08/21 17:39*	*5*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC3-S2B-0.5

Date Collected: 10/26/21 14:51
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-31

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
4,4'-DDT	ND		16	2.3	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
Aldrin	ND		16	1.3	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
alpha-BHC	ND		16	1.5	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
beta-BHC	ND		16	2.1	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
Chlordane (technical)	ND		190	88	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
delta-BHC	ND		16	3.3	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
Dieldrin	ND		16	1.9	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
Endosulfan I	ND		16	1.7	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
Endosulfan II	ND		16	1.7	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
Endosulfan sulfate	ND		16	3.3	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
Endrin	ND		16	1.9	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
Endrin aldehyde	ND		16	5.4	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
Endrin ketone	ND		16	2.5	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
trans-Chlordane	ND		16	5.6	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
Heptachlor	ND		16	1.4	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
Methoxychlor	ND		32	5.3	ug/Kg		11/02/21 06:18	11/08/21 17:58	10
Toxaphene	ND		630	210	ug/Kg		11/02/21 06:18	11/08/21 17:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*78*		*46 - 109*	*11/02/21 06:18*	*11/08/21 17:58*	*10*
DCB Decachlorobiphenyl	*107*		*46 - 109*	*11/02/21 06:18*	*11/08/21 17:58*	*10*
Tetrachloro-m-xylene	*93*		*47 - 107*	*11/02/21 06:18*	*11/08/21 17:58*	*10*
Tetrachloro-m-xylene	*89*		*47 - 107*	*11/02/21 06:18*	*11/08/21 17:58*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	F2	31	2.4	ug/Kg		11/02/21 06:48	11/16/21 20:01	1
PCB-1221	ND		31	3.4	ug/Kg		11/02/21 06:48	11/16/21 20:01	1
PCB-1232	ND		31	4.5	ug/Kg		11/02/21 06:48	11/16/21 20:01	1
PCB-1242	ND		31	5.5	ug/Kg		11/02/21 06:48	11/16/21 20:01	1
PCB-1248	ND		31	2.3	ug/Kg		11/02/21 06:48	11/16/21 20:01	1
PCB-1254	ND		31	3.6	ug/Kg		11/02/21 06:48	11/16/21 20:01	1
PCB-1260	ND		31	2.5	ug/Kg		11/02/21 06:48	11/16/21 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*88*		*52 - 138*	*11/02/21 06:48*	*11/16/21 20:01*	*1*
Tetrachloro-m-xylene	*92*		*56 - 114*	*11/02/21 06:48*	*11/16/21 20:01*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**160**	**B**	0.96	0.25	mg/Kg		11/01/21 13:39	11/02/21 12:43	1
Arsenic	**2.7**		1.9	1.3	mg/Kg		11/01/21 13:39	11/02/21 12:43	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC3-S2B-2
Date Collected: 10/26/21 14:54
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-32
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.2	0.43	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
4,4'-DDE	ND		3.2	0.40	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
4,4'-DDT	ND		3.2	0.47	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
Aldrin	ND		3.2	0.26	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
alpha-BHC	ND		3.2	0.30	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
cis-Chlordane	ND		3.2	0.34	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
beta-BHC	ND		3.2	0.41	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
Chlordane (technical)	ND		38	18	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
delta-BHC	ND		3.2	0.66	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
Dieldrin	ND		3.2	0.38	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
Endosulfan I	ND		3.2	0.34	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
Endosulfan II	ND		3.2	0.34	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
Endosulfan sulfate	ND		3.2	0.66	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
Endrin	ND		3.2	0.38	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
Endrin aldehyde	ND		3.2	1.1	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
Endrin ketone	ND		3.2	0.51	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
trans-Chlordane	ND		3.2	1.1	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
gamma-BHC (Lindane)	ND		3.2	0.26	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
Heptachlor	ND		3.2	0.28	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
Heptachlor epoxide	ND		3.2	0.34	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
Methoxychlor	ND		6.4	1.1	ug/Kg		11/02/21 06:18	11/08/21 18:17	2
Toxaphene	ND		130	42	ug/Kg		11/02/21 06:18	11/08/21 18:17	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*48*		*46 - 109*	*11/02/21 06:18*	*11/08/21 18:17*	*2*
DCB Decachlorobiphenyl	*44*	*S1-*	*46 - 109*	*11/02/21 06:18*	*11/08/21 18:17*	*2*
Tetrachloro-m-xylene	*71*		*47 - 107*	*11/02/21 06:18*	*11/08/21 18:17*	*2*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/02/21 06:18*	*11/08/21 18:17*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC3-S2C-0.5

Date Collected: 10/26/21 14:43
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-33

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
4,4'-DDT	ND	F1	16	2.4	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
Aldrin	ND		16	1.3	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
alpha-BHC	ND		16	1.5	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
beta-BHC	ND		16	2.1	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
Chlordane (technical)	ND		190	89	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
delta-BHC	ND		16	3.3	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
Dieldrin	ND	F1	16	1.9	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
Endosulfan I	ND		16	1.7	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
Endosulfan II	ND	F1	16	1.7	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
Endosulfan sulfate	ND	F1	16	3.3	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
Endrin	ND	F1	16	1.9	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
Endrin aldehyde	ND		16	5.4	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
Endrin ketone	ND	F1	16	2.6	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
trans-Chlordane	ND		16	5.7	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
Heptachlor	ND		16	1.4	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
Methoxychlor	ND		32	5.3	ug/Kg		11/02/21 06:18	11/08/21 18:36	10
Toxaphene	ND		640	210	ug/Kg		11/02/21 06:18	11/08/21 18:36	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*99*		*46 - 109*	*11/02/21 06:18*	*11/08/21 18:36*	*10*
DCB Decachlorobiphenyl	*60*		*46 - 109*	*11/02/21 06:18*	*11/08/21 18:36*	*10*
Tetrachloro-m-xylene	*92*		*47 - 107*	*11/02/21 06:18*	*11/08/21 18:36*	*10*
Tetrachloro-m-xylene	*94*		*47 - 107*	*11/02/21 06:18*	*11/08/21 18:36*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/02/21 06:48	11/16/21 21:03	1
PCB-1221	ND		31	3.4	ug/Kg		11/02/21 06:48	11/16/21 21:03	1
PCB-1232	ND		31	4.5	ug/Kg		11/02/21 06:48	11/16/21 21:03	1
PCB-1242	ND		31	5.6	ug/Kg		11/02/21 06:48	11/16/21 21:03	1
PCB-1248	ND		31	2.3	ug/Kg		11/02/21 06:48	11/16/21 21:03	1
PCB-1254	ND		31	3.6	ug/Kg		11/02/21 06:48	11/16/21 21:03	1
PCB-1260	ND		31	2.6	ug/Kg		11/02/21 06:48	11/16/21 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*59*		*52 - 138*	*11/02/21 06:48*	*11/16/21 21:03*	*1*
Tetrachloro-m-xylene	*64*		*56 - 114*	*11/02/21 06:48*	*11/16/21 21:03*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**640**	**B**	0.95	0.25	mg/Kg		11/01/21 13:39	11/02/21 12:55	1
Arsenic	**5.2**		1.9	1.2	mg/Kg		11/01/21 13:39	11/02/21 12:55	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC3-S2C-2
Date Collected: 10/26/21 14:46
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-34
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
Aldrin	ND		1.7	0.14	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
Endrin	ND		1.7	0.20	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
Methoxychlor	ND		3.4	0.55	ug/Kg		11/02/21 06:18	11/08/21 19:32	1
Toxaphene	ND		66	22	ug/Kg		11/02/21 06:18	11/08/21 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*63*		*46 - 109*	*11/02/21 06:18*	*11/08/21 19:32*	*1*
DCB Decachlorobiphenyl	*46*		*46 - 109*	*11/02/21 06:18*	*11/08/21 19:32*	*1*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/02/21 06:18*	*11/08/21 19:32*	*1*
Tetrachloro-m-xylene	*71*		*47 - 107*	*11/02/21 06:18*	*11/08/21 19:32*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: EB10262021

Date Collected: 10/26/21 16:30
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-35

Matrix: Water

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.048	0.013	ug/L		11/02/21 10:26	11/03/21 15:34	1
4,4'-DDE	ND		0.019	0.0081	ug/L		11/02/21 10:26	11/03/21 15:34	1
4,4'-DDT	ND		0.048	0.025	ug/L		11/02/21 10:26	11/03/21 15:34	1
Aldrin	ND		0.048	0.011	ug/L		11/02/21 10:26	11/03/21 15:34	1
alpha-BHC	ND		0.019	0.0091	ug/L		11/02/21 10:26	11/03/21 15:34	1
cis-Chlordane	ND		0.019	0.0072	ug/L		11/02/21 10:26	11/03/21 15:34	1
beta-BHC	ND		0.019	0.0072	ug/L		11/02/21 10:26	11/03/21 15:34	1
Chlordane (technical)	ND		0.096	0.035	ug/L		11/02/21 10:26	11/03/21 15:34	1
delta-BHC	ND		0.019	0.0072	ug/L		11/02/21 10:26	11/03/21 15:34	1
Dieldrin	ND		0.048	0.011	ug/L		11/02/21 10:26	11/03/21 15:34	1
Endosulfan I	ND		0.048	0.011	ug/L		11/02/21 10:26	11/03/21 15:34	1
Endosulfan II	ND		0.048	0.010	ug/L		11/02/21 10:26	11/03/21 15:34	1
Endosulfan sulfate	ND		0.048	0.013	ug/L		11/02/21 10:26	11/03/21 15:34	1
Endrin	ND		0.019	0.0096	ug/L		11/02/21 10:26	11/03/21 15:34	1
Endrin aldehyde	ND		0.096	0.031	ug/L		11/02/21 10:26	11/03/21 15:34	1
Endrin ketone	ND		0.048	0.012	ug/L		11/02/21 10:26	11/03/21 15:34	1
trans-Chlordane	ND		0.048	0.013	ug/L		11/02/21 10:26	11/03/21 15:34	1
gamma-BHC (Lindane)	ND		0.019	0.0067	ug/L		11/02/21 10:26	11/03/21 15:34	1
Heptachlor	ND		0.019	0.0072	ug/L		11/02/21 10:26	11/03/21 15:34	1
Heptachlor epoxide	ND		0.019	0.0076	ug/L		11/02/21 10:26	11/03/21 15:34	1
Methoxychlor	ND		0.048	0.019	ug/L		11/02/21 10:26	11/03/21 15:34	1
Toxaphene	ND		0.29	0.14	ug/L		11/02/21 10:26	11/03/21 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*49 - 132*	*11/02/21 10:26*	*11/03/21 15:34*	*1*
DCB Decachlorobiphenyl (Surr)	*41*		*10 - 142*	*11/02/21 10:26*	*11/03/21 15:34*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.48	0.31	ug/L		11/02/21 10:26	11/03/21 13:07	1
PCB-1221	ND		0.48	0.31	ug/L		11/02/21 10:26	11/03/21 13:07	1
PCB-1232	ND		0.48	0.31	ug/L		11/02/21 10:26	11/03/21 13:07	1
PCB-1242	ND		0.48	0.31	ug/L		11/02/21 10:26	11/03/21 13:07	1
PCB-1248	ND		0.48	0.31	ug/L		11/02/21 10:26	11/03/21 13:07	1
PCB-1254	ND		0.48	0.37	ug/L		11/02/21 10:26	11/03/21 13:07	1
PCB-1260	ND		0.48	0.37	ug/L		11/02/21 10:26	11/03/21 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*48*		*20 - 122*	*11/02/21 10:26*	*11/03/21 13:07*	*1*
Tetrachloro-m-xylene	*66*		*20 - 144*	*11/02/21 10:26*	*11/03/21 13:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.010	0.0058	mg/L		11/04/21 10:32	11/09/21 12:32	1
Arsenic	ND		0.10	0.022	mg/L		11/04/21 10:32	11/09/21 12:32	1
Barium	ND		0.010	0.0016	mg/L		11/04/21 10:32	11/09/21 12:32	1
Beryllium	ND		0.010	0.0026	mg/L		11/04/21 10:32	11/09/21 12:32	1
Cadmium	**0.0017**	**J**	0.010	0.0012	mg/L		11/04/21 10:32	11/09/21 12:32	1
Cobalt	ND		0.050	0.0023	mg/L		11/04/21 10:32	11/09/21 12:32	1
Chromium	ND		0.050	0.0086	mg/L		11/04/21 10:32	11/09/21 12:32	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: EB10262021
Date Collected: 10/26/21 16:30
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-35
Matrix: Water

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.050	0.0085	mg/L		11/04/21 10:32	11/09/21 12:32	1
Molybdenum	ND		0.050	0.024	mg/L		11/04/21 10:32	11/09/21 12:32	1
Nickel	ND		0.050	0.0045	mg/L		11/04/21 10:32	11/09/21 12:32	1
Antimony	ND		0.10	0.021	mg/L		11/04/21 10:32	11/09/21 12:32	1
Selenium	ND		0.10	0.034	mg/L		11/04/21 10:32	11/09/21 12:32	1
Thallium	ND		0.050	0.019	mg/L		11/04/21 10:32	11/09/21 12:32	1
Vanadium	**0.0021**	**J**	0.010	0.0017	mg/L		11/04/21 10:32	11/09/21 12:32	1
Zinc	ND		0.25	0.014	mg/L		11/04/21 10:32	11/09/21 12:32	1
Lead	ND		0.050	0.0080	mg/L		11/04/21 10:32	11/09/21 12:32	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00050	0.00014	mg/L		11/08/21 15:39	11/09/21 11:48	1

Default Detection Limits

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Method: 8081A - Organochlorine Pesticides (GC)
Prep: 3510C

Analyte	RL	MDL	Units
4,4'-DDD	0.050	0.014	ug/L
4,4'-DDE	0.020	0.0085	ug/L
4,4'-DDT	0.050	0.026	ug/L
Aldrin	0.050	0.011	ug/L
alpha-BHC	0.020	0.0095	ug/L
beta-BHC	0.020	0.0075	ug/L
Chlordane (technical)	0.10	0.037	ug/L
cis-Chlordane	0.020	0.0075	ug/L
delta-BHC	0.020	0.0075	ug/L
Dieldrin	0.050	0.012	ug/L
Endosulfan I	0.050	0.012	ug/L
Endosulfan II	0.050	0.011	ug/L
Endosulfan sulfate	0.050	0.014	ug/L
Endrin	0.020	0.010	ug/L
Endrin aldehyde	0.10	0.032	ug/L
Endrin ketone	0.050	0.013	ug/L
gamma-BHC (Lindane)	0.020	0.0070	ug/L
Heptachlor	0.020	0.0075	ug/L
Heptachlor epoxide	0.020	0.0080	ug/L
Methoxychlor	0.050	0.020	ug/L
Toxaphene	0.30	0.15	ug/L
trans-Chlordane	0.050	0.014	ug/L

Method: 8081A - Organochlorine Pesticides (GC)
Prep: 3546

Analyte	RL	MDL	Units
4,4'-DDD	1.7	0.23	ug/Kg
4,4'-DDE	1.7	0.21	ug/Kg
4,4'-DDT	1.7	0.25	ug/Kg
Aldrin	1.7	0.14	ug/Kg
alpha-BHC	1.7	0.16	ug/Kg
beta-BHC	1.7	0.22	ug/Kg
Chlordane (technical)	20	9.4	ug/Kg
cis-Chlordane	1.7	0.18	ug/Kg
delta-BHC	1.7	0.35	ug/Kg
Dieldrin	1.7	0.20	ug/Kg
Endosulfan I	1.7	0.18	ug/Kg
Endosulfan II	1.7	0.18	ug/Kg
Endosulfan sulfate	1.7	0.35	ug/Kg
Endrin	1.7	0.20	ug/Kg
Endrin aldehyde	1.7	0.57	ug/Kg
Endrin ketone	1.7	0.27	ug/Kg
gamma-BHC (Lindane)	1.7	0.14	ug/Kg
Heptachlor	1.7	0.15	ug/Kg
Heptachlor epoxide	1.7	0.18	ug/Kg
Methoxychlor	3.4	0.56	ug/Kg
Toxaphene	67	22	ug/Kg
trans-Chlordane	1.7	0.60	ug/Kg

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography
Prep: 3510C

Default Detection Limits

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography
Prep: 3510C

Analyte	RL	MDL	Units
PCB-1016	0.50	0.33	ug/L
PCB-1221	0.50	0.33	ug/L
PCB-1232	0.50	0.33	ug/L
PCB-1242	0.50	0.33	ug/L
PCB-1248	0.50	0.33	ug/L
PCB-1254	0.50	0.39	ug/L
PCB-1260	0.50	0.39	ug/L

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography
Prep: 3546

Analyte	RL	MDL	Units
PCB-1016	33	2.6	ug/Kg
PCB-1221	33	3.6	ug/Kg
PCB-1232	33	4.8	ug/Kg
PCB-1242	33	5.9	ug/Kg
PCB-1248	33	2.4	ug/Kg
PCB-1254	33	3.8	ug/Kg
PCB-1260	33	2.7	ug/Kg

Method: 6010B - Metals (ICP)
Prep: 3010A

Analyte	RL	MDL	Units
Antimony	0.10	0.021	mg/L
Arsenic	0.10	0.022	mg/L
Barium	0.010	0.0016	mg/L
Beryllium	0.010	0.0026	mg/L
Cadmium	0.010	0.0012	mg/L
Chromium	0.050	0.0086	mg/L
Cobalt	0.050	0.0023	mg/L
Copper	0.050	0.0085	mg/L
Lead	0.050	0.0080	mg/L
Molybdenum	0.050	0.024	mg/L
Nickel	0.050	0.0045	mg/L
Selenium	0.10	0.034	mg/L
Silver	0.010	0.0058	mg/L
Thallium	0.050	0.019	mg/L
Vanadium	0.010	0.0017	mg/L
Zinc	0.25	0.014	mg/L

Method: 6010B - Metals (ICP)
Prep: 3050B

Analyte	RL	MDL	Units
Antimony	3.0	1.4	mg/Kg
Arsenic	2.0	1.3	mg/Kg
Arsenic	2.5	2.3	mg/Kg
Barium	0.50	0.22	mg/Kg
Beryllium	0.25	0.17	mg/Kg
Cadmium	0.50	0.20	mg/Kg
Chromium	1.0	0.18	mg/Kg
Cobalt	1.0	0.23	mg/Kg
Copper	1.0	0.51	mg/Kg

Default Detection Limits

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Method: 6010B - Metals (ICP) (Continued)

Prep: 3050B

Analyte	RL	MDL	Units
Lead	1.0	0.26	mg/Kg
Lead	5.0	0.97	mg/Kg
Molybdenum	0.50	0.45	mg/Kg
Nickel	0.50	0.43	mg/Kg
Selenium	5.0	1.9	mg/Kg
Silver	1.0	0.23	mg/Kg
Thallium	5.0	1.5	mg/Kg
Vanadium	1.0	0.17	mg/Kg
Zinc	10	5.1	mg/Kg

Method: 7470A - Mercury (CVAA)

Prep: 7470A

Analyte	RL	MDL	Units
Mercury	0.00050	0.00014	mg/L

Method: 7471A - Mercury (CVAA)

Prep: 7471A

Analyte	RL	MDL	Units
Mercury	0.083	0.014	mg/Kg

Surrogate Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(46-109)	(46-109)	(47-107)	(47-107)
320-80878-1	AOC1-S3-0.5	21 S1-	32 S1-	63	62
320-80878-2	AOC1-S3-2	54	57	62	65
320-80878-3	AOC1/AOC8-S4-0.5	86	124 S1+	81	79
320-80878-4	AOC1/AOC8-S4-0.5DUP	92	106	85	81
320-80878-5	AOC1/AOC8-S4-2	29 S1-	36 S1-	45 S1-	47
320-80878-6	AOC1/AOC2-S5-0.5	68	74	104	93
320-80878-7	AOC1/AOC2-S5-2	67	54	69	75
320-80878-8	AOC1-S6-0.5	103	98	94	94
320-80878-9	AOC1-S6-2	69	46	52	67
320-80878-10	AOC1/AOC7-S8-0.5	58	55	66	63
320-80878-11	AOC1/AOC7-S8-2	52	54	65	67
320-80878-12	AOC1/AOC7-S8-2DUP	43 S1-	49	52	54
320-80878-13	AOC1/AOC8-S10-0.5	57	50	68	70
320-80878-14	AOC1/AOC8-S10-2	45 S1-	41 S1-	67	64
320-80878-15	AOC1-S11-0.5	74	57	69	71
320-80878-16	AOC1-S11-2	60	62	63	70
320-80878-16 MS	AOC1-S11-2	63		63	
320-80878-16 MSD	AOC1-S11-2	52		57	
320-80878-17	AOC2-S12-0.5	584 S1+	47	71	69
320-80878-18	AOC2-S12-0.5DUP	192 S1+	50	70	75
320-80878-19	AOC2-S12-2	70	47	68	67
320-80878-20	AOC2-S12-2DUP	63	67	71	68
320-80878-21	AOC2/AOC3-S13/S3I-0.5	53	40 S1-	76	74
320-80878-22	AOC2/AOC3-S13/S3I-2	61	46	61	59
320-80878-23	AOC2-S14-0.5	73	48	81	80
320-80878-24	AOC2-S14-2	40 S1-	45 S1-	57	58
320-80878-25	AOC3/AOC8-S1A-0.5	209 S1+	31 S1- p	81	72
320-80878-25 MS	AOC3/AOC8-S1A-0.5		31 p S1-		59
320-80878-25 MSD	AOC3/AOC8-S1A-0.5		28 p S1-		63
320-80878-26	AOC3/AOC8-S1A-2	42 S1-	45 S1-	60	62
320-80878-27	AOC3-S1B-0.5	66	47	70	64
320-80878-28	AOC3-S1B-2	46	50	64	69
320-80878-29	AOC3-S1C-0.5	73	50	81	86
320-80878-30	AOC3-S1C-2	77	70	82	79
320-80878-31	AOC3-S2B-0.5	78	107	93	89
320-80878-32	AOC3-S2B-2	48	44 S1-	71	69
320-80878-33	AOC3-S2C-0.5	99	60	92	94
320-80878-33 MS	AOC3-S2C-0.5	72		87	
320-80878-33 MSD	AOC3-S2C-0.5	98		91	
320-80878-34	AOC3-S2C-2	63	46	64	71
LCS 320-537878/2-A	Lab Control Sample		57		68
LCS 320-539048/2-A	Lab Control Sample	48		68	
LCS 320-539069/2-A	Lab Control Sample	61		71	
MB 320-537878/1-A	Method Blank	53	53	68	70
MB 320-539048/1-A	Method Blank	47	68	62	64
MB 320-539069/1-A	Method Blank	64	78	67	68

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (49-132)	DCB1 (10-142)
320-80878-35	EB10262021	72	41
LCS 570-191082/2-A	Lab Control Sample	83	66
LCSD 570-191082/3-A	Lab Control Sample Dup	84	70
MB 570-191082/1-A	Method Blank	73	44

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (52-138)	TCX1 (56-114)
320-80878-1	AOC1-S3-0.5	25 S1-	66
320-80878-3	AOC1/AOC8-S4-0.5	77	81
320-80878-4	AOC1/AOC8-S4-0.5DUP	77	78
320-80878-6	AOC1/AOC2-S5-0.5	63	71
320-80878-8	AOC1-S6-0.5	66	64
320-80878-10	AOC1/AOC7-S8-0.5	53	46 S1-
320-80878-13	AOC1/AOC8-S10-0.5	56	52 S1-
320-80878-15	AOC1-S11-0.5	75	54 S1-
320-80878-17	AOC2-S12-0.5	56	52 S1-
320-80878-17 MS	AOC2-S12-0.5	64	61
320-80878-17 MSD	AOC2-S12-0.5	54	56
LCS 320-539050/2-A	Lab Control Sample	70	73
MB 320-539050/1-A	Method Blank	76	80

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP2 (52-138)	TCX2 (56-114)
320-80878-18	AOC2-S12-0.5DUP	66	74
320-80878-21	AOC2/AOC3-S13/S3I-0.5	69	81
320-80878-23	AOC2-S14-0.5	62	70
320-80878-25	AOC3/AOC8-S1A-0.5	61	69
320-80878-27	AOC3-S1B-0.5	73	71
320-80878-29	AOC3-S1C-0.5	77	70
320-80878-31	AOC3-S2B-0.5	88	92
320-80878-31 MS	AOC3-S2B-0.5	94	89
320-80878-31 MSD	AOC3-S2B-0.5	68	67
320-80878-33	AOC3-S2C-0.5	59	64
LCS 320-539070/2-A	Lab Control Sample	87	89
MB 320-539070/1-A	Method Blank	91	92

Surrogate Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(20-122)	(20-144)
320-80878-35	EB10262021	48	66
LCS 570-191082/4-A	Lab Control Sample	65	68
LCSD 570-191082/5-A	Lab Control Sample Dup	65	69
MB 570-191082/1-A	Method Blank	50	65

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 570-191082/1-A
Matrix: Water
Analysis Batch: 191324

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 191082

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.050	0.014	ug/L		11/02/21 10:26	11/03/21 12:40	1
4,4'-DDE	ND		0.020	0.0085	ug/L		11/02/21 10:26	11/03/21 12:40	1
4,4'-DDT	ND		0.050	0.026	ug/L		11/02/21 10:26	11/03/21 12:40	1
Aldrin	ND		0.050	0.011	ug/L		11/02/21 10:26	11/03/21 12:40	1
alpha-BHC	ND		0.020	0.0095	ug/L		11/02/21 10:26	11/03/21 12:40	1
cis-Chlordane	ND		0.020	0.0075	ug/L		11/02/21 10:26	11/03/21 12:40	1
beta-BHC	ND		0.020	0.0075	ug/L		11/02/21 10:26	11/03/21 12:40	1
Chlordane (technical)	ND		0.10	0.037	ug/L		11/02/21 10:26	11/03/21 12:40	1
delta-BHC	ND		0.020	0.0075	ug/L		11/02/21 10:26	11/03/21 12:40	1
Dieldrin	ND		0.050	0.012	ug/L		11/02/21 10:26	11/03/21 12:40	1
Endosulfan I	ND		0.050	0.012	ug/L		11/02/21 10:26	11/03/21 12:40	1
Endosulfan II	ND		0.050	0.011	ug/L		11/02/21 10:26	11/03/21 12:40	1
Endosulfan sulfate	ND		0.050	0.014	ug/L		11/02/21 10:26	11/03/21 12:40	1
Endrin	ND		0.020	0.010	ug/L		11/02/21 10:26	11/03/21 12:40	1
Endrin aldehyde	ND		0.10	0.032	ug/L		11/02/21 10:26	11/03/21 12:40	1
Endrin ketone	ND		0.050	0.013	ug/L		11/02/21 10:26	11/03/21 12:40	1
trans-Chlordane	ND		0.050	0.014	ug/L		11/02/21 10:26	11/03/21 12:40	1
gamma-BHC (Lindane)	ND		0.020	0.0070	ug/L		11/02/21 10:26	11/03/21 12:40	1
Heptachlor	ND		0.020	0.0075	ug/L		11/02/21 10:26	11/03/21 12:40	1
Heptachlor epoxide	ND		0.020	0.0080	ug/L		11/02/21 10:26	11/03/21 12:40	1
Methoxychlor	ND		0.050	0.020	ug/L		11/02/21 10:26	11/03/21 12:40	1
Toxaphene	ND		0.30	0.15	ug/L		11/02/21 10:26	11/03/21 12:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*49 - 132*	*11/02/21 10:26*	*11/03/21 12:40*	*1*
DCB Decachlorobiphenyl (Surr)	*44*		*10 - 142*	*11/02/21 10:26*	*11/03/21 12:40*	*1*

Lab Sample ID: LCS 570-191082/2-A
Matrix: Water
Analysis Batch: 191324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 191082

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.250	0.233		ug/L		93	27 - 162
4,4'-DDE	0.250	0.222		ug/L		89	23 - 160
4,4'-DDT	0.250	0.237		ug/L		95	11 - 173
Aldrin	0.250	0.190		ug/L		76	31 - 135
alpha-BHC	0.250	0.218		ug/L		87	28 - 147
cis-Chlordane	0.250	0.227		ug/L		91	26 - 151
beta-BHC	0.250	0.198		ug/L		79	26 - 151
delta-BHC	0.250	0.241		ug/L		96	10 - 140
Dieldrin	0.250	0.240		ug/L		96	24 - 157
Endosulfan I	0.250	0.219		ug/L		87	26 - 150
Endosulfan II	0.250	0.218		ug/L		87	27 - 160
Endosulfan sulfate	0.250	0.219		ug/L		88	25 - 146
Endrin	0.250	0.238		ug/L		95	24 - 170
Endrin aldehyde	0.250	0.225		ug/L		90	23 - 153
Endrin ketone	0.250	0.217		ug/L		87	32 - 154
trans-Chlordane	0.250	0.201		ug/L		80	22 - 159

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 570-191082/2-A
Matrix: Water
Analysis Batch: 191324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 191082

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
gamma-BHC (Lindane)	0.250	0.219		ug/L		88	28 - 151
Heptachlor	0.250	0.206		ug/L		83	26 - 145
Heptachlor epoxide	0.250	0.222		ug/L		89	26 - 157
Methoxychlor	0.250	0.217		ug/L		87	31 - 155

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*83*		*49 - 132*
DCB Decachlorobiphenyl (Surr)	*66*		*10 - 142*

Lab Sample ID: LCSD 570-191082/3-A
Matrix: Water
Analysis Batch: 191324

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 191082

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.250	0.232		ug/L		93	27 - 162	0	30
4,4'-DDE	0.250	0.222		ug/L		89	23 - 160	0	28
4,4'-DDT	0.250	0.239		ug/L		96	11 - 173	1	40
Aldrin	0.250	0.197		ug/L		79	31 - 135	3	26
alpha-BHC	0.250	0.221		ug/L		88	28 - 147	1	26
cis-Chlordane	0.250	0.216		ug/L		86	26 - 151	5	29
beta-BHC	0.250	0.201		ug/L		80	26 - 151	2	26
delta-BHC	0.250	0.244		ug/L		97	10 - 140	1	36
Dieldrin	0.250	0.222		ug/L		89	24 - 157	8	27
Endosulfan I	0.250	0.218		ug/L		87	26 - 150	0	25
Endosulfan II	0.250	0.220		ug/L		88	27 - 160	1	27
Endosulfan sulfate	0.250	0.222		ug/L		89	25 - 146	1	27
Endrin	0.250	0.233		ug/L		93	24 - 170	2	40
Endrin aldehyde	0.250	0.224		ug/L		90	23 - 153	0	25
Endrin ketone	0.250	0.219		ug/L		88	32 - 154	1	27
trans-Chlordane	0.250	0.201		ug/L		81	22 - 159	0	30
gamma-BHC (Lindane)	0.250	0.221		ug/L		88	28 - 151	1	26
Heptachlor	0.250	0.211		ug/L		85	26 - 145	2	26
Heptachlor epoxide	0.250	0.219		ug/L		88	26 - 157	1	30
Methoxychlor	0.250	0.219		ug/L		88	31 - 155	1	26

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*84*		*49 - 132*
DCB Decachlorobiphenyl (Surr)	*70*		*10 - 142*

Lab Sample ID: MB 320-537878/1-A
Matrix: Solid
Analysis Batch: 538396

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 537878

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
Aldrin	ND		1.7	0.14	ug/Kg		10/28/21 10:38	10/29/21 21:20	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 320-537878/1-A
Matrix: Solid
Analysis Batch: 538396

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 537878

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		1.7	0.16	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
beta-BHC	ND		1.7	0.22	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
Chlordane (technical)	ND		20	9.4	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
delta-BHC	ND		1.7	0.35	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
Dieldrin	ND		1.7	0.20	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
Endosulfan I	ND		1.7	0.18	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
Endosulfan II	ND		1.7	0.18	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
Endrin	ND		1.7	0.20	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
Endrin ketone	ND		1.7	0.27	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
Heptachlor	ND		1.7	0.15	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
Methoxychlor	ND		3.4	0.56	ug/Kg		10/28/21 10:38	10/29/21 21:20	1
Toxaphene	ND		67	22	ug/Kg		10/28/21 10:38	10/29/21 21:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*53*		*46 - 109*	*10/28/21 10:38*	*10/29/21 21:20*	*1*
DCB Decachlorobiphenyl	*53*		*46 - 109*	*10/28/21 10:38*	*10/29/21 21:20*	*1*
Tetrachloro-m-xylene	*68*		*47 - 107*	*10/28/21 10:38*	*10/29/21 21:20*	*1*
Tetrachloro-m-xylene	*70*		*47 - 107*	*10/28/21 10:38*	*10/29/21 21:20*	*1*

Lab Sample ID: LCS 320-537878/2-A
Matrix: Solid
Analysis Batch: 538396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 537878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	14.8		ug/Kg		89	53 - 117
4,4'-DDE	16.7	13.3		ug/Kg		80	58 - 115
4,4'-DDT	16.7	15.1		ug/Kg		90	53 - 128
Aldrin	16.7	12.7		ug/Kg		76	55 - 109
alpha-BHC	16.7	12.8		ug/Kg		77	54 - 111
cis-Chlordane	16.7	12.8		ug/Kg		77	54 - 113
beta-BHC	16.7	12.7		ug/Kg		76	53 - 115
delta-BHC	16.7	12.5		ug/Kg		75	39 - 124
Dieldrin	16.7	13.7		ug/Kg		82	54 - 117
Endosulfan I	16.7	11.7		ug/Kg		70	42 - 118
Endosulfan II	16.7	12.7		ug/Kg		76	48 - 118
Endosulfan sulfate	16.7	12.5		ug/Kg		75	51 - 113
Endrin	16.7	13.8		ug/Kg		83	58 - 115
Endrin aldehyde	16.7	11.3		ug/Kg		68	40 - 100
Endrin ketone	16.7	11.8		ug/Kg		71	51 - 118
trans-Chlordane	16.7	12.6		ug/Kg		75	55 - 114
gamma-BHC (Lindane)	16.7	12.5		ug/Kg		75	54 - 112
Heptachlor	16.7	13.0		ug/Kg		78	50 - 118

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 320-537878/2-A
Matrix: Solid
Analysis Batch: 538396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 537878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Heptachlor epoxide	16.7	12.9		ug/Kg		77	56 - 113
Methoxychlor	16.7	12.8		ug/Kg		77	52 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*57*		*46 - 109*
Tetrachloro-m-xylene	*68*		*47 - 107*

Lab Sample ID: 320-80878-25 MS
Matrix: Solid
Analysis Batch: 538396

Client Sample ID: AOC3/AOC8-S1A-0.5
Prep Type: Total/NA
Prep Batch: 537878

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		15.8	11.1	J P	ug/Kg		70	53 - 117
4,4'-DDE	ND	F1	15.8	6.35	J F1	ug/Kg		40	58 - 115
4,4'-DDT	ND	F1	15.8	7.24	J F1	ug/Kg		46	53 - 128
Aldrin	ND		15.8	9.09	J	ug/Kg		58	55 - 109
alpha-BHC	ND		15.8	9.00	J	ug/Kg		57	54 - 111
cis-Chlordane	ND	F1	15.8	6.63	J F1	ug/Kg		42	54 - 113
beta-BHC	ND		15.8	9.52	J	ug/Kg		60	53 - 115
delta-BHC	ND		15.8	8.30	J	ug/Kg		53	39 - 124
Dieldrin	ND	F1	15.8	6.38	J F1	ug/Kg		40	54 - 117
Endosulfan I	ND	F1	15.8	6.33	J F1	ug/Kg		40	42 - 118
Endosulfan II	ND	F1	15.8	7.21	J F1	ug/Kg		46	48 - 118
Endosulfan sulfate	ND	F1	15.8	7.55	J F1	ug/Kg		48	51 - 113
Endrin	ND	F1	15.8	6.66	J F1	ug/Kg		42	58 - 115
Endrin aldehyde	ND	F1	15.8	ND	F1	ug/Kg		0	40 - 100
Endrin ketone	ND	F1	15.8	7.30	J F1 P	ug/Kg		46	51 - 118
trans-Chlordane	ND	F1	15.8	ND	F1	ug/Kg		0	55 - 114
gamma-BHC (Lindane)	ND		15.8	10.8	J	ug/Kg		69	54 - 112
Heptachlor	ND		15.8	9.26	J	ug/Kg		59	50 - 118
Heptachlor epoxide	ND	F1	15.8	7.53	J F1	ug/Kg		48	56 - 113
Methoxychlor	ND	F1	15.8	ND	F1	ug/Kg		0	52 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*31*	*p S1-*	*46 - 109*
Tetrachloro-m-xylene	*59*		*47 - 107*

Lab Sample ID: 320-80878-25 MSD
Matrix: Solid
Analysis Batch: 538396

Client Sample ID: AOC3/AOC8-S1A-0.5
Prep Type: Total/NA
Prep Batch: 537878

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		15.8	11.0	J P	ug/Kg		70	53 - 117	1	30
4,4'-DDE	ND	F1	15.8	7.74	J F1	ug/Kg		49	58 - 115	20	30
4,4'-DDT	ND	F1	15.8	6.81	J F1	ug/Kg		43	53 - 128	6	30
Aldrin	ND		15.8	9.15	J	ug/Kg		58	55 - 109	1	30
alpha-BHC	ND		15.8	9.40	J	ug/Kg		59	54 - 111	4	30
cis-Chlordane	ND	F1	15.8	6.80	J F1	ug/Kg		43	54 - 113	3	30

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-80878-25 MSD
Matrix: Solid
Analysis Batch: 538396

Client Sample ID: AOC3/AOC8-S1A-0.5
Prep Type: Total/NA
Prep Batch: 537878

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
beta-BHC	ND		15.8	9.44	J	ug/Kg		60	53 - 115	1	30
delta-BHC	ND		15.8	8.03	J	ug/Kg		51	39 - 124	3	30
Dieldrin	ND	F1	15.8	8.00	J F1	ug/Kg		51	54 - 117	23	30
Endosulfan I	ND	F1	15.8	6.44	J F1	ug/Kg		41	42 - 118	2	30
Endosulfan II	ND	F1	15.8	8.09	J	ug/Kg		51	48 - 118	11	30
Endosulfan sulfate	ND	F1	15.8	7.17	J F1	ug/Kg		45	51 - 113	5	30
Endrin	ND	F1	15.8	6.84	J F1	ug/Kg		43	58 - 115	3	30
Endrin aldehyde	ND	F1	15.8	ND	F1	ug/Kg		0	40 - 100	NC	30
Endrin ketone	ND	F1	15.8	7.60	J F1 P	ug/Kg		48	51 - 118	4	30
trans-Chlordane	ND	F1	15.8	ND	F1	ug/Kg		0	55 - 114	NC	30
gamma-BHC (Lindane)	ND		15.8	10.9	J	ug/Kg		69	54 - 112	0	30
Heptachlor	ND		15.8	9.46	J	ug/Kg		60	50 - 118	2	30
Heptachlor epoxide	ND	F1	15.8	7.96	J F1	ug/Kg		50	56 - 113	6	30
Methoxychlor	ND	F1	15.8	ND	F1	ug/Kg		0	52 - 123	NC	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*28*	*p S1-*	*46 - 109*
Tetrachloro-m-xylene	*63*		*47 - 107*

Lab Sample ID: MB 320-539048/1-A
Matrix: Solid
Analysis Batch: 541246

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539048

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
Aldrin	ND		1.7	0.14	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
Endrin	ND		1.7	0.20	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/02/21 04:39	11/09/21 14:59	1
Toxaphene	ND		67	22	ug/Kg		11/02/21 04:39	11/09/21 14:59	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 320-539048/1-A
Matrix: Solid
Analysis Batch: 541246

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539048

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	47		46 - 109	11/02/21 04:39	11/09/21 14:59	1
DCB Decachlorobiphenyl	68		46 - 109	11/02/21 04:39	11/09/21 14:59	1
Tetrachloro-m-xylene	62		47 - 107	11/02/21 04:39	11/09/21 14:59	1
Tetrachloro-m-xylene	64		47 - 107	11/02/21 04:39	11/09/21 14:59	1

Lab Sample ID: LCS 320-539048/2-A
Matrix: Solid
Analysis Batch: 541246

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539048

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	10.4		ug/Kg		63	53 - 117
4,4'-DDE	16.7	10.2		ug/Kg		61	58 - 115
4,4'-DDT	16.7	9.84		ug/Kg		59	53 - 128
Aldrin	16.7	9.77		ug/Kg		59	55 - 109
alpha-BHC	16.7	11.5		ug/Kg		69	54 - 111
cis-Chlordane	16.7	10.3		ug/Kg		62	54 - 113
beta-BHC	16.7	11.3		ug/Kg		68	53 - 115
delta-BHC	16.7	10.6		ug/Kg		63	39 - 124
Dieldrin	16.7	9.93		ug/Kg		60	54 - 117
Endosulfan I	16.7	8.55		ug/Kg		51	42 - 118
Endosulfan II	16.7	9.42		ug/Kg		57	48 - 118
Endosulfan sulfate	16.7	9.61		ug/Kg		58	51 - 113
Endrin	16.7	10.2		ug/Kg		61	58 - 115
Endrin aldehyde	16.7	6.62		ug/Kg		40	40 - 100
Endrin ketone	16.7	8.65		ug/Kg		52	51 - 118
trans-Chlordane	16.7	10.7		ug/Kg		64	55 - 114
gamma-BHC (Lindane)	16.7	11.5		ug/Kg		69	54 - 112
Heptachlor	16.7	9.85		ug/Kg		59	50 - 118
Heptachlor epoxide	16.7	10.1		ug/Kg		61	56 - 113
Methoxychlor	16.7	10.2		ug/Kg		61	52 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	48		46 - 109
Tetrachloro-m-xylene	68		47 - 107

Lab Sample ID: 320-80878-16 MS
Matrix: Solid
Analysis Batch: 541246

Client Sample ID: AOC1-S11-2
Prep Type: Total/NA
Prep Batch: 539048

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		15.7	10.7		ug/Kg		68	53 - 117
4,4'-DDE	ND		15.7	9.98		ug/Kg		64	58 - 115
4,4'-DDT	ND		15.7	10.2		ug/Kg		65	53 - 128
Aldrin	ND		15.7	10.6		ug/Kg		67	55 - 109
alpha-BHC	ND		15.7	10.3		ug/Kg		66	54 - 111
cis-Chlordane	ND		15.7	10.4		ug/Kg		67	54 - 113
beta-BHC	ND		15.7	10.7		ug/Kg		68	53 - 115
delta-BHC	ND		15.7	10.5		ug/Kg		67	39 - 124

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-80878-16 MS
Matrix: Solid
Analysis Batch: 541246

Client Sample ID: AOC1-S11-2
Prep Type: Total/NA
Prep Batch: 539048

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dieldrin	ND		15.7	10.3		ug/Kg		66	54 - 117
Endosulfan I	ND		15.7	8.66		ug/Kg		55	42 - 118
Endosulfan II	ND		15.7	9.53		ug/Kg		61	48 - 118
Endosulfan sulfate	ND		15.7	10.5		ug/Kg		67	51 - 113
Endrin	ND		15.7	10.2		ug/Kg		65	58 - 115
Endrin aldehyde	ND		15.7	7.84		ug/Kg		50	40 - 100
Endrin ketone	ND		15.7	10.0		ug/Kg		64	51 - 118
trans-Chlordane	ND		15.7	9.71		ug/Kg		62	55 - 114
gamma-BHC (Lindane)	ND		15.7	10.5		ug/Kg		67	54 - 112
Heptachlor	ND		15.7	9.86		ug/Kg		63	50 - 118
Heptachlor epoxide	ND		15.7	10.4		ug/Kg		66	56 - 113
Methoxychlor	ND		15.7	10.3		ug/Kg		66	52 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*63*		*46 - 109*
Tetrachloro-m-xylene	*63*		*47 - 107*

Lab Sample ID: 320-80878-16 MSD
Matrix: Solid
Analysis Batch: 541246

Client Sample ID: AOC1-S11-2
Prep Type: Total/NA
Prep Batch: 539048

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		15.6	11.6		ug/Kg		74	53 - 117	8	30
4,4'-DDE	ND		15.6	10.9		ug/Kg		70	58 - 115	9	30
4,4'-DDT	ND		15.6	10.9		ug/Kg		70	53 - 128	6	30
Aldrin	ND		15.6	11.2		ug/Kg		71	55 - 109	6	30
alpha-BHC	ND		15.6	11.1		ug/Kg		71	54 - 111	7	30
cis-Chlordane	ND		15.6	11.1		ug/Kg		71	54 - 113	6	30
beta-BHC	ND		15.6	11.2		ug/Kg		72	53 - 115	5	30
delta-BHC	ND		15.6	11.1		ug/Kg		71	39 - 124	6	30
Dieldrin	ND		15.6	11.1		ug/Kg		71	54 - 117	7	30
Endosulfan I	ND		15.6	9.26		ug/Kg		59	42 - 118	7	30
Endosulfan II	ND		15.6	10.3		ug/Kg		66	48 - 118	7	30
Endosulfan sulfate	ND		15.6	11.2		ug/Kg		71	51 - 113	6	30
Endrin	ND		15.6	11.2		ug/Kg		71	58 - 115	9	30
Endrin aldehyde	ND		15.6	8.90		ug/Kg		57	40 - 100	13	30
Endrin ketone	ND		15.6	10.6		ug/Kg		68	51 - 118	5	30
trans-Chlordane	ND		15.6	10.3		ug/Kg		66	55 - 114	6	30
gamma-BHC (Lindane)	ND		15.6	11.2		ug/Kg		72	54 - 112	6	30
Heptachlor	ND		15.6	10.7		ug/Kg		68	50 - 118	8	30
Heptachlor epoxide	ND		15.6	10.9		ug/Kg		70	56 - 113	5	30
Methoxychlor	ND		15.6	11.0		ug/Kg		70	52 - 123	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*52*		*46 - 109*
Tetrachloro-m-xylene	*57*		*47 - 107*

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 320-539069/1-A
Matrix: Solid
Analysis Batch: 541246

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539069

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
Aldrin	ND		1.7	0.14	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
Endrin	ND		1.7	0.20	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/02/21 06:18	11/09/21 14:40	1
Toxaphene	ND		67	22	ug/Kg		11/02/21 06:18	11/09/21 14:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*64*		*46 - 109*	*11/02/21 06:18*	*11/09/21 14:40*	*1*
DCB Decachlorobiphenyl	*78*		*46 - 109*	*11/02/21 06:18*	*11/09/21 14:40*	*1*
Tetrachloro-m-xylene	*67*		*47 - 107*	*11/02/21 06:18*	*11/09/21 14:40*	*1*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/02/21 06:18*	*11/09/21 14:40*	*1*

Lab Sample ID: LCS 320-539069/2-A
Matrix: Solid
Analysis Batch: 540922

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	11.4		ug/Kg		68	53 - 117
4,4'-DDE	16.7	11.5		ug/Kg		69	58 - 115
4,4'-DDT	16.7	12.5		ug/Kg		75	53 - 128
Aldrin	16.7	11.2		ug/Kg		67	55 - 109
alpha-BHC	16.7	11.3		ug/Kg		68	54 - 111
cis-Chlordane	16.7	11.0		ug/Kg		66	54 - 113
beta-BHC	16.7	10.9		ug/Kg		66	53 - 115
delta-BHC	16.7	11.0		ug/Kg		66	39 - 124
Dieldrin	16.7	11.5		ug/Kg		69	54 - 117
Endosulfan I	16.7	9.43		ug/Kg		57	42 - 118
Endosulfan II	16.7	10.9		ug/Kg		65	48 - 118
Endosulfan sulfate	16.7	11.7		ug/Kg		70	51 - 113
Endrin	16.7	11.5		ug/Kg		69	58 - 115
Endrin aldehyde	16.7	10.6		ug/Kg		64	40 - 100

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 320-539069/2-A
Matrix: Solid
Analysis Batch: 540922

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Endrin ketone	16.7	11.2		ug/Kg		67	51 - 118
trans-Chlordane	16.7	10.7		ug/Kg		64	55 - 114
gamma-BHC (Lindane)	16.7	11.2		ug/Kg		67	54 - 112
Heptachlor	16.7	10.7		ug/Kg		64	50 - 118
Heptachlor epoxide	16.7	10.8		ug/Kg		65	56 - 113
Methoxychlor	16.7	12.2		ug/Kg		73	52 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*61*		*46 - 109*
Tetrachloro-m-xylene	*71*		*47 - 107*

Lab Sample ID: 320-80878-33 MS
Matrix: Solid
Analysis Batch: 540922

Client Sample ID: AOC3-S2C-0.5
Prep Type: Total/NA
Prep Batch: 539069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		15.9	12.7	J	ug/Kg		80	53 - 117
4,4'-DDE	ND		15.9	9.82	J	ug/Kg		62	58 - 115
4,4'-DDT	ND	F1	15.9	8.76	J	ug/Kg		55	53 - 128
Aldrin	ND		15.9	11.2	J	ug/Kg		70	55 - 109
alpha-BHC	ND		15.9	12.5	J	ug/Kg		79	54 - 111
cis-Chlordane	ND		15.9	9.86	J	ug/Kg		62	54 - 113
beta-BHC	ND		15.9	12.2	J	ug/Kg		77	53 - 115
delta-BHC	ND		15.9	10.9	J	ug/Kg		69	39 - 124
Dieldrin	ND	F1	15.9	8.95	J	ug/Kg		56	54 - 117
Endosulfan I	ND		15.9	7.85	J	ug/Kg		49	42 - 118
Endosulfan II	ND	F1	15.9	7.35	J F1	ug/Kg		46	48 - 118
Endosulfan sulfate	ND	F1	15.9	7.59	J F1	ug/Kg		48	51 - 113
Endrin	ND	F1	15.9	9.08	J F1	ug/Kg		57	58 - 115
Endrin aldehyde	ND		15.9	7.05	J	ug/Kg		44	40 - 100
Endrin ketone	ND	F1	15.9	7.54	J F1	ug/Kg		47	51 - 118
trans-Chlordane	ND		15.9	9.65	J	ug/Kg		61	55 - 114
gamma-BHC (Lindane)	ND		15.9	12.1	J	ug/Kg		76	54 - 112
Heptachlor	ND		15.9	11.6	J	ug/Kg		73	50 - 118
Heptachlor epoxide	ND		15.9	9.83	J	ug/Kg		62	56 - 113
Methoxychlor	ND		15.9	5.50	J p F1	ug/Kg		35	52 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*72*		*46 - 109*
Tetrachloro-m-xylene	*87*		*47 - 107*

Lab Sample ID: 320-80878-33 MSD
Matrix: Solid
Analysis Batch: 540922

Client Sample ID: AOC3-S2C-0.5
Prep Type: Total/NA
Prep Batch: 539069

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		15.8	12.1	J	ug/Kg		77	53 - 117	5	30
4,4'-DDE	ND		15.8	9.45	J	ug/Kg		60	58 - 115	4	30

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-80878-33 MSD
Matrix: Solid
Analysis Batch: 540922

Client Sample ID: AOC3-S2C-0.5
Prep Type: Total/NA
Prep Batch: 539069

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDT	ND	F1	15.8	6.93	J F1	ug/Kg		44	53 - 128	23	30
Aldrin	ND		15.8	11.4	J	ug/Kg		73	55 - 109	2	30
alpha-BHC	ND		15.8	11.4	J	ug/Kg		73	54 - 111	9	30
cis-Chlordane	ND		15.8	9.28	J	ug/Kg		59	54 - 113	6	30
beta-BHC	ND		15.8	12.1	J	ug/Kg		77	53 - 115	1	30
delta-BHC	ND		15.8	10.1	J	ug/Kg		64	39 - 124	8	30
Dieldrin	ND	F1	15.8	8.34	J F1	ug/Kg		53	54 - 117	7	30
Endosulfan I	ND		15.8	7.89	J	ug/Kg		50	42 - 118	0	30
Endosulfan II	ND	F1	15.8	7.03	J F1	ug/Kg		45	48 - 118	4	30
Endosulfan sulfate	ND	F1	15.8	7.43	J F1	ug/Kg		47	51 - 113	2	30
Endrin	ND	F1	15.8	8.41	J F1	ug/Kg		53	58 - 115	8	30
Endrin aldehyde	ND		15.8	7.48	J	ug/Kg		47	40 - 100	6	30
Endrin ketone	ND	F1	15.8	8.09	J	ug/Kg		51	51 - 118	7	30
trans-Chlordane	ND		15.8	9.39	J	ug/Kg		60	55 - 114	3	30
gamma-BHC (Lindane)	ND		15.8	11.6	J	ug/Kg		74	54 - 112	4	30
Heptachlor	ND		15.8	10.8	J	ug/Kg		68	50 - 118	8	30
Heptachlor epoxide	ND		15.8	10.5	J	ug/Kg		66	56 - 113	6	30
Methoxychlor	ND		15.8	5.34	J p F1	ug/Kg		34	52 - 123	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*98*		*46 - 109*
Tetrachloro-m-xylene	*91*		*47 - 107*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 570-191082/1-A
Matrix: Water
Analysis Batch: 191413

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 191082

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.33	ug/L		11/02/21 10:26	11/03/21 11:55	1
PCB-1221	ND		0.50	0.33	ug/L		11/02/21 10:26	11/03/21 11:55	1
PCB-1232	ND		0.50	0.33	ug/L		11/02/21 10:26	11/03/21 11:55	1
PCB-1242	ND		0.50	0.33	ug/L		11/02/21 10:26	11/03/21 11:55	1
PCB-1248	ND		0.50	0.33	ug/L		11/02/21 10:26	11/03/21 11:55	1
PCB-1254	ND		0.50	0.39	ug/L		11/02/21 10:26	11/03/21 11:55	1
PCB-1260	ND		0.50	0.39	ug/L		11/02/21 10:26	11/03/21 11:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*50*		*20 - 122*	*11/02/21 10:26*	*11/03/21 11:55*	*1*
Tetrachloro-m-xylene	*65*		*20 - 144*	*11/02/21 10:26*	*11/03/21 11:55*	*1*

Lab Sample ID: LCS 570-191082/4-A
Matrix: Water
Analysis Batch: 191413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 191082

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			1.00	0.903		ug/L		90	20 - 165		

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 570-191082/4-A
Matrix: Water
Analysis Batch: 191413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 191082

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1260			1.00	1.06		ug/L		106	42 - 148		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*65*		*20 - 122*
Tetrachloro-m-xylene	*68*		*20 - 144*

Lab Sample ID: LCSD 570-191082/5-A
Matrix: Water
Analysis Batch: 191413

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 191082

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			1.00	0.910		ug/L		91	20 - 165	1	30
PCB-1260			1.00	0.937		ug/L		94	42 - 148	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*65*		*20 - 122*
Tetrachloro-m-xylene	*69*		*20 - 144*

Lab Sample ID: MB 320-539050/1-A
Matrix: Solid
Analysis Batch: 543551

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539050

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.6	ug/Kg		11/02/21 04:41	11/17/21 14:20	1
PCB-1221	ND		33	3.6	ug/Kg		11/02/21 04:41	11/17/21 14:20	1
PCB-1232	ND		33	4.8	ug/Kg		11/02/21 04:41	11/17/21 14:20	1
PCB-1242	ND		33	5.9	ug/Kg		11/02/21 04:41	11/17/21 14:20	1
PCB-1248	ND		33	2.4	ug/Kg		11/02/21 04:41	11/17/21 14:20	1
PCB-1254	ND		33	3.8	ug/Kg		11/02/21 04:41	11/17/21 14:20	1
PCB-1260	ND		33	2.7	ug/Kg		11/02/21 04:41	11/17/21 14:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*76*		*52 - 138*	*11/02/21 04:41*	*11/17/21 14:20*	*1*
Tetrachloro-m-xylene	*80*		*56 - 114*	*11/02/21 04:41*	*11/17/21 14:20*	*1*

Lab Sample ID: LCS 320-539050/2-A
Matrix: Solid
Analysis Batch: 543551

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539050

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			66.7	60.3		ug/Kg		90	58 - 124		
PCB-1260			66.7	57.9		ug/Kg		87	55 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*70*		*52 - 138*
Tetrachloro-m-xylene	*73*		*56 - 114*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 320-80878-17 MS
Matrix: Solid
Analysis Batch: 543551

Client Sample ID: AOC2-S12-0.5
Prep Type: Total/NA
Prep Batch: 539050

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		64.1	39.5		ug/Kg		62	58 - 124
PCB-1260	ND	F1	64.1	33.8	F1	ug/Kg		53	55 - 138

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*64*		*52 - 138*
Tetrachloro-m-xylene	*61*		*56 - 114*

Lab Sample ID: 320-80878-17 MSD
Matrix: Solid
Analysis Batch: 543551

Client Sample ID: AOC2-S12-0.5
Prep Type: Total/NA
Prep Batch: 539050

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		65.2	39.7		ug/Kg		61	58 - 124	1	20
PCB-1260	ND	F1	65.2	33.9	F1	ug/Kg		52	55 - 138	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*54*		*52 - 138*
Tetrachloro-m-xylene	*56*		*56 - 114*

Lab Sample ID: MB 320-539070/1-A
Matrix: Solid
Analysis Batch: 543265

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539070

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.6	ug/Kg		11/02/21 06:48	11/16/21 17:17	1
PCB-1221	ND		33	3.6	ug/Kg		11/02/21 06:48	11/16/21 17:17	1
PCB-1232	ND		33	4.8	ug/Kg		11/02/21 06:48	11/16/21 17:17	1
PCB-1242	ND		33	5.9	ug/Kg		11/02/21 06:48	11/16/21 17:17	1
PCB-1248	ND		33	2.4	ug/Kg		11/02/21 06:48	11/16/21 17:17	1
PCB-1254	ND		33	3.8	ug/Kg		11/02/21 06:48	11/16/21 17:17	1
PCB-1260	ND		33	2.7	ug/Kg		11/02/21 06:48	11/16/21 17:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*91*		*52 - 138*	*11/02/21 06:48*	*11/16/21 17:17*	*1*
Tetrachloro-m-xylene	*92*		*56 - 114*	*11/02/21 06:48*	*11/16/21 17:17*	*1*

Lab Sample ID: LCS 320-539070/2-A
Matrix: Solid
Analysis Batch: 543265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539070

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016			66.7	64.5		ug/Kg		97	58 - 124
PCB-1260			66.7	61.3		ug/Kg		92	55 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*87*		*52 - 138*
Tetrachloro-m-xylene	*89*		*56 - 114*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 320-80878-31 MS
Matrix: Solid
Analysis Batch: 543265

Client Sample ID: AOC3-S2B-0.5
Prep Type: Total/NA
Prep Batch: 539070

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND	F2	64.1	53.8		ug/Kg		84	58 - 124
PCB-1260	ND		64.1	50.0		ug/Kg		78	55 - 138

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*94*		*52 - 138*
Tetrachloro-m-xylene	*89*		*56 - 114*

Lab Sample ID: 320-80878-31 MSD
Matrix: Solid
Analysis Batch: 543265

Client Sample ID: AOC3-S2B-0.5
Prep Type: Total/NA
Prep Batch: 539070

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND	F2	66.2	43.0	F2	ug/Kg		65	58 - 124	22	20
PCB-1260	ND		66.2	52.0		ug/Kg		79	55 - 138	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*68*		*52 - 138*
Tetrachloro-m-xylene	*67*		*56 - 114*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 570-191547/1-A
Matrix: Water
Analysis Batch: 191812

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 191547

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.010	0.0058	mg/L		11/03/21 16:24	11/04/21 11:15	1
Arsenic	ND		0.10	0.022	mg/L		11/03/21 16:24	11/04/21 11:15	1
Barium	ND		0.010	0.0016	mg/L		11/03/21 16:24	11/04/21 11:15	1
Beryllium	ND		0.010	0.0026	mg/L		11/03/21 16:24	11/04/21 11:15	1
Cadmium	ND		0.010	0.0012	mg/L		11/03/21 16:24	11/04/21 11:15	1
Cobalt	ND		0.050	0.0023	mg/L		11/03/21 16:24	11/04/21 11:15	1
Chromium	ND		0.050	0.0086	mg/L		11/03/21 16:24	11/04/21 11:15	1
Copper	ND		0.050	0.0085	mg/L		11/03/21 16:24	11/04/21 11:15	1
Molybdenum	ND		0.050	0.024	mg/L		11/03/21 16:24	11/04/21 11:15	1
Nickel	ND		0.050	0.0045	mg/L		11/03/21 16:24	11/04/21 11:15	1
Antimony	ND		0.10	0.021	mg/L		11/03/21 16:24	11/04/21 11:15	1
Selenium	ND		0.10	0.034	mg/L		11/03/21 16:24	11/04/21 11:15	1
Thallium	ND		0.050	0.019	mg/L		11/03/21 16:24	11/04/21 11:15	1
Vanadium	ND		0.010	0.0017	mg/L		11/03/21 16:24	11/04/21 11:15	1
Zinc	ND		0.25	0.014	mg/L		11/03/21 16:24	11/04/21 11:15	1
Lead	ND		0.050	0.0080	mg/L		11/03/21 16:24	11/04/21 11:15	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 570-191547/2-A
Matrix: Water
Analysis Batch: 191812

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 191547

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.250	0.232		mg/L		93	80 - 120
Arsenic	0.500	0.458		mg/L		92	80 - 120
Barium	0.500	0.560		mg/L		112	80 - 120
Beryllium	0.500	0.514		mg/L		103	80 - 120
Cadmium	0.500	0.529		mg/L		106	80 - 120
Cobalt	0.500	0.517		mg/L		103	80 - 120
Chromium	0.500	0.526		mg/L		105	80 - 120
Copper	0.500	0.564		mg/L		113	80 - 120
Molybdenum	0.501	0.504		mg/L		101	80 - 120
Nickel	0.500	0.544		mg/L		109	80 - 120
Antimony	0.500	0.519		mg/L		104	80 - 120
Selenium	0.500	0.496		mg/L		99	80 - 120
Thallium	0.500	0.524		mg/L		105	80 - 120
Vanadium	0.500	0.520		mg/L		104	80 - 120
Zinc	0.500	0.520		mg/L		104	80 - 120
Lead	0.500	0.534		mg/L		107	80 - 120

Lab Sample ID: LCSD 570-191547/3-A
Matrix: Water
Analysis Batch: 191812

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 191547

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.250	0.230		mg/L		92	80 - 120	1	20
Arsenic	0.500	0.461		mg/L		92	80 - 120	1	20
Barium	0.500	0.563		mg/L		113	80 - 120	0	20
Beryllium	0.500	0.513		mg/L		103	80 - 120	0	20
Cadmium	0.500	0.524		mg/L		105	80 - 120	1	20
Cobalt	0.500	0.514		mg/L		103	80 - 120	1	20
Chromium	0.500	0.525		mg/L		105	80 - 120	0	20
Copper	0.500	0.565		mg/L		113	80 - 120	0	20
Molybdenum	0.501	0.509		mg/L		102	80 - 120	1	20
Nickel	0.500	0.540		mg/L		108	80 - 120	1	20
Antimony	0.500	0.513		mg/L		103	80 - 120	1	20
Selenium	0.500	0.509		mg/L		102	80 - 120	2	20
Thallium	0.500	0.520		mg/L		104	80 - 120	1	20
Vanadium	0.500	0.520		mg/L		104	80 - 120	0	20
Zinc	0.500	0.514		mg/L		103	80 - 120	1	20
Lead	0.500	0.530		mg/L		106	80 - 120	1	20

Lab Sample ID: MB 570-192668/1-A
Matrix: Solid
Analysis Batch: 192971

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 192668

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.22	mg/Kg		11/08/21 15:30	11/09/21 12:04	1
Arsenic	ND		2.5	2.3	mg/Kg		11/08/21 15:30	11/09/21 12:04	1
Barium	ND		0.50	0.22	mg/Kg		11/08/21 15:30	11/09/21 12:04	1
Beryllium	ND		0.25	0.17	mg/Kg		11/08/21 15:30	11/09/21 12:04	1
Cadmium	ND		0.50	0.20	mg/Kg		11/08/21 15:30	11/09/21 12:04	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 570-192668/1-A
Matrix: Solid
Analysis Batch: 192971

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 192668

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		1.0	0.23	mg/Kg		11/08/21 15:30	11/09/21 12:04	1
Chromium	ND		1.0	0.17	mg/Kg		11/08/21 15:30	11/09/21 12:04	1
Copper	ND		1.0	0.50	mg/Kg		11/08/21 15:30	11/09/21 12:04	1
Molybdenum	ND		0.50	0.45	mg/Kg		11/08/21 15:30	11/09/21 12:04	1
Nickel	ND		0.50	0.43	mg/Kg		11/08/21 15:30	11/09/21 12:04	1
Antimony	ND		3.0	1.3	mg/Kg		11/08/21 15:30	11/09/21 12:04	1
Selenium	ND		5.0	1.8	mg/Kg		11/08/21 15:30	11/09/21 12:04	1
Thallium	ND		5.0	1.5	mg/Kg		11/08/21 15:30	11/09/21 12:04	1
Vanadium	ND		1.0	0.17	mg/Kg		11/08/21 15:30	11/09/21 12:04	1
Zinc	ND		10	5.1	mg/Kg		11/08/21 15:30	11/09/21 12:04	1
Lead	ND		5.0	0.96	mg/Kg		11/08/21 15:30	11/09/21 12:04	1

Lab Sample ID: LCS 570-192668/2-A
Matrix: Solid
Analysis Batch: 192971

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 192668

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	12.5	12.2		mg/Kg		98	80 - 120
Arsenic	25.0	23.1		mg/Kg		92	80 - 120
Barium	25.0	29.2		mg/Kg		117	80 - 120
Beryllium	25.0	28.4		mg/Kg		114	80 - 120
Cadmium	25.0	25.9		mg/Kg		104	80 - 120
Cobalt	25.0	29.4		mg/Kg		117	80 - 120
Chromium	25.0	29.1		mg/Kg		117	80 - 120
Copper	25.0	25.6		mg/Kg		102	80 - 120
Molybdenum	25.0	25.2		mg/Kg		101	80 - 120
Nickel	25.0	25.4		mg/Kg		101	80 - 120
Antimony	25.0	26.4		mg/Kg		106	80 - 120
Selenium	25.0	24.4		mg/Kg		98	80 - 120
Thallium	25.0	27.1		mg/Kg		108	80 - 120
Vanadium	25.0	29.5		mg/Kg		118	80 - 120
Zinc	25.0	25.7		mg/Kg		103	80 - 120
Lead	25.0	25.5		mg/Kg		102	80 - 120

Lab Sample ID: LCSD 570-192668/3-A
Matrix: Solid
Analysis Batch: 192971

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 192668

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	12.6	12.3		mg/Kg		98	80 - 120	1	20
Arsenic	25.1	24.0		mg/Kg		95	80 - 120	4	20
Barium	25.1	29.7		mg/Kg		118	80 - 120	2	20
Beryllium	25.1	28.4		mg/Kg		113	80 - 120	0	20
Cadmium	25.1	26.6		mg/Kg		106	80 - 120	3	20
Cobalt	25.1	29.6		mg/Kg		118	80 - 120	1	20
Chromium	25.1	29.0		mg/Kg		116	80 - 120	0	20
Copper	25.1	26.3		mg/Kg		105	80 - 120	3	20
Molybdenum	25.2	26.0		mg/Kg		103	80 - 120	3	20
Nickel	25.1	25.4		mg/Kg		101	80 - 120	0	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCSD 570-192668/3-A
Matrix: Solid
Analysis Batch: 192971

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 192668

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony			25.1	27.4		mg/Kg		109	80 - 120	4	20
Selenium			25.1	25.3		mg/Kg		101	80 - 120	4	20
Thallium			25.1	28.2		mg/Kg		112	80 - 120	4	20
Vanadium			25.1	29.6		mg/Kg		118	80 - 120	0	20
Zinc			25.1	26.6		mg/Kg		106	80 - 120	3	20
Lead			25.1	26.4		mg/Kg		105	80 - 120	3	20

Lab Sample ID: MB 320-538272/1-A
Matrix: Solid
Analysis Batch: 538932

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0	1.3	mg/Kg		10/29/21 13:31	11/01/21 12:25	1

Lab Sample ID: MB 320-538272/1-A
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.26	mg/Kg		10/29/21 13:31	11/02/21 14:34	1

Lab Sample ID: LCS 320-538272/2-A
Matrix: Solid
Analysis Batch: 538932

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538272

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			50.0	43.2		mg/Kg		86	80 - 120		

Lab Sample ID: LCS 320-538272/2-A
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538272

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			25.0	22.7		mg/Kg		91	80 - 120		

Lab Sample ID: 320-80878-8 MS
Matrix: Solid
Analysis Batch: 538932

Client Sample ID: AOC1-S6-0.5
Prep Type: Total/NA
Prep Batch: 538272

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic	3.8		48.1	44.7		mg/Kg		85	80 - 120		

Lab Sample ID: 320-80878-8 MS
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: AOC1-S6-0.5
Prep Type: Total/NA
Prep Batch: 538272

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	140		24.0	141	4	mg/Kg		22	80 - 120		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 320-80878-8 MSD
Matrix: Solid
Analysis Batch: 538932

Client Sample ID: AOC1-S6-0.5
Prep Type: Total/NA
Prep Batch: 538272

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	3.8		47.6	47.0		mg/Kg		91	80 - 120	5	35

Lab Sample ID: 320-80878-8 MSD
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: AOC1-S6-0.5
Prep Type: Total/NA
Prep Batch: 538272

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	140		23.8	157	4	mg/Kg		90	80 - 120	11	35

Lab Sample ID: MB 320-538278/1-A
Matrix: Solid
Analysis Batch: 539348

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538278

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.26	mg/Kg		10/29/21 13:31	11/02/21 09:29	1
Arsenic	ND		2.0	1.3	mg/Kg		10/29/21 13:31	11/02/21 09:29	1

Lab Sample ID: LCS 320-538278/2-A
Matrix: Solid
Analysis Batch: 539348

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538278

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	25.0	23.2		mg/Kg		93	80 - 120
Arsenic	50.0	42.9		mg/Kg		86	80 - 120

Lab Sample ID: 320-80878-1 MS
Matrix: Solid
Analysis Batch: 539348

Client Sample ID: AOC1-S3-0.5
Prep Type: Total/NA
Prep Batch: 538278

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	250		12.6	258	4	mg/Kg		73	80 - 120
Arsenic	3.3		25.1	24.1		mg/Kg		83	80 - 120

Lab Sample ID: 320-80878-1 MSD
Matrix: Solid
Analysis Batch: 539348

Client Sample ID: AOC1-S3-0.5
Prep Type: Total/NA
Prep Batch: 538278

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	250		12.4	259	4	mg/Kg		82	80 - 120	0	35
Arsenic	3.3		24.9	24.0		mg/Kg		83	80 - 120	0	35

Lab Sample ID: MB 320-538884/1-A
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538884

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.260	J	1.0	0.26	mg/Kg		11/01/21 13:39	11/02/21 12:13	1
Arsenic	ND		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 12:13	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 320-538884/2-A
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538884

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	25.0	23.7		mg/Kg		95	80 - 120
Arsenic	50.0	44.7		mg/Kg		89	80 - 120

Lab Sample ID: 320-80878-27 MS
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: AOC3-S1B-0.5
Prep Type: Total/NA
Prep Batch: 538884

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	120	F2 B	24.0	141	4	mg/Kg		102	80 - 120
Arsenic	5.6		48.1	45.2		mg/Kg		82	80 - 120

Lab Sample ID: 320-80878-27 MSD
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: AOC3-S1B-0.5
Prep Type: Total/NA
Prep Batch: 538884

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	120	F2 B	25.0	208	4 F2	mg/Kg		365	80 - 120	38	35
Arsenic	5.6		50.0	47.7		mg/Kg		84	80 - 120	5	35

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 570-192675/1-A
Matrix: Water
Analysis Batch: 192900

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 192675

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00050	0.00014	mg/L		11/08/21 15:39	11/09/21 11:15	1

Lab Sample ID: LCS 570-192675/2-A
Matrix: Water
Analysis Batch: 192900

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 192675

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0100	0.00963		mg/L		96	80 - 120

Lab Sample ID: LCSD 570-192675/3-A
Matrix: Water
Analysis Batch: 192900

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 192675

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0100	0.00969		mg/L		97	80 - 120	1	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 570-192581/1-A
Matrix: Solid
Analysis Batch: 192620

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 192581

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.083	0.014	mg/Kg		11/08/21 11:07	11/08/21 16:12	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 570-192581/2-A
Matrix: Solid
Analysis Batch: 192620

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 192581

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.847	0.862		mg/Kg		102	85 - 121		

Lab Sample ID: LCSD 570-192581/3-A
Matrix: Solid
Analysis Batch: 192620

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 192581

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.820	0.824		mg/Kg		101	85 - 121	4	10

QC Association Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

GC Semi VOA

Prep Batch: 191082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-35	EB10262021	Total/NA	Water	3510C	
MB 570-191082/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-191082/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 570-191082/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-191082/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 570-191082/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 191324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-35	EB10262021	Total/NA	Water	8081A	191082
MB 570-191082/1-A	Method Blank	Total/NA	Water	8081A	191082
LCS 570-191082/2-A	Lab Control Sample	Total/NA	Water	8081A	191082
LCSD 570-191082/3-A	Lab Control Sample Dup	Total/NA	Water	8081A	191082

Analysis Batch: 191413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-35	EB10262021	Total/NA	Water	8082	191082
MB 570-191082/1-A	Method Blank	Total/NA	Water	8082	191082
LCS 570-191082/4-A	Lab Control Sample	Total/NA	Water	8082	191082
LCSD 570-191082/5-A	Lab Control Sample Dup	Total/NA	Water	8082	191082

Prep Batch: 537878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-25	AOC3/AOC8-S1A-0.5	Total/NA	Solid	3546	
MB 320-537878/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-537878/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-80878-25 MS	AOC3/AOC8-S1A-0.5	Total/NA	Solid	3546	
320-80878-25 MSD	AOC3/AOC8-S1A-0.5	Total/NA	Solid	3546	

Analysis Batch: 538396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-25	AOC3/AOC8-S1A-0.5	Total/NA	Solid	8081A	537878
MB 320-537878/1-A	Method Blank	Total/NA	Solid	8081A	537878
LCS 320-537878/2-A	Lab Control Sample	Total/NA	Solid	8081A	537878
320-80878-25 MS	AOC3/AOC8-S1A-0.5	Total/NA	Solid	8081A	537878
320-80878-25 MSD	AOC3/AOC8-S1A-0.5	Total/NA	Solid	8081A	537878

Prep Batch: 539048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-1	AOC1-S3-0.5	Total/NA	Solid	3546	
320-80878-2	AOC1-S3-2	Total/NA	Solid	3546	
320-80878-3	AOC1/AOC8-S4-0.5	Total/NA	Solid	3546	
320-80878-4	AOC1/AOC8-S4-0.5DUP	Total/NA	Solid	3546	
320-80878-5	AOC1/AOC8-S4-2	Total/NA	Solid	3546	
320-80878-6	AOC1/AOC2-S5-0.5	Total/NA	Solid	3546	
320-80878-7	AOC1/AOC2-S5-2	Total/NA	Solid	3546	
320-80878-8	AOC1-S6-0.5	Total/NA	Solid	3546	
320-80878-9	AOC1-S6-2	Total/NA	Solid	3546	
320-80878-10	AOC1/AOC7-S8-0.5	Total/NA	Solid	3546	
320-80878-11	AOC1/AOC7-S8-2	Total/NA	Solid	3546	
320-80878-12	AOC1/AOC7-S8-2DUP	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 539048 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-13	AOC1/AOC8-S10-0.5	Total/NA	Solid	3546	
320-80878-14	AOC1/AOC8-S10-2	Total/NA	Solid	3546	
320-80878-15	AOC1-S11-0.5	Total/NA	Solid	3546	
320-80878-16	AOC1-S11-2	Total/NA	Solid	3546	
320-80878-17	AOC2-S12-0.5	Total/NA	Solid	3546	
MB 320-539048/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-539048/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-80878-16 MS	AOC1-S11-2	Total/NA	Solid	3546	
320-80878-16 MSD	AOC1-S11-2	Total/NA	Solid	3546	

Prep Batch: 539050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-1	AOC1-S3-0.5	Total/NA	Solid	3546	
320-80878-3	AOC1/AOC8-S4-0.5	Total/NA	Solid	3546	
320-80878-4	AOC1/AOC8-S4-0.5DUP	Total/NA	Solid	3546	
320-80878-6	AOC1/AOC2-S5-0.5	Total/NA	Solid	3546	
320-80878-8	AOC1-S6-0.5	Total/NA	Solid	3546	
320-80878-10	AOC1/AOC7-S8-0.5	Total/NA	Solid	3546	
320-80878-13	AOC1/AOC8-S10-0.5	Total/NA	Solid	3546	
320-80878-15	AOC1-S11-0.5	Total/NA	Solid	3546	
320-80878-17	AOC2-S12-0.5	Total/NA	Solid	3546	
MB 320-539050/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-539050/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-80878-17 MS	AOC2-S12-0.5	Total/NA	Solid	3546	
320-80878-17 MSD	AOC2-S12-0.5	Total/NA	Solid	3546	

Prep Batch: 539069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-18	AOC2-S12-0.5DUP	Total/NA	Solid	3546	
320-80878-19	AOC2-S12-2	Total/NA	Solid	3546	
320-80878-20	AOC2-S12-2DUP	Total/NA	Solid	3546	
320-80878-21	AOC2/AOC3-S13/S3I-0.5	Total/NA	Solid	3546	
320-80878-22	AOC2/AOC3-S13/S3I-2	Total/NA	Solid	3546	
320-80878-23	AOC2-S14-0.5	Total/NA	Solid	3546	
320-80878-24	AOC2-S14-2	Total/NA	Solid	3546	
320-80878-26	AOC3/AOC8-S1A-2	Total/NA	Solid	3546	
320-80878-27	AOC3-S1B-0.5	Total/NA	Solid	3546	
320-80878-28	AOC3-S1B-2	Total/NA	Solid	3546	
320-80878-29	AOC3-S1C-0.5	Total/NA	Solid	3546	
320-80878-30	AOC3-S1C-2	Total/NA	Solid	3546	
320-80878-31	AOC3-S2B-0.5	Total/NA	Solid	3546	
320-80878-32	AOC3-S2B-2	Total/NA	Solid	3546	
320-80878-33	AOC3-S2C-0.5	Total/NA	Solid	3546	
320-80878-34	AOC3-S2C-2	Total/NA	Solid	3546	
MB 320-539069/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-539069/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-80878-33 MS	AOC3-S2C-0.5	Total/NA	Solid	3546	
320-80878-33 MSD	AOC3-S2C-0.5	Total/NA	Solid	3546	

GC Semi VOA

Prep Batch: 539070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-18	AOC2-S12-0.5DUP	Total/NA	Solid	3546	
320-80878-21	AOC2/AOC3-S13/S3I-0.5	Total/NA	Solid	3546	
320-80878-23	AOC2-S14-0.5	Total/NA	Solid	3546	
320-80878-25	AOC3/AOC8-S1A-0.5	Total/NA	Solid	3546	
320-80878-27	AOC3-S1B-0.5	Total/NA	Solid	3546	
320-80878-29	AOC3-S1C-0.5	Total/NA	Solid	3546	
320-80878-31	AOC3-S2B-0.5	Total/NA	Solid	3546	
320-80878-33	AOC3-S2C-0.5	Total/NA	Solid	3546	
MB 320-539070/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-539070/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-80878-31 MS	AOC3-S2B-0.5	Total/NA	Solid	3546	
320-80878-31 MSD	AOC3-S2B-0.5	Total/NA	Solid	3546	

Analysis Batch: 540922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-18	AOC2-S12-0.5DUP	Total/NA	Solid	8081A	539069
320-80878-19	AOC2-S12-2	Total/NA	Solid	8081A	539069
320-80878-20	AOC2-S12-2DUP	Total/NA	Solid	8081A	539069
320-80878-21	AOC2/AOC3-S13/S3I-0.5	Total/NA	Solid	8081A	539069
320-80878-22	AOC2/AOC3-S13/S3I-2	Total/NA	Solid	8081A	539069
320-80878-23	AOC2-S14-0.5	Total/NA	Solid	8081A	539069
320-80878-24	AOC2-S14-2	Total/NA	Solid	8081A	539069
320-80878-26	AOC3/AOC8-S1A-2	Total/NA	Solid	8081A	539069
320-80878-27	AOC3-S1B-0.5	Total/NA	Solid	8081A	539069
320-80878-28	AOC3-S1B-2	Total/NA	Solid	8081A	539069
320-80878-29	AOC3-S1C-0.5	Total/NA	Solid	8081A	539069
320-80878-30	AOC3-S1C-2	Total/NA	Solid	8081A	539069
320-80878-31	AOC3-S2B-0.5	Total/NA	Solid	8081A	539069
320-80878-32	AOC3-S2B-2	Total/NA	Solid	8081A	539069
320-80878-33	AOC3-S2C-0.5	Total/NA	Solid	8081A	539069
320-80878-34	AOC3-S2C-2	Total/NA	Solid	8081A	539069
LCS 320-539069/2-A	Lab Control Sample	Total/NA	Solid	8081A	539069
320-80878-33 MS	AOC3-S2C-0.5	Total/NA	Solid	8081A	539069
320-80878-33 MSD	AOC3-S2C-0.5	Total/NA	Solid	8081A	539069

Analysis Batch: 541246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-1	AOC1-S3-0.5	Total/NA	Solid	8081A	539048
320-80878-2	AOC1-S3-2	Total/NA	Solid	8081A	539048
320-80878-3	AOC1/AOC8-S4-0.5	Total/NA	Solid	8081A	539048
320-80878-4	AOC1/AOC8-S4-0.5DUP	Total/NA	Solid	8081A	539048
320-80878-5	AOC1/AOC8-S4-2	Total/NA	Solid	8081A	539048
320-80878-6	AOC1/AOC2-S5-0.5	Total/NA	Solid	8081A	539048
320-80878-7	AOC1/AOC2-S5-2	Total/NA	Solid	8081A	539048
320-80878-8	AOC1-S6-0.5	Total/NA	Solid	8081A	539048
320-80878-9	AOC1-S6-2	Total/NA	Solid	8081A	539048
320-80878-10	AOC1/AOC7-S8-0.5	Total/NA	Solid	8081A	539048
320-80878-11	AOC1/AOC7-S8-2	Total/NA	Solid	8081A	539048
320-80878-12	AOC1/AOC7-S8-2DUP	Total/NA	Solid	8081A	539048
320-80878-13	AOC1/AOC8-S10-0.5	Total/NA	Solid	8081A	539048
320-80878-14	AOC1/AOC8-S10-2	Total/NA	Solid	8081A	539048

GC Semi VOA (Continued)

Analysis Batch: 541246 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-15	AOC1-S11-0.5	Total/NA	Solid	8081A	539048
320-80878-16	AOC1-S11-2	Total/NA	Solid	8081A	539048
320-80878-17	AOC2-S12-0.5	Total/NA	Solid	8081A	539048
MB 320-539048/1-A	Method Blank	Total/NA	Solid	8081A	539048
MB 320-539069/1-A	Method Blank	Total/NA	Solid	8081A	539069
LCS 320-539048/2-A	Lab Control Sample	Total/NA	Solid	8081A	539048
320-80878-16 MS	AOC1-S11-2	Total/NA	Solid	8081A	539048
320-80878-16 MSD	AOC1-S11-2	Total/NA	Solid	8081A	539048

Analysis Batch: 543265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-18	AOC2-S12-0.5DUP	Total/NA	Solid	8082	539070
320-80878-21	AOC2/AOC3-S13/S3I-0.5	Total/NA	Solid	8082	539070
320-80878-23	AOC2-S14-0.5	Total/NA	Solid	8082	539070
320-80878-25	AOC3/AOC8-S1A-0.5	Total/NA	Solid	8082	539070
320-80878-27	AOC3-S1B-0.5	Total/NA	Solid	8082	539070
320-80878-29	AOC3-S1C-0.5	Total/NA	Solid	8082	539070
320-80878-31	AOC3-S2B-0.5	Total/NA	Solid	8082	539070
320-80878-33	AOC3-S2C-0.5	Total/NA	Solid	8082	539070
MB 320-539070/1-A	Method Blank	Total/NA	Solid	8082	539070
LCS 320-539070/2-A	Lab Control Sample	Total/NA	Solid	8082	539070
320-80878-31 MS	AOC3-S2B-0.5	Total/NA	Solid	8082	539070
320-80878-31 MSD	AOC3-S2B-0.5	Total/NA	Solid	8082	539070

Analysis Batch: 543551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-1	AOC1-S3-0.5	Total/NA	Solid	8082	539050
320-80878-3	AOC1/AOC8-S4-0.5	Total/NA	Solid	8082	539050
320-80878-4	AOC1/AOC8-S4-0.5DUP	Total/NA	Solid	8082	539050
320-80878-6	AOC1/AOC2-S5-0.5	Total/NA	Solid	8082	539050
320-80878-8	AOC1-S6-0.5	Total/NA	Solid	8082	539050
320-80878-10	AOC1/AOC7-S8-0.5	Total/NA	Solid	8082	539050
320-80878-13	AOC1/AOC8-S10-0.5	Total/NA	Solid	8082	539050
320-80878-15	AOC1-S11-0.5	Total/NA	Solid	8082	539050
320-80878-17	AOC2-S12-0.5	Total/NA	Solid	8082	539050
MB 320-539050/1-A	Method Blank	Total/NA	Solid	8082	539050
LCS 320-539050/2-A	Lab Control Sample	Total/NA	Solid	8082	539050
320-80878-17 MS	AOC2-S12-0.5	Total/NA	Solid	8082	539050
320-80878-17 MSD	AOC2-S12-0.5	Total/NA	Solid	8082	539050

Metals

Prep Batch: 191547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-35	EB10262021	Total/NA	Water	3010A	
MB 570-191547/1-A	Method Blank	Total/NA	Water	3010A	
LCS 570-191547/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 570-191547/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	

Metals

Analysis Batch: 191812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-191547/1-A	Method Blank	Total/NA	Water	6010B	191547
LCS 570-191547/2-A	Lab Control Sample	Total/NA	Water	6010B	191547
LCSD 570-191547/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	191547

Prep Batch: 192581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-25	AOC3/AOC8-S1A-0.5	Total/NA	Solid	7471A	
MB 570-192581/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 570-192581/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 570-192581/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	

Analysis Batch: 192618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-25	AOC3/AOC8-S1A-0.5	Total/NA	Solid	7471A	192581

Analysis Batch: 192620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-192581/1-A	Method Blank	Total/NA	Solid	7471A	192581
LCS 570-192581/2-A	Lab Control Sample	Total/NA	Solid	7471A	192581
LCSD 570-192581/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	192581

Prep Batch: 192668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-25	AOC3/AOC8-S1A-0.5	Total/NA	Solid	3050B	
MB 570-192668/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 570-192668/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 570-192668/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	

Prep Batch: 192675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-35	EB10262021	Total/NA	Water	7470A	
MB 570-192675/1-A	Method Blank	Total/NA	Water	7470A	
LCS 570-192675/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 570-192675/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	

Analysis Batch: 192900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-35	EB10262021	Total/NA	Water	7470A	192675
MB 570-192675/1-A	Method Blank	Total/NA	Water	7470A	192675
LCS 570-192675/2-A	Lab Control Sample	Total/NA	Water	7470A	192675
LCSD 570-192675/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	192675

Analysis Batch: 192971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-25	AOC3/AOC8-S1A-0.5	Total/NA	Solid	6010B	192668
MB 570-192668/1-A	Method Blank	Total/NA	Solid	6010B	192668
LCS 570-192668/2-A	Lab Control Sample	Total/NA	Solid	6010B	192668
LCSD 570-192668/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	192668

Metals

Analysis Batch: 192986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-35	EB10262021	Total/NA	Water	6010B	191547

Prep Batch: 538272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-8	AOC1-S6-0.5	Total/NA	Solid	3050B	
320-80878-10	AOC1/AOC7-S8-0.5	Total/NA	Solid	3050B	
320-80878-13	AOC1/AOC8-S10-0.5	Total/NA	Solid	3050B	
320-80878-15	AOC1-S11-0.5	Total/NA	Solid	3050B	
320-80878-17	AOC2-S12-0.5	Total/NA	Solid	3050B	
320-80878-18	AOC2-S12-0.5DUP	Total/NA	Solid	3050B	
320-80878-21	AOC2/AOC3-S13/S3I-0.5	Total/NA	Solid	3050B	
320-80878-23	AOC2-S14-0.5	Total/NA	Solid	3050B	
MB 320-538272/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-538272/2-A	Lab Control Sample	Total/NA	Solid	3050B	
320-80878-8 MS	AOC1-S6-0.5	Total/NA	Solid	3050B	
320-80878-8 MSD	AOC1-S6-0.5	Total/NA	Solid	3050B	

Prep Batch: 538278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-1	AOC1-S3-0.5	Total/NA	Solid	3050B	
320-80878-3	AOC1/AOC8-S4-0.5	Total/NA	Solid	3050B	
320-80878-4	AOC1/AOC8-S4-0.5DUP	Total/NA	Solid	3050B	
320-80878-6	AOC1/AOC2-S5-0.5	Total/NA	Solid	3050B	
MB 320-538278/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-538278/2-A	Lab Control Sample	Total/NA	Solid	3050B	
320-80878-1 MS	AOC1-S3-0.5	Total/NA	Solid	3050B	
320-80878-1 MSD	AOC1-S3-0.5	Total/NA	Solid	3050B	

Prep Batch: 538884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-27	AOC3-S1B-0.5	Total/NA	Solid	3050B	
320-80878-29	AOC3-S1C-0.5	Total/NA	Solid	3050B	
320-80878-31	AOC3-S2B-0.5	Total/NA	Solid	3050B	
320-80878-33	AOC3-S2C-0.5	Total/NA	Solid	3050B	
MB 320-538884/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-538884/2-A	Lab Control Sample	Total/NA	Solid	3050B	
320-80878-27 MS	AOC3-S1B-0.5	Total/NA	Solid	3050B	
320-80878-27 MSD	AOC3-S1B-0.5	Total/NA	Solid	3050B	

Analysis Batch: 538932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-8	AOC1-S6-0.5	Total/NA	Solid	6010B	538272
320-80878-10	AOC1/AOC7-S8-0.5	Total/NA	Solid	6010B	538272
320-80878-13	AOC1/AOC8-S10-0.5	Total/NA	Solid	6010B	538272
320-80878-15	AOC1-S11-0.5	Total/NA	Solid	6010B	538272
320-80878-17	AOC2-S12-0.5	Total/NA	Solid	6010B	538272
320-80878-18	AOC2-S12-0.5DUP	Total/NA	Solid	6010B	538272
320-80878-21	AOC2/AOC3-S13/S3I-0.5	Total/NA	Solid	6010B	538272
320-80878-23	AOC2-S14-0.5	Total/NA	Solid	6010B	538272
MB 320-538272/1-A	Method Blank	Total/NA	Solid	6010B	538272
LCS 320-538272/2-A	Lab Control Sample	Total/NA	Solid	6010B	538272

Metals (Continued)

Analysis Batch: 538932 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-8 MS	AOC1-S6-0.5	Total/NA	Solid	6010B	538272
320-80878-8 MSD	AOC1-S6-0.5	Total/NA	Solid	6010B	538272

Analysis Batch: 539348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-1	AOC1-S3-0.5	Total/NA	Solid	6010B	538278
320-80878-3	AOC1/AOC8-S4-0.5	Total/NA	Solid	6010B	538278
320-80878-4	AOC1/AOC8-S4-0.5DUP	Total/NA	Solid	6010B	538278
320-80878-6	AOC1/AOC2-S5-0.5	Total/NA	Solid	6010B	538278
MB 320-538278/1-A	Method Blank	Total/NA	Solid	6010B	538278
LCS 320-538278/2-A	Lab Control Sample	Total/NA	Solid	6010B	538278
320-80878-1 MS	AOC1-S3-0.5	Total/NA	Solid	6010B	538278
320-80878-1 MSD	AOC1-S3-0.5	Total/NA	Solid	6010B	538278

Analysis Batch: 539464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-8	AOC1-S6-0.5	Total/NA	Solid	6010B	538272
320-80878-10	AOC1/AOC7-S8-0.5	Total/NA	Solid	6010B	538272
320-80878-13	AOC1/AOC8-S10-0.5	Total/NA	Solid	6010B	538272
320-80878-15	AOC1-S11-0.5	Total/NA	Solid	6010B	538272
320-80878-17	AOC2-S12-0.5	Total/NA	Solid	6010B	538272
320-80878-18	AOC2-S12-0.5DUP	Total/NA	Solid	6010B	538272
320-80878-21	AOC2/AOC3-S13/S3I-0.5	Total/NA	Solid	6010B	538272
320-80878-23	AOC2-S14-0.5	Total/NA	Solid	6010B	538272
320-80878-27	AOC3-S1B-0.5	Total/NA	Solid	6010B	538884
320-80878-29	AOC3-S1C-0.5	Total/NA	Solid	6010B	538884
320-80878-31	AOC3-S2B-0.5	Total/NA	Solid	6010B	538884
320-80878-33	AOC3-S2C-0.5	Total/NA	Solid	6010B	538884
MB 320-538272/1-A	Method Blank	Total/NA	Solid	6010B	538272
MB 320-538884/1-A	Method Blank	Total/NA	Solid	6010B	538884
LCS 320-538272/2-A	Lab Control Sample	Total/NA	Solid	6010B	538272
LCS 320-538884/2-A	Lab Control Sample	Total/NA	Solid	6010B	538884
320-80878-8 MS	AOC1-S6-0.5	Total/NA	Solid	6010B	538272
320-80878-8 MSD	AOC1-S6-0.5	Total/NA	Solid	6010B	538272
320-80878-27 MS	AOC3-S1B-0.5	Total/NA	Solid	6010B	538884
320-80878-27 MSD	AOC3-S1B-0.5	Total/NA	Solid	6010B	538884

Client Sample ID: AOC1-S3-0.5

Lab Sample ID: 320-80878-1

Date Collected: 10/26/21 08:43

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.19 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		2			541246	11/09/21 15:36	K1D	TAL SAC
Total/NA	Prep	3546			15.19 g	5 mL	539050	11/02/21 04:41	TL	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 15:01	K1D	TAL SAC
Total/NA	Prep	3050B			2.01 g	100 mL	538278	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			539348	11/02/21 09:37	GSH	TAL SAC

Client Sample ID: AOC1-S3-2

Lab Sample ID: 320-80878-2

Date Collected: 10/26/21 08:45

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.00 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		1			541246	11/09/21 15:55	K1D	TAL SAC

Client Sample ID: AOC1/AOC8-S4-0.5

Lab Sample ID: 320-80878-3

Date Collected: 10/26/21 08:52

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.62 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		5			541246	11/09/21 16:14	K1D	TAL SAC
Total/NA	Prep	3546			15.62 g	5 mL	539050	11/02/21 04:41	TL	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 15:21	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	538278	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			539348	11/02/21 09:56	GSH	TAL SAC

Client Sample ID: AOC1/AOC8-S4-0.5DUP

Lab Sample ID: 320-80878-4

Date Collected: 10/26/21 08:52

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.99 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		5			541246	11/09/21 16:33	K1D	TAL SAC
Total/NA	Prep	3546			15.99 g	5 mL	539050	11/02/21 04:41	TL	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 15:42	K1D	TAL SAC
Total/NA	Prep	3050B			1.01 g	100 mL	538278	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			539348	11/02/21 10:00	GSH	TAL SAC

Client Sample ID: AOC1/AOC8-S4-2

Lab Sample ID: 320-80878-5

Date Collected: 10/26/21 08:54

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.27 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		1			541246	11/09/21 16:52	K1D	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1/AOC2-S5-0.5

Lab Sample ID: 320-80878-6
Matrix: Solid
Date Collected: 10/26/21 10:50
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.59 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		10			541246	11/09/21 17:11	K1D	TAL SAC
Total/NA	Prep	3546			15.59 g	5 mL	539050	11/02/21 04:41	TL	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 16:02	K1D	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	538278	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			539348	11/02/21 10:04	GSH	TAL SAC

Client Sample ID: AOC1/AOC2-S5-2

Lab Sample ID: 320-80878-7
Matrix: Solid
Date Collected: 10/26/21 11:00
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.62 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		1			541246	11/09/21 17:29	K1D	TAL SAC

Client Sample ID: AOC1-S6-0.5

Lab Sample ID: 320-80878-8
Matrix: Solid
Date Collected: 10/26/21 11:32
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.01 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		10			541246	11/09/21 17:48	K1D	TAL SAC
Total/NA	Prep	3546			15.01 g	5 mL	539050	11/02/21 04:41	TL	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 16:23	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			538932	11/01/21 12:32	SP	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 14:42	GSH	TAL SAC

Client Sample ID: AOC1-S6-2

Lab Sample ID: 320-80878-9
Matrix: Solid
Date Collected: 10/26/21 11:35
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.07 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		1			541246	11/09/21 18:07	K1D	TAL SAC

Client Sample ID: AOC1/AOC7-S8-0.5

Lab Sample ID: 320-80878-10
Matrix: Solid
Date Collected: 10/26/21 11:53
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.25 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		10			541246	11/09/21 18:26	K1D	TAL SAC
Total/NA	Prep	3546			15.25 g	5 mL	539050	11/02/21 04:41	TL	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 16:43	K1D	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1/AOC7-S8-0.5
Lab Sample ID: 320-80878-10
Date Collected: 10/26/21 11:53
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			538932	11/01/21 12:59	SP	TAL SAC
Total/NA	Prep	3050B			1.01 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 15:00	GSH	TAL SAC

Client Sample ID: AOC1/AOC7-S8-2
Lab Sample ID: 320-80878-11
Date Collected: 10/26/21 11:58
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.72 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		2			541246	11/09/21 18:45	K1D	TAL SAC

Client Sample ID: AOC1/AOC7-S8-2DUP
Lab Sample ID: 320-80878-12
Date Collected: 10/26/21 11:58
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.22 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		2			541246	11/09/21 19:04	K1D	TAL SAC

Client Sample ID: AOC1/AOC8-S10-0.5
Lab Sample ID: 320-80878-13
Date Collected: 10/26/21 12:57
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.20 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		10			541246	11/09/21 19:23	K1D	TAL SAC
Total/NA	Prep	3546			15.20 g	5 mL	539050	11/02/21 04:41	TL	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 17:04	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			538932	11/01/21 13:02	SP	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 15:12	GSH	TAL SAC

Client Sample ID: AOC1/AOC8-S10-2
Lab Sample ID: 320-80878-14
Date Collected: 10/26/21 13:01
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.09 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		1			541246	11/09/21 19:41	K1D	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC1-S11-0.5

Lab Sample ID: 320-80878-15

Date Collected: 10/26/21 09:16

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.54 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		5			541246	11/09/21 20:00	K1D	TAL SAC
Total/NA	Prep	3546			15.54 g	5 mL	539050	11/02/21 04:41	TL	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 17:24	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			538932	11/01/21 13:06	SP	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 15:16	GSH	TAL SAC

Client Sample ID: AOC1-S11-2

Lab Sample ID: 320-80878-16

Date Collected: 10/26/21 09:18

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.32 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		1			541246	11/09/21 20:19	K1D	TAL SAC

Client Sample ID: AOC2-S12-0.5

Lab Sample ID: 320-80878-17

Date Collected: 10/26/21 09:36

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.57 g	5 mL	539048	11/02/21 04:39	TL	TAL SAC
Total/NA	Analysis	8081A		10			541246	11/09/21 21:16	K1D	TAL SAC
Total/NA	Prep	3546			15.57 g	5 mL	539050	11/02/21 04:41	TL	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 17:45	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			538932	11/01/21 13:10	SP	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 15:19	GSH	TAL SAC

Client Sample ID: AOC2-S12-0.5DUP

Lab Sample ID: 320-80878-18

Date Collected: 10/26/21 09:36

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.80 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		5			540922	11/08/21 13:52	K1D	TAL SAC
Total/NA	Prep	3546			15.80 g	5 mL	539070	11/02/21 06:48	NGK	TAL SAC
Total/NA	Analysis	8082		1			543265	11/16/21 17:58	K1D	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			538932	11/01/21 13:14	SP	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 15:23	GSH	TAL SAC

Client Sample ID: AOC2-S12-2

Lab Sample ID: 320-80878-19

Date Collected: 10/26/21 09:41

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.15 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		1			540922	11/08/21 14:11	K1D	TAL SAC

Client Sample ID: AOC2-S12-2DUP

Lab Sample ID: 320-80878-20

Date Collected: 10/26/21 09:41

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.30 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		1			540922	11/08/21 14:30	K1D	TAL SAC

Client Sample ID: AOC2/AOC3-S13/S3I-0.5

Lab Sample ID: 320-80878-21

Date Collected: 10/26/21 10:02

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.41 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		2			540922	11/08/21 14:49	K1D	TAL SAC
Total/NA	Prep	3546			15.41 g	5 mL	539070	11/02/21 06:48	NGK	TAL SAC
Total/NA	Analysis	8082		1			543265	11/16/21 18:19	K1D	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			538932	11/01/21 13:18	SP	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 15:27	GSH	TAL SAC

Client Sample ID: AOC2/AOC3-S13/S3I-2

Lab Sample ID: 320-80878-22

Date Collected: 10/26/21 10:04

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.44 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		1			540922	11/08/21 15:08	K1D	TAL SAC

Client Sample ID: AOC2-S14-0.5

Lab Sample ID: 320-80878-23

Date Collected: 10/26/21 10:27

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.75 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		5			540922	11/08/21 15:27	K1D	TAL SAC
Total/NA	Prep	3546			15.75 g	5 mL	539070	11/02/21 06:48	NGK	TAL SAC
Total/NA	Analysis	8082		1			543265	11/16/21 18:39	K1D	TAL SAC
Total/NA	Prep	3050B			1.05 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			538932	11/01/21 13:21	SP	TAL SAC
Total/NA	Prep	3050B			1.05 g	100 mL	538272	10/29/21 13:31	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 15:31	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC2-S14-2
Lab Sample ID: 320-80878-24
Date Collected: 10/26/21 10:29
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.99 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		1			540922	11/08/21 15:46	K1D	TAL SAC

Client Sample ID: AOC3/AOC8-S1A-0.5
Lab Sample ID: 320-80878-25
Date Collected: 10/26/21 14:11
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.52 g	5 mL	537878	10/28/21 10:38	SJ	TAL SAC
Total/NA	Analysis	8081A		20			538396	10/29/21 23:14	K1D	TAL SAC
Total/NA	Prep	3546			15.90 g	5 mL	539070	11/02/21 06:48	NGK	TAL SAC
Total/NA	Analysis	8082		1			543265	11/16/21 19:00	K1D	TAL SAC
Total/NA	Prep	3050B			1.99 g	100 mL	192668	11/08/21 15:30	WL8G	ECL 1
Total/NA	Analysis	6010B		1			192971	11/09/21 12:48	ULPF	ECL 1
Total/NA	Prep	7471A			.63 g	100 mL	192581	11/08/21 11:07	WL8G	ECL 1
Total/NA	Analysis	7471A		1			192618	11/08/21 18:20	VWJ7	ECL 1

Client Sample ID: AOC3/AOC8-S1A-2
Lab Sample ID: 320-80878-26
Date Collected: 10/26/21 14:18
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.22 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		1			540922	11/08/21 16:24	K1D	TAL SAC

Client Sample ID: AOC3-S1B-0.5
Lab Sample ID: 320-80878-27
Date Collected: 10/26/21 14:24
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.74 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		20			540922	11/08/21 16:42	K1D	TAL SAC
Total/NA	Prep	3546			15.74 g	5 mL	539070	11/02/21 06:48	NGK	TAL SAC
Total/NA	Analysis	8082		1			543265	11/16/21 19:20	K1D	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	538884	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 12:21	GSH	TAL SAC

Client Sample ID: AOC3-S1B-2
Lab Sample ID: 320-80878-28
Date Collected: 10/26/21 14:26
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.81 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		2			540922	11/08/21 17:01	K1D	TAL SAC

Client Sample ID: AOC3-S1C-0.5
Lab Sample ID: 320-80878-29
Date Collected: 10/26/21 14:30
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.14 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		10			540922	11/08/21 17:20	K1D	TAL SAC
Total/NA	Prep	3546			15.14 g	5 mL	539070	11/02/21 06:48	NGK	TAL SAC
Total/NA	Analysis	8082		1			543265	11/16/21 19:41	K1D	TAL SAC
Total/NA	Prep	3050B			1.01 g	100 mL	538884	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 12:39	GSH	TAL SAC

Client Sample ID: AOC3-S1C-2
Lab Sample ID: 320-80878-30
Date Collected: 10/26/21 15:09
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.99 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		5			540922	11/08/21 17:39	K1D	TAL SAC

Client Sample ID: AOC3-S2B-0.5
Lab Sample ID: 320-80878-31
Date Collected: 10/26/21 14:51
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.98 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		10			540922	11/08/21 17:58	K1D	TAL SAC
Total/NA	Prep	3546			15.98 g	5 mL	539070	11/02/21 06:48	NGK	TAL SAC
Total/NA	Analysis	8082		1			543265	11/16/21 20:01	K1D	TAL SAC
Total/NA	Prep	3050B			1.04 g	100 mL	538884	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 12:43	GSH	TAL SAC

Client Sample ID: AOC3-S2B-2
Lab Sample ID: 320-80878-32
Date Collected: 10/26/21 14:54
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.91 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		2			540922	11/08/21 18:17	K1D	TAL SAC

Client Sample ID: AOC3-S2C-0.5
Lab Sample ID: 320-80878-33
Date Collected: 10/26/21 14:43
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.82 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		10			540922	11/08/21 18:36	K1D	TAL SAC
Total/NA	Prep	3546			15.82 g	5 mL	539070	11/02/21 06:48	NGK	TAL SAC
Total/NA	Analysis	8082		1			543265	11/16/21 21:03	K1D	TAL SAC
Total/NA	Prep	3050B			1.05 g	100 mL	538884	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 12:55	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Client Sample ID: AOC3-S2C-2

Lab Sample ID: 320-80878-34

Date Collected: 10/26/21 14:46

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.21 g	5 mL	539069	11/02/21 06:18	NGK	TAL SAC
Total/NA	Analysis	8081A		1			540922	11/08/21 19:32	K1D	TAL SAC

Client Sample ID: EB10262021

Lab Sample ID: 320-80878-35

Date Collected: 10/26/21 16:30

Matrix: Water

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1045.8 mL	5 mL	191082	11/02/21 10:26	H1SH	ECL 1
Total/NA	Analysis	8081A		1			191324	11/03/21 15:34	UHHN	ECL 1
Total/NA	Prep	3510C			1045.8 mL	5 mL	191082	11/02/21 10:26	H1SH	ECL 1
Total/NA	Analysis	8082		1			191413	11/03/21 13:07	UJ3K	ECL 1
Total/NA	Prep	3010A			50 mL	50 mL	191547	11/04/21 10:32	WL8G	ECL 1
Total/NA	Analysis	6010B		1			192986	11/09/21 12:32	ULPF	ECL 1
Total/NA	Prep	7470A			50 mL	100 mL	192675	11/08/21 15:39	WL8G	ECL 1
Total/NA	Analysis	7470A		1			192900	11/09/21 11:48	VWJ7	ECL 1

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

Laboratory: Eurofins Calscience LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2944	09-30-22

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Method	Method Description	Protocol	Laboratory
8081A	Organochlorine Pesticides (GC)	SW846	ECL 1
8081A	Organochlorine Pesticides (GC)	SW846	TAL SAC
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	ECL 1
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL SAC
6010B	Metals (ICP)	SW846	ECL 1
6010B	Metals (ICP)	SW846	TAL SAC
7470A	Mercury (CVAA)	SW846	ECL 1
7471A	Mercury (CVAA)	SW846	ECL 1
3010A	Preparation, Total Metals	SW846	ECL 1
3050B	Preparation, Metals	SW846	ECL 1
3050B	Preparation, Metals	SW846	TAL SAC
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
3546	Microwave Extraction	SW846	TAL SAC
7470A	Preparation, Mercury	SW846	ECL 1
7471A	Preparation, Mercury	SW846	ECL 1

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-80878-1	AOC1-S3-0.5	Solid	10/26/21 08:43	10/27/21 12:54
320-80878-2	AOC1-S3-2	Solid	10/26/21 08:45	10/27/21 12:54
320-80878-3	AOC1/AOC8-S4-0.5	Solid	10/26/21 08:52	10/27/21 12:54
320-80878-4	AOC1/AOC8-S4-0.5DUP	Solid	10/26/21 08:52	10/27/21 12:54
320-80878-5	AOC1/AOC8-S4-2	Solid	10/26/21 08:54	10/27/21 12:54
320-80878-6	AOC1/AOC2-S5-0.5	Solid	10/26/21 10:50	10/27/21 12:54
320-80878-7	AOC1/AOC2-S5-2	Solid	10/26/21 11:00	10/27/21 12:54
320-80878-8	AOC1-S6-0.5	Solid	10/26/21 11:32	10/27/21 12:54
320-80878-9	AOC1-S6-2	Solid	10/26/21 11:35	10/27/21 12:54
320-80878-10	AOC1/AOC7-S8-0.5	Solid	10/26/21 11:53	10/27/21 12:54
320-80878-11	AOC1/AOC7-S8-2	Solid	10/26/21 11:58	10/27/21 12:54
320-80878-12	AOC1/AOC7-S8-2DUP	Solid	10/26/21 11:58	10/27/21 12:54
320-80878-13	AOC1/AOC8-S10-0.5	Solid	10/26/21 12:57	10/27/21 12:54
320-80878-14	AOC1/AOC8-S10-2	Solid	10/26/21 13:01	10/27/21 12:54
320-80878-15	AOC1-S11-0.5	Solid	10/26/21 09:16	10/27/21 12:54
320-80878-16	AOC1-S11-2	Solid	10/26/21 09:18	10/27/21 12:54
320-80878-17	AOC2-S12-0.5	Solid	10/26/21 09:36	10/27/21 12:54
320-80878-18	AOC2-S12-0.5DUP	Solid	10/26/21 09:36	10/27/21 12:54
320-80878-19	AOC2-S12-2	Solid	10/26/21 09:41	10/27/21 12:54
320-80878-20	AOC2-S12-2DUP	Solid	10/26/21 09:41	10/27/21 12:54
320-80878-21	AOC2/AOC3-S13/S3I-0.5	Solid	10/26/21 10:02	10/27/21 12:54
320-80878-22	AOC2/AOC3-S13/S3I-2	Solid	10/26/21 10:04	10/27/21 12:54
320-80878-23	AOC2-S14-0.5	Solid	10/26/21 10:27	10/27/21 12:54
320-80878-24	AOC2-S14-2	Solid	10/26/21 10:29	10/27/21 12:54
320-80878-25	AOC3/AOC8-S1A-0.5	Solid	10/26/21 14:11	10/27/21 12:54
320-80878-26	AOC3/AOC8-S1A-2	Solid	10/26/21 14:18	10/27/21 12:54
320-80878-27	AOC3-S1B-0.5	Solid	10/26/21 14:24	10/27/21 12:54
320-80878-28	AOC3-S1B-2	Solid	10/26/21 14:26	10/27/21 12:54
320-80878-29	AOC3-S1C-0.5	Solid	10/26/21 14:30	10/27/21 12:54
320-80878-30	AOC3-S1C-2	Solid	10/26/21 15:09	10/27/21 12:54
320-80878-31	AOC3-S2B-0.5	Solid	10/26/21 14:51	10/27/21 12:54
320-80878-32	AOC3-S2B-2	Solid	10/26/21 14:54	10/27/21 12:54
320-80878-33	AOC3-S2C-0.5	Solid	10/26/21 14:43	10/27/21 12:54
320-80878-34	AOC3-S2C-2	Solid	10/26/21 14:46	10/27/21 12:54
320-80878-35	EB10262021	Water	10/26/21 16:30	10/27/21 12:54

201227

Chain of Custody Record

320-80878

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

eurofins

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemecio	Date: 10/26/21	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	1 of 4 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNR
Alameda California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole Schoo PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC1-S3-0.5	10/26/21	G	0843	Soil	1							X	X		X	
AOC1-S3-2			0845									X				
AOC1/AOC8-S4-0.5			0852									X	X	X	X	
AOC1/AOC8-S4-0.5 DUP			0852									X	X	X	X	
AOC1/AOC8-S4-2			0854									X		X		
AOC1/AOC2-S5-0.5			1050									X	X		X	
AOC1/AOC2-S5-2			1100									X				
AOC1-S6-0.5			1132									X	X		X	
AOC1-S6-2			1135									X				
AOC1/AOC7-S8-0.5			1153									X	X		X	
AOC1/AOC7-S8-2			1158									X	X			

320-80878 Chain of Custody

Preservation Used 1= Ice, 2= HCl; 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.
Hold samples for addional analys's

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.		Cooler Temp (°C): Obs'd _____ Corr'd. _____ Therm ID No. _____		
Relinquished by: Daysi Nemecio (Secured Location Alameda office)	Company: N&M	Date/Time: 10/26/21 1345	Received by: Leslie Jung	Company: N&M	Date/Time: 10/26/21 1345
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10/27 1140	Received by:	Company: EA-SJ	Date/Time: 10/27/21 1140
Relinquished by: 3.0°C	Company: EA-SJ	Date/Time: 10-27-21/1254	Received in Laboratory by:	Company: EA-SJ	Date/Time: 10/27/21 1254

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

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(Rev. 1)

001227

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
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Chain of Custody Record

320-80878

eurofins Environment Testing America

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemecio	Date: 10/26/21	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: TestAmerica	2 of 4 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNP
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC1/AOC7-S8-2 DUP	10/26/21	1158	G	SOIL	1							X	X			
AOC1/AOC8-S10-0.5		1257										X	X	X	X	
AOC1/AOC8-S10-2		1301										X		X		
AOC1-S11-0.5		0916										X	X		X	
AOC1-S11-2		0918										X				
AOC2-S12-0.5		0936										X	X		X	
AOC2-S12-0.5 DUP		0936										X	X		X	
AOC2-S12-2		0941										X				
AOC2-S12-2 DUP		0941										X				
AOC2/AOC3-S13/S3I-0.5		1002										X	X		X	
AOC2/AOC3-S13/S3I-2		1004										X				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3 5=NaOH, 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No | Cooler Temp. (°C): Obs'd _____ Corr'd. _____ Therm ID No. _____

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Daysi Nemecio (Sealed in Alameda office)	NM	10/26/21 1745	Leslie Jung	NM	10/26/21 1745
Leslie Jung	NM	10/27 11:40		EPA-ST	10/27/21 1140
	EPA-ST	10/27/21 1254	Received in Laboratory by	TestAmerica	10/27/21 1254

0.0°C

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

(Rev. 1)

20227

Chain of Custody Record

320-80878

eurofins

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemecio	Date: 10/26/2021	COC No. 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: TestAmerica	3 of 4 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DMP
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below ____			Lab Sampling
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes.
AOC2-S14-0.5	10/26/21	1027	G	Soil	1							X	X		X	
AOC2-S14-2		1029										X				
AOC3/AOC8-S1A-0.5		1411								X		X	X	X		
AOC3/AOC8-S1A-2		1418										X		X		
AOC3-S1B-0.5		1424										X	X		X	
AOC3-S1B-2		1426										X				
AOC3-S1C-0.5		1430										X	X		X	
AOC3-S1C-2		1509										X				
AOC3-S2B-0.5		1451										X	X		X	
AOC3-S2B-2		1454										X				
AOC3-S2C-0.5		1443										X	X		X	

Preservation Used 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for ____ Months

Special Instructions/QC Requirements & Comments:
Hold samples for addional analysis

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. | Cooler Temp. (°C): Obs'd. ____ Corr'd. ____ Therm ID No. ____

Relinquished by: Daysi Nemecio (Secured Location Alameda office)	Company: N&M	Date/Time: 10/26/21 1745	Received by: Leslie Jung	Company: N&M	Date/Time: 10/26/21	17 45
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10/27 1140	Received by:	Company: EA-SJ	Date/Time: 102721	1140
Relinquished by: 0.3°C	Company: EA-SJ	Date/Time: 102721/1254	Received in Laboratory by:	Company: TEA SJ	Date/Time: 10/27/21	1254

Form No CA-C-WI-004, Rev 1 17 dated 6/27/2019

(Rev. 1)

201227

Chain of Custody Record

320 - 80878

eurofins

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemecio	Date 10/26/21	COC No 1
N'nyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier TestAmerica	4 of 4 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DWP
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3-S2C-2	10/26/21	1446	6	Soil	1							X				
EB10262021	1	1630	1	H_2O	3					X		X	X	X		

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Preservation Used 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3, 5=NaOH, 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments
Hold samples for addional analysis

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No | Cooler Temp. (°C). Obs'd: _____ Corr'd. _____ | Therm ID No _____

Relinquished by: Daysi Nemecio	Company: N&M	Date/Time: 10/26/21 1745	Received by: Leslie Jung	Company: N&M	Date/Time: 10/26/21 1745
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10/27 1140	Received by:	Company: TA-CT	Date/Time: 102721 1140
Relinquished by:	Company: TA-SJ	Date/Time: 10/27/21/1254	Received in Laboratory by:	Company: TA-SC	Date/Time: 10/27/21 1254

Courier Location Sacramento office
0 3°C

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

TAL-8210 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247081.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80878-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/2/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: General - ASK PM IF OK TO USE	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
AOC1-S3-0.5 (320-80878-1)	10/26/21	08:43 Pacific		Solid			X	X	X			1	
AOC1-S3-2 (320-80878-2)	10/26/21	08:45 Pacific		Solid				X				1	
AOC1/AOC8-S4-0.5 (320-80878-3)	10/26/21	08:52 Pacific		Solid			X	X	X	X		1	
AOC1/AOC8-S4-0.5DUP (320-80878-4)	10/26/21	08:52 Pacific		Solid			X	X	X	X		1	
AOC1/AOC8-S4-2 (320-80878-5)	10/26/21	08:54 Pacific		Solid				X		X		1	
AOC1/AOC2-S5-0.5 (320-80878-6)	10/26/21	10:50 Pacific		Solid			X	X	X			1	
AOC1/AOC2-S5-2 (320-80878-7)	10/26/21	11:00 Pacific		Solid				X				1	
AOC1-S6-0.5 (320-80878-8)	10/26/21	11:32 Pacific		Solid			X	X	X			1	
AOC1-S6-2. (320-80878-9)	10/26/21	11:35 Pacific		Solid				X				1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/27/21 1615	EurSac		10/27/21 1615	DCS
2	Relinquished by:	Date/Time: 10/27/21 1950	Company DCS	Received by:	Date/Time: 10/27/21 1950	Company EurSac
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.5

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247081.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 2 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80878-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/2/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: General - ASK PM IF OK TO USE	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
AOC1/AOC7-S8-0.5 (320-80878-10)	10/26/21	11:53 Pacific		Solid			X	X	X			1	
AOC1/AOC7-S8-2 (320-80878-11)	10/26/21	11:58 Pacific		Solid				X	X			1	
AOC1/AOC7-S8-2DUP (320-80878-12)	10/26/21	11:58 Pacific		Solid				X	X			1	
AOC1/AOC8-S10-0.5 (320-80878-13)	10/26/21	12:57 Pacific		Solid			X	X	X	X		1	
AOC1/AOC8-S10-2 (320-80878-14)	10/26/21	13:01 Pacific		Solid				X		X		1	
AOC1-S11-0.5 (320-80878-15)	10/26/21	09:16 Pacific		Solid			X	X	X			1	
AOC1-S11-2 (320-80878-16)	10/26/21	09:18 Pacific		Solid				X				1	
AOC2-S12-0.5 (320-80878-17)	10/26/21	09:36 Pacific		Solid			X	X	X			1	
AOC2-S12-0.5DUP (320-80878-18)	10/26/21	09:36 Pacific		Solid			X	X	X			1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/27/21 1600	EMTSS		10/27/21 1600	EETSAC
2	Relinquished by:	Date/Time: 10-27-21 1950	Company	Received by:	Date/Time: 10/27/21 1950	Company EETSAC
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247081.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 3 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80878-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/2/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: General - ASK PM IF OK TO USE	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
AOC2-S12-2 (320-80878-19)	10/26/21	09:41 Pacific		Solid				X				1	
AOC2-S12-2DUP (320-80878-20)	10/26/21	09:41 Pacific		Solid				X				1	
AOC2/AOC3-S13/S3I-0.5 (320-80878-21)	10/26/21	10:02 Pacific		Solid			X	X	X			1	
AOC2/AOC3-S13/S3I-2 (320-80878-22)	10/26/21	10:04 Pacific		Solid				X				1	
AOC2-S14-0.5 (320-80878-23)	10/26/21	10:27 Pacific		Solid			X	X	X			1	
AOC2-S14-2 (320-80878-24)	10/26/21	10:29 Pacific		Solid				X				1	
AOC3/AOC8-S1A-0.5 (320-80878-25)	10/26/21	14:11 Pacific		Solid				X	X	X		1	
AOC3/AOC8-S1A-2 (320-80878-26)	10/26/21	14:18 Pacific		Solid				X		X		1	
AOC3-S1B-0.5 (320-80878-27)	10/26/21	14:24 Pacific		Solid			X	X	X			1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/27/21 1615	EEFSAC		10/27/21 1610	DC
2		10-27-21 1650	DC		10/27/21 1950	EEFSAC
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247081.4
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 4 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80878-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/2/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: General - ASK PM IF OK TO USE	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
AOC3-S1B-2 (320-80878-28)	10/26/21	14:26 Pacific		Solid				X				1	
AOC3-S1C-0.5 (320-80878-29)	10/26/21	14:30 Pacific		Solid			X	X	X			1	
AOC3-S1C-2 (320-80878-30)	10/26/21	15:09 Pacific		Solid				X				1	
AOC3-S2B-0.5 (320-80878-31)	10/26/21	14:51 Pacific		Solid			X	X	X			1	
AOC3-S2B-2 (320-80878-32)	10/26/21	14:54 Pacific		Solid				X				1	
AOC3-S2C-0.5 (320-80878-33)	10/26/21	14:43 Pacific		Solid			X	X	X			1	
AOC3-S2C-2 (320-80878-34)	10/26/21	14:46 Pacific		Solid				X				1	
EB10262021 (320-80878-35)	10/26/21	16:30 Pacific		Water							X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	10/27/21 1615	TAAS		10/27/21 1615	DCS
Relinquished by:	10/27/21 1950	DCS		10/27/21 1950	EEISAC
Relinquished by:			Received by:		

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

92 APVA

92841
SNA
CA-US

TRK# 0201 5047 2941 7438

THU - 28 OCT 10:30A
PRIORITY OVERNIGHT

FedEx Express

ORIGIN ID:LVKA (928) 404-1919
SAMPLE RECEIVING
EUROFINS TEST AMERICA
780 MONTAGUE EXPRESSWAY
SUITE 802
SAN JOSE, CA 95131
UNITED STATES US

SHIP DATE: 27OCT21
ACTWGT: 45.35 LB
CAD: 0785504/CAFE3507
DIMS: 28x16x15 IN

BILL SENDER

TO SAMPLE RECEIVING
EUROFINS CALSCIENCE, LLC
7440 LINCOLN WAY

GARDEN GROVE CA 92841

(714) 895-5494

REF:

DEPT:

Part # 159469-434 MTW EXP 07/22

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica CUSTODY

Signature:

Date:

320-80878 Waybill

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247080 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 1
Company: Eurofins Calscience LLC		Accreditations Required (See note): State - California		Job #: 320-80878-1
Address: 7440 Lincoln Way, ,	Due Date Requested: 11/2/2021			
City: Garden Grove	TAT Requested (days)			
State, Zip: CA, 92841				
Phone: 714-895-5494(Tel) 714-894-7501(Fax)	PO #:			
Email:	WO #:			
Project Name: General - ASK PM IF OK TO USE	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7471A/7471A_Prep Mercury	6010B/3050B CAM 17, no Mercury	8081A/3510C (MOD) Standard List	8082/3510C (MOD) Standard List	7470A/7470A_Prep Mercury	6010B/3010A California Administrative Manual List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3/AOC8-S1A-0 5 (320-80878-25)	10/26/21	14 11 Pacific		Solid			X	X					1	
EB10262021 (320-80878-35)	10/26/21	16 30 Pacific		Water					X	X	X	X	2	

Note: Since laboratory accreditations are subject to change Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III, IV Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
1		10/27/21 1600	FEDEX		10/28/21 1010	EC GC
2	Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No. N/A	Cooler Temperature(s) °C and Other Remarks. 1.9/2.8 SCG

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80878-1

Login Number: 80878
List Number: 1
Creator: Garcia, Hilario A

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80878-1

Login Number: 80878
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80878-1

Login Number: 80878
List Number: 3
Creator: Ortiz-Luis, Michael

List Source: Eurofins Calscience LLC
List Creation: 10/28/21 01:16 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-80878-2
Client Project/Site: Cole School PEA
Revision: 1

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/15/2021 9:04:38 AM

Justinn Gonzales, Project Manager I
(925)484-1919
Justinn.Gonzales@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Qualifiers

Dioxin

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
G	The reported quantitation limit has been raised due to an exhibited elevated noise or matrix interference
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 320-80878-2

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-80878-2

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 11/17/2021. The report (revision 1) is being revised due to: Report samples to MDL or EDL for 8290A per client request. Total TEQ also added.

Receipt
The samples were received on 10/27/2021 12:54 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.3º C.

Dioxin
Method 8290A: Automatic End Resolution Check failed to print. Resolution Check was run the next morning and the instrument had maintained 10,000 resolution. All samples were run within the 12 hour window.
AOC1/AOC8-S4-0.5 (320-80878-3), AOC1/AOC8-S4-0.5DUP (320-80878-4), AOC1/AOC8-S10-0.5 (320-80878-13), (CCV 320-542971/2), (CCV 320-542971/8) and (CPS 320-542971/1)

Method 8290A: The following samples exhibited elevated noise or matrix interferences for 2,3,7,8-TCDF causing elevation of the detection limit (EDL): AOC1/AOC8-S4-0.5 (320-80878-3) and AOC1/AOC8-S4-0.5DUP (320-80878-4) . The reporting limit (RL) for the affected analytes has been raised to be equal to the EDL, and a "G" qualifier applied.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Dioxin Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Client Sample ID: AOC1/AOC8-S4-0.5 — Lab Sample ID: 320-80878-3

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDD	2.2		0.97	0.24	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDD	1.4	J	4.9	0.44	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDF	2.1	J	4.9	0.83	pg/g	1		8290A	Total/NA
2,3,4,7,8-PeCDF	4.9		4.9	0.84	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	1.8	J B	4.9	0.18	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	4.1	J	4.9	0.17	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	3.6	J B	4.9	0.15	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	2.5	J	4.9	0.99	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	5.4		4.9	0.95	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	5.0		4.9	0.97	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	85	B	4.9	0.87	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	40	B	4.9	0.38	pg/g	1		8290A	Total/NA
1,2,3,4,7,8,9-HpCDF	2.5	J B	4.9	0.47	pg/g	1		8290A	Total/NA
OCDD	740	B	9.7	0.87	pg/g	1		8290A	Total/NA
OCDF	90	B	9.7	0.14	pg/g	1		8290A	Total/NA
2,3,7,8-TCDF - RA	7.0	G B	1.2	1.2	pg/g	1		8290A	Total/NA

Client Sample ID: AOC1/AOC8-S4-0.5DUP — Lab Sample ID: 320-80878-4

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDD	1.3		0.95	0.15	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDD	1.2	J	4.8	0.37	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDF	2.4	J	4.8	0.99	pg/g	1		8290A	Total/NA
2,3,4,7,8-PeCDF	4.4	J	4.8	1.0	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	1.2	J B	4.8	0.082	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	3.3	J	4.8	0.079	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	2.3	J B	4.8	0.070	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	3.4	J	4.8	0.87	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	7.6		4.8	0.84	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	4.6	J	4.8	0.85	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	60	B	4.8	0.28	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	30	B	4.8	0.27	pg/g	1		8290A	Total/NA
1,2,3,4,7,8,9-HpCDF	1.8	J B	4.8	0.34	pg/g	1		8290A	Total/NA
OCDD	500	B	9.5	0.98	pg/g	1		8290A	Total/NA
OCDF	62	B	9.5	0.076	pg/g	1		8290A	Total/NA
2,3,7,8-TCDF - RA	4.9	G B	1.3	1.3	pg/g	1		8290A	Total/NA

Client Sample ID: AOC1/AOC8-S4-2 — Lab Sample ID: 320-80878-5

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDF	0.29	J B	0.91	0.037	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDF	0.10	J	4.5	0.049	pg/g	1		8290A	Total/NA
2,3,4,7,8-PeCDF	0.13	J	4.5	0.050	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.15	J B	4.5	0.044	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	0.063	J	4.5	0.042	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	0.17	J B	4.5	0.038	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.15	J	4.5	0.075	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.081	J	4.5	0.077	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	1.4	J B	4.5	0.038	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.67	J B	4.5	0.036	pg/g	1		8290A	Total/NA
OCDD	12	B	9.1	0.049	pg/g	1		8290A	Total/NA
OCDF	1.2	J B	9.1	0.039	pg/g	1		8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Client Sample ID: AOC1/AOC8-S10-0.5 — Lab Sample ID: 320-80878-13

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDD	0.16	J	0.99	0.12	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDD	0.55	J	4.9	0.18	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDF	0.48	J	4.9	0.16	pg/g	1		8290A	Total/NA
2,3,4,7,8-PeCDF	0.71	J	4.9	0.16	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.82	J B	4.9	0.11	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	0.88	J	4.9	0.10	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	0.90	J B	4.9	0.090	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.84	J	4.9	0.23	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.85	J	4.9	0.22	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.54	J	4.9	0.22	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	4.2	J B	4.9	0.070	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	1.9	J B	4.9	0.11	pg/g	1		8290A	Total/NA
OCDD	15	B	9.9	0.11	pg/g	1		8290A	Total/NA
OCDF	1.3	J B	9.9	0.098	pg/g	1		8290A	Total/NA
2,3,7,8-TCDF - RA	0.82	J B	0.99	0.41	pg/g	1		8290A	Total/NA

Client Sample ID: AOC1/AOC8-S10-2 — Lab Sample ID: 320-80878-14

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,7,8-PeCDD	0.29	J	4.7	0.17	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	0.62	J B	4.7	0.12	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.22	J B	4.7	0.091	pg/g	1		8290A	Total/NA
OCDD	3.7	J B	9.3	0.16	pg/g	1		8290A	Total/NA
OCDF	0.58	J B	9.3	0.18	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S1A-0.5 — Lab Sample ID: 320-80878-25

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDF	0.91	J B	1.0	0.42	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.79	J	5.0	0.56	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	4.7	J B	5.0	0.21	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	1.6	J B	5.0	0.23	pg/g	1		8290A	Total/NA
OCDD	55	B	10	0.36	pg/g	1		8290A	Total/NA
OCDF	2.7	J B	10	0.33	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S1A-2 — Lab Sample ID: 320-80878-26

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDF	0.26	J B	0.97	0.047	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDF	0.12	J	4.9	0.053	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.22	J B	4.9	0.057	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	0.13	J B	4.9	0.049	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	0.56	J B	4.9	0.045	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.14	J B	4.9	0.035	pg/g	1		8290A	Total/NA
1,2,3,4,7,8,9-HpCDF	0.089	J B	4.9	0.044	pg/g	1		8290A	Total/NA
OCDD	5.3	J B	9.7	0.074	pg/g	1		8290A	Total/NA
OCDF	0.47	J B	9.7	0.062	pg/g	1		8290A	Total/NA

Client Sample ID: EB10262021 — Lab Sample ID: 320-80878-35

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,7,8-PeCDF	2.2	J	48	0.32	pg/L	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	2.6	J B	48	0.46	pg/L	1		8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: EB10262021 (Continued)

Lab Sample ID: 320-80878-35

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,6,7,8-HxCDD	1.3	J B	48	0.42	pg/L	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	1.0	J	48	0.38	pg/L	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	1.3	J	48	0.34	pg/L	1		8290A	Total/NA
1,2,3,7,8,9-HxCDF	5.4	J B	48	0.36	pg/L	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.66	J	48	0.33	pg/L	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	1.4	J B	48	0.23	pg/L	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	1.2	J	48	0.49	pg/L	1		8290A	Total/NA
1,2,3,4,7,8,9-HpCDF	2.0	J	48	0.57	pg/L	1		8290A	Total/NA
OCDD	4.2	J B	96	0.67	pg/L	1		8290A	Total/NA
OCDF	1.8	J	96	0.57	pg/L	1		8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Client Sample ID: AOC1/AOC8-S4-0.5

Date Collected: 10/26/21 08:52
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-3

Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	2.2		0.97	0.24	pg/g		10/29/21 09:50	11/13/21 05:10	1
1,2,3,7,8-PeCDD	1.4	J	4.9	0.44	pg/g		10/29/21 09:50	11/13/21 05:10	1
1,2,3,7,8-PeCDF	2.1	J	4.9	0.83	pg/g		10/29/21 09:50	11/13/21 05:10	1
2,3,4,7,8-PeCDF	4.9		4.9	0.84	pg/g		10/29/21 09:50	11/13/21 05:10	1
1,2,3,4,7,8-HxCDD	1.8	J B	4.9	0.18	pg/g		10/29/21 09:50	11/13/21 05:10	1
1,2,3,6,7,8-HxCDD	4.1	J	4.9	0.17	pg/g		10/29/21 09:50	11/13/21 05:10	1
1,2,3,7,8,9-HxCDD	3.6	J B	4.9	0.15	pg/g		10/29/21 09:50	11/13/21 05:10	1
1,2,3,4,7,8-HxCDF	2.5	J	4.9	0.99	pg/g		10/29/21 09:50	11/13/21 05:10	1
1,2,3,6,7,8-HxCDF	5.4		4.9	0.95	pg/g		10/29/21 09:50	11/13/21 05:10	1
1,2,3,7,8,9-HxCDF	ND		4.9	1.0	pg/g		10/29/21 09:50	11/13/21 05:10	1
2,3,4,6,7,8-HxCDF	5.0		4.9	0.97	pg/g		10/29/21 09:50	11/13/21 05:10	1
1,2,3,4,6,7,8-HpCDD	85	B	4.9	0.87	pg/g		10/29/21 09:50	11/13/21 05:10	1
1,2,3,4,6,7,8-HpCDF	40	B	4.9	0.38	pg/g		10/29/21 09:50	11/13/21 05:10	1
1,2,3,4,7,8,9-HpCDF	2.5	J B	4.9	0.47	pg/g		10/29/21 09:50	11/13/21 05:10	1
OCDD	740	B	9.7	0.87	pg/g		10/29/21 09:50	11/13/21 05:10	1
OCDF	90	B	9.7	0.14	pg/g		10/29/21 09:50	11/13/21 05:10	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*69*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:10*	*1*
13C-1,2,3,7,8-PeCDD	*75*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:10*	*1*
13C-1,2,3,7,8-PeCDF	*77*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:10*	*1*
13C-1,2,3,6,7,8-HxCDD	*68*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:10*	*1*
13C-1,2,3,4,7,8-HxCDF	*69*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:10*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*88*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:10*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*79*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:10*	*1*
13C-OCDD	*86*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:10*	*1*

Method: 8290A - Dioxins and Furans (HRGC/HRMS) - RA

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDF	7.0	G B	1.2	1.2	pg/g		10/29/21 09:50	11/15/21 18:41	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDF	*84*		*40 - 135*	*10/29/21 09:50*	*11/15/21 18:41*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Client Sample ID: AOC1/AOC8-S4-0.5DUP

Date Collected: 10/26/21 08:52
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-4

Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	1.3		0.95	0.15	pg/g		10/29/21 09:50	11/13/21 05:55	1
1,2,3,7,8-PeCDD	1.2	J	4.8	0.37	pg/g		10/29/21 09:50	11/13/21 05:55	1
1,2,3,7,8-PeCDF	2.4	J	4.8	0.99	pg/g		10/29/21 09:50	11/13/21 05:55	1
2,3,4,7,8-PeCDF	4.4	J	4.8	1.0	pg/g		10/29/21 09:50	11/13/21 05:55	1
1,2,3,4,7,8-HxCDD	1.2	J B	4.8	0.082	pg/g		10/29/21 09:50	11/13/21 05:55	1
1,2,3,6,7,8-HxCDD	3.3	J	4.8	0.079	pg/g		10/29/21 09:50	11/13/21 05:55	1
1,2,3,7,8,9-HxCDD	2.3	J B	4.8	0.070	pg/g		10/29/21 09:50	11/13/21 05:55	1
1,2,3,4,7,8-HxCDF	3.4	J	4.8	0.87	pg/g		10/29/21 09:50	11/13/21 05:55	1
1,2,3,6,7,8-HxCDF	7.6		4.8	0.84	pg/g		10/29/21 09:50	11/13/21 05:55	1
1,2,3,7,8,9-HxCDF	ND		4.8	0.89	pg/g		10/29/21 09:50	11/13/21 05:55	1
2,3,4,6,7,8-HxCDF	4.6	J	4.8	0.85	pg/g		10/29/21 09:50	11/13/21 05:55	1
1,2,3,4,6,7,8-HpCDD	60	B	4.8	0.28	pg/g		10/29/21 09:50	11/13/21 05:55	1
1,2,3,4,6,7,8-HpCDF	30	B	4.8	0.27	pg/g		10/29/21 09:50	11/13/21 05:55	1
1,2,3,4,7,8,9-HpCDF	1.8	J B	4.8	0.34	pg/g		10/29/21 09:50	11/13/21 05:55	1
OCDD	500	B	9.5	0.98	pg/g		10/29/21 09:50	11/13/21 05:55	1
OCDF	62	B	9.5	0.076	pg/g		10/29/21 09:50	11/13/21 05:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*69*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:55*	*1*
13C-1,2,3,7,8-PeCDD	*80*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:55*	*1*
13C-1,2,3,7,8-PeCDF	*78*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:55*	*1*
13C-1,2,3,6,7,8-HxCDD	*70*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:55*	*1*
13C-1,2,3,4,7,8-HxCDF	*71*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:55*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*91*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:55*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*80*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:55*	*1*
13C-OCDD	*91*		*40 - 135*	*10/29/21 09:50*	*11/13/21 05:55*	*1*

Method: 8290A - Dioxins and Furans (HRGC/HRMS) - RA

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDF	4.9	G B	1.3	1.3	pg/g		10/29/21 09:50	11/15/21 19:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDF	*81*		*40 - 135*	*10/29/21 09:50*	*11/15/21 19:19*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Client Sample ID: AOC1/AOC8-S4-2
Date Collected: 10/26/21 08:54
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-5
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.91	0.059	pg/g		10/29/21 09:50	11/13/21 06:40	1
2,3,7,8-TCDF	**0.29**	**J B**	0.91	0.037	pg/g		10/29/21 09:50	11/13/21 06:40	1
1,2,3,7,8-PeCDD	ND		4.5	0.052	pg/g		10/29/21 09:50	11/13/21 06:40	1
1,2,3,7,8-PeCDF	**0.10**	**J**	4.5	0.049	pg/g		10/29/21 09:50	11/13/21 06:40	1
2,3,4,7,8-PeCDF	**0.13**	**J**	4.5	0.050	pg/g		10/29/21 09:50	11/13/21 06:40	1
1,2,3,4,7,8-HxCDD	**0.15**	**J B**	4.5	0.044	pg/g		10/29/21 09:50	11/13/21 06:40	1
1,2,3,6,7,8-HxCDD	**0.063**	**J**	4.5	0.042	pg/g		10/29/21 09:50	11/13/21 06:40	1
1,2,3,7,8,9-HxCDD	**0.17**	**J B**	4.5	0.038	pg/g		10/29/21 09:50	11/13/21 06:40	1
1,2,3,4,7,8-HxCDF	ND		4.5	0.079	pg/g		10/29/21 09:50	11/13/21 06:40	1
1,2,3,6,7,8-HxCDF	**0.15**	**J**	4.5	0.075	pg/g		10/29/21 09:50	11/13/21 06:40	1
1,2,3,7,8,9-HxCDF	ND		4.5	0.081	pg/g		10/29/21 09:50	11/13/21 06:40	1
2,3,4,6,7,8-HxCDF	**0.081**	**J**	4.5	0.077	pg/g		10/29/21 09:50	11/13/21 06:40	1
1,2,3,4,6,7,8-HpCDD	**1.4**	**J B**	4.5	0.038	pg/g		10/29/21 09:50	11/13/21 06:40	1
1,2,3,4,6,7,8-HpCDF	**0.67**	**J B**	4.5	0.036	pg/g		10/29/21 09:50	11/13/21 06:40	1
1,2,3,4,7,8,9-HpCDF	ND		4.5	0.046	pg/g		10/29/21 09:50	11/13/21 06:40	1
OCDD	**12**	**B**	9.1	0.049	pg/g		10/29/21 09:50	11/13/21 06:40	1
OCDF	**1.2**	**J B**	9.1	0.039	pg/g		10/29/21 09:50	11/13/21 06:40	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*91*		*40 - 135*	*10/29/21 09:50*	*11/13/21 06:40*	*1*
13C-2,3,7,8-TCDF	*88*		*40 - 135*	*10/29/21 09:50*	*11/13/21 06:40*	*1*
13C-1,2,3,7,8-PeCDD	*99*		*40 - 135*	*10/29/21 09:50*	*11/13/21 06:40*	*1*
13C-1,2,3,7,8-PeCDF	*98*		*40 - 135*	*10/29/21 09:50*	*11/13/21 06:40*	*1*
13C-1,2,3,6,7,8-HxCDD	*90*		*40 - 135*	*10/29/21 09:50*	*11/13/21 06:40*	*1*
13C-1,2,3,4,7,8-HxCDF	*93*		*40 - 135*	*10/29/21 09:50*	*11/13/21 06:40*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*118*		*40 - 135*	*10/29/21 09:50*	*11/13/21 06:40*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*102*		*40 - 135*	*10/29/21 09:50*	*11/13/21 06:40*	*1*
13C-OCDD	*116*		*40 - 135*	*10/29/21 09:50*	*11/13/21 06:40*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Client Sample ID: AOC1/AOC8-S10-0.5

Date Collected: 10/26/21 12:57
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-13

Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	0.16	J	0.99	0.12	pg/g		10/29/21 09:50	11/13/21 07:25	1
1,2,3,7,8-PeCDD	0.55	J	4.9	0.18	pg/g		10/29/21 09:50	11/13/21 07:25	1
1,2,3,7,8-PeCDF	0.48	J	4.9	0.16	pg/g		10/29/21 09:50	11/13/21 07:25	1
2,3,4,7,8-PeCDF	0.71	J	4.9	0.16	pg/g		10/29/21 09:50	11/13/21 07:25	1
1,2,3,4,7,8-HxCDD	0.82	J B	4.9	0.11	pg/g		10/29/21 09:50	11/13/21 07:25	1
1,2,3,6,7,8-HxCDD	0.88	J	4.9	0.10	pg/g		10/29/21 09:50	11/13/21 07:25	1
1,2,3,7,8,9-HxCDD	0.90	J B	4.9	0.090	pg/g		10/29/21 09:50	11/13/21 07:25	1
1,2,3,4,7,8-HxCDF	0.84	J	4.9	0.23	pg/g		10/29/21 09:50	11/13/21 07:25	1
1,2,3,6,7,8-HxCDF	0.85	J	4.9	0.22	pg/g		10/29/21 09:50	11/13/21 07:25	1
1,2,3,7,8,9-HxCDF	ND		4.9	0.24	pg/g		10/29/21 09:50	11/13/21 07:25	1
2,3,4,6,7,8-HxCDF	0.54	J	4.9	0.22	pg/g		10/29/21 09:50	11/13/21 07:25	1
1,2,3,4,6,7,8-HpCDD	4.2	J B	4.9	0.070	pg/g		10/29/21 09:50	11/13/21 07:25	1
1,2,3,4,6,7,8-HpCDF	1.9	J B	4.9	0.11	pg/g		10/29/21 09:50	11/13/21 07:25	1
1,2,3,4,7,8,9-HpCDF	ND		4.9	0.14	pg/g		10/29/21 09:50	11/13/21 07:25	1
OCDD	15	B	9.9	0.11	pg/g		10/29/21 09:50	11/13/21 07:25	1
OCDF	1.3	J B	9.9	0.098	pg/g		10/29/21 09:50	11/13/21 07:25	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*70*		*40 - 135*	*10/29/21 09:50*	*11/13/21 07:25*	*1*
13C-1,2,3,7,8-PeCDD	*79*		*40 - 135*	*10/29/21 09:50*	*11/13/21 07:25*	*1*
13C-1,2,3,7,8-PeCDF	*81*		*40 - 135*	*10/29/21 09:50*	*11/13/21 07:25*	*1*
13C-1,2,3,6,7,8-HxCDD	*72*		*40 - 135*	*10/29/21 09:50*	*11/13/21 07:25*	*1*
13C-1,2,3,4,7,8-HxCDF	*72*		*40 - 135*	*10/29/21 09:50*	*11/13/21 07:25*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*77*		*40 - 135*	*10/29/21 09:50*	*11/13/21 07:25*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*72*		*40 - 135*	*10/29/21 09:50*	*11/13/21 07:25*	*1*
13C-OCDD	*69*		*40 - 135*	*10/29/21 09:50*	*11/13/21 07:25*	*1*

Method: 8290A - Dioxins and Furans (HRGC/HRMS) - RA

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDF	0.82	J B	0.99	0.41	pg/g		10/29/21 09:50	11/15/21 19:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDF	*77*		*40 - 135*	*10/29/21 09:50*	*11/15/21 19:58*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Client Sample ID: AOC1/AOC8-S10-2
Date Collected: 10/26/21 13:01
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-14
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.93	0.20	pg/g		10/29/21 09:50	11/13/21 08:10	1
2,3,7,8-TCDF	ND		0.93	0.10	pg/g		10/29/21 09:50	11/13/21 08:10	1
1,2,3,7,8-PeCDD	**0.29**	**J**	4.7	0.17	pg/g		10/29/21 09:50	11/13/21 08:10	1
1,2,3,7,8-PeCDF	ND		4.7	0.12	pg/g		10/29/21 09:50	11/13/21 08:10	1
2,3,4,7,8-PeCDF	ND		4.7	0.12	pg/g		10/29/21 09:50	11/13/21 08:10	1
1,2,3,4,7,8-HxCDD	ND		4.7	0.15	pg/g		10/29/21 09:50	11/13/21 08:10	1
1,2,3,6,7,8-HxCDD	ND		4.7	0.14	pg/g		10/29/21 09:50	11/13/21 08:10	1
1,2,3,7,8,9-HxCDD	ND		4.7	0.12	pg/g		10/29/21 09:50	11/13/21 08:10	1
1,2,3,4,7,8-HxCDF	ND		4.7	0.17	pg/g		10/29/21 09:50	11/13/21 08:10	1
1,2,3,6,7,8-HxCDF	ND		4.7	0.16	pg/g		10/29/21 09:50	11/13/21 08:10	1
1,2,3,7,8,9-HxCDF	ND		4.7	0.18	pg/g		10/29/21 09:50	11/13/21 08:10	1
2,3,4,6,7,8-HxCDF	ND		4.7	0.17	pg/g		10/29/21 09:50	11/13/21 08:10	1
1,2,3,4,6,7,8-HpCDD	**0.62**	**J B**	4.7	0.12	pg/g		10/29/21 09:50	11/13/21 08:10	1
1,2,3,4,6,7,8-HpCDF	**0.22**	**J B**	4.7	0.091	pg/g		10/29/21 09:50	11/13/21 08:10	1
1,2,3,4,7,8,9-HpCDF	ND		4.7	0.12	pg/g		10/29/21 09:50	11/13/21 08:10	1
OCDD	**3.7**	**J B**	9.3	0.16	pg/g		10/29/21 09:50	11/13/21 08:10	1
OCDF	**0.58**	**J B**	9.3	0.18	pg/g		10/29/21 09:50	11/13/21 08:10	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*69*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:10*	*1*
13C-2,3,7,8-TCDF	*69*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:10*	*1*
13C-1,2,3,7,8-PeCDD	*79*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:10*	*1*
13C-1,2,3,7,8-PeCDF	*77*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:10*	*1*
13C-1,2,3,6,7,8-HxCDD	*71*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:10*	*1*
13C-1,2,3,4,7,8-HxCDF	*68*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:10*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*91*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:10*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*82*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:10*	*1*
13C-OCDD	*87*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:10*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Client Sample ID: AOC3/AOC8-S1A-0.5
Date Collected: 10/26/21 14:11
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-25
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.0	0.38	pg/g		10/29/21 09:50	11/13/21 08:55	1
2,3,7,8-TCDF	**0.91**	**J B**	1.0	0.42	pg/g		10/29/21 09:50	11/13/21 08:55	1
1,2,3,7,8-PeCDD	ND		5.0	0.43	pg/g		10/29/21 09:50	11/13/21 08:55	1
1,2,3,7,8-PeCDF	ND		5.0	0.53	pg/g		10/29/21 09:50	11/13/21 08:55	1
2,3,4,7,8-PeCDF	ND		5.0	0.54	pg/g		10/29/21 09:50	11/13/21 08:55	1
1,2,3,4,7,8-HxCDD	ND		5.0	0.34	pg/g		10/29/21 09:50	11/13/21 08:55	1
1,2,3,6,7,8-HxCDD	ND		5.0	0.33	pg/g		10/29/21 09:50	11/13/21 08:55	1
1,2,3,7,8,9-HxCDD	ND		5.0	0.29	pg/g		10/29/21 09:50	11/13/21 08:55	1
1,2,3,4,7,8-HxCDF	ND		5.0	0.58	pg/g		10/29/21 09:50	11/13/21 08:55	1
1,2,3,6,7,8-HxCDF	**0.79**	**J**	5.0	0.56	pg/g		10/29/21 09:50	11/13/21 08:55	1
1,2,3,7,8,9-HxCDF	ND		5.0	0.60	pg/g		10/29/21 09:50	11/13/21 08:55	1
2,3,4,6,7,8-HxCDF	ND		5.0	0.57	pg/g		10/29/21 09:50	11/13/21 08:55	1
1,2,3,4,6,7,8-HpCDD	**4.7**	**J B**	5.0	0.21	pg/g		10/29/21 09:50	11/13/21 08:55	1
1,2,3,4,6,7,8-HpCDF	**1.6**	**J B**	5.0	0.23	pg/g		10/29/21 09:50	11/13/21 08:55	1
1,2,3,4,7,8,9-HpCDF	ND		5.0	0.29	pg/g		10/29/21 09:50	11/13/21 08:55	1
OCDD	**55**	**B**	10	0.36	pg/g		10/29/21 09:50	11/13/21 08:55	1
OCDF	**2.7**	**J B**	10	0.33	pg/g		10/29/21 09:50	11/13/21 08:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*74*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:55*	*1*
13C-2,3,7,8-TCDF	*70*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:55*	*1*
13C-1,2,3,7,8-PeCDD	*87*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:55*	*1*
13C-1,2,3,7,8-PeCDF	*84*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:55*	*1*
13C-1,2,3,6,7,8-HxCDD	*68*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:55*	*1*
13C-1,2,3,4,7,8-HxCDF	*69*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:55*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*79*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:55*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*74*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:55*	*1*
13C-OCDD	*70*		*40 - 135*	*10/29/21 09:50*	*11/13/21 08:55*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Client Sample ID: AOC3/AOC8-S1A-2
Date Collected: 10/26/21 14:18
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-26
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.97	0.062	pg/g		10/29/21 09:50	11/13/21 09:40	1
2,3,7,8-TCDF	**0.26**	**J B**	0.97	0.047	pg/g		10/29/21 09:50	11/13/21 09:40	1
1,2,3,7,8-PeCDD	ND		4.9	0.063	pg/g		10/29/21 09:50	11/13/21 09:40	1
1,2,3,7,8-PeCDF	**0.12**	**J**	4.9	0.053	pg/g		10/29/21 09:50	11/13/21 09:40	1
2,3,4,7,8-PeCDF	ND		4.9	0.053	pg/g		10/29/21 09:50	11/13/21 09:40	1
1,2,3,4,7,8-HxCDD	**0.22**	**J B**	4.9	0.057	pg/g		10/29/21 09:50	11/13/21 09:40	1
1,2,3,6,7,8-HxCDD	ND		4.9	0.055	pg/g		10/29/21 09:50	11/13/21 09:40	1
1,2,3,7,8,9-HxCDD	**0.13**	**J B**	4.9	0.049	pg/g		10/29/21 09:50	11/13/21 09:40	1
1,2,3,4,7,8-HxCDF	ND		4.9	0.078	pg/g		10/29/21 09:50	11/13/21 09:40	1
1,2,3,6,7,8-HxCDF	ND		4.9	0.075	pg/g		10/29/21 09:50	11/13/21 09:40	1
1,2,3,7,8,9-HxCDF	ND		4.9	0.080	pg/g		10/29/21 09:50	11/13/21 09:40	1
2,3,4,6,7,8-HxCDF	ND		4.9	0.076	pg/g		10/29/21 09:50	11/13/21 09:40	1
1,2,3,4,6,7,8-HpCDD	**0.56**	**J B**	4.9	0.045	pg/g		10/29/21 09:50	11/13/21 09:40	1
1,2,3,4,6,7,8-HpCDF	**0.14**	**J B**	4.9	0.035	pg/g		10/29/21 09:50	11/13/21 09:40	1
1,2,3,4,7,8,9-HpCDF	**0.089**	**J B**	4.9	0.044	pg/g		10/29/21 09:50	11/13/21 09:40	1
OCDD	**5.3**	**J B**	9.7	0.074	pg/g		10/29/21 09:50	11/13/21 09:40	1
OCDF	**0.47**	**J B**	9.7	0.062	pg/g		10/29/21 09:50	11/13/21 09:40	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*70*		*40 - 135*	*10/29/21 09:50*	*11/13/21 09:40*	*1*
13C-2,3,7,8-TCDF	*71*		*40 - 135*	*10/29/21 09:50*	*11/13/21 09:40*	*1*
13C-1,2,3,7,8-PeCDD	*82*		*40 - 135*	*10/29/21 09:50*	*11/13/21 09:40*	*1*
13C-1,2,3,7,8-PeCDF	*80*		*40 - 135*	*10/29/21 09:50*	*11/13/21 09:40*	*1*
13C-1,2,3,6,7,8-HxCDD	*72*		*40 - 135*	*10/29/21 09:50*	*11/13/21 09:40*	*1*
13C-1,2,3,4,7,8-HxCDF	*71*		*40 - 135*	*10/29/21 09:50*	*11/13/21 09:40*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*92*		*40 - 135*	*10/29/21 09:50*	*11/13/21 09:40*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*78*		*40 - 135*	*10/29/21 09:50*	*11/13/21 09:40*	*1*
13C-OCDD	*87*		*40 - 135*	*10/29/21 09:50*	*11/13/21 09:40*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Client Sample ID: EB10262021
Date Collected: 10/26/21 16:30
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-35
Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		9.6	0.86	pg/L		10/29/21 12:27	11/04/21 03:34	1
2,3,7,8-TCDF	ND		9.6	0.30	pg/L		10/29/21 12:27	11/04/21 03:34	1
1,2,3,7,8-PeCDD	ND		48	0.61	pg/L		10/29/21 12:27	11/04/21 03:34	1
1,2,3,7,8-PeCDF	**2.2**	**J**	48	0.32	pg/L		10/29/21 12:27	11/04/21 03:34	1
2,3,4,7,8-PeCDF	ND		48	0.33	pg/L		10/29/21 12:27	11/04/21 03:34	1
1,2,3,4,7,8-HxCDD	**2.6**	**J B**	48	0.46	pg/L		10/29/21 12:27	11/04/21 03:34	1
1,2,3,6,7,8-HxCDD	**1.3**	**J B**	48	0.42	pg/L		10/29/21 12:27	11/04/21 03:34	1
1,2,3,7,8,9-HxCDD	ND		48	0.41	pg/L		10/29/21 12:27	11/04/21 03:34	1
1,2,3,4,7,8-HxCDF	**1.0**	**J**	48	0.38	pg/L		10/29/21 12:27	11/04/21 03:34	1
1,2,3,6,7,8-HxCDF	**1.3**	**J**	48	0.34	pg/L		10/29/21 12:27	11/04/21 03:34	1
1,2,3,7,8,9-HxCDF	**5.4**	**J B**	48	0.36	pg/L		10/29/21 12:27	11/04/21 03:34	1
2,3,4,6,7,8-HxCDF	**0.66**	**J**	48	0.33	pg/L		10/29/21 12:27	11/04/21 03:34	1
1,2,3,4,6,7,8-HpCDD	**1.4**	**J B**	48	0.23	pg/L		10/29/21 12:27	11/04/21 03:34	1
1,2,3,4,6,7,8-HpCDF	**1.2**	**J**	48	0.49	pg/L		10/29/21 12:27	11/04/21 03:34	1
1,2,3,4,7,8,9-HpCDF	**2.0**	**J**	48	0.57	pg/L		10/29/21 12:27	11/04/21 03:34	1
OCDD	**4.2**	**J B**	96	0.67	pg/L		10/29/21 12:27	11/04/21 03:34	1
OCDF	**1.8**	**J**	96	0.57	pg/L		10/29/21 12:27	11/04/21 03:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*78*		*40 - 135*	*10/29/21 12:27*	*11/04/21 03:34*	*1*
13C-2,3,7,8-TCDF	*91*		*40 - 135*	*10/29/21 12:27*	*11/04/21 03:34*	*1*
13C-1,2,3,7,8-PeCDD	*83*		*40 - 135*	*10/29/21 12:27*	*11/04/21 03:34*	*1*
13C-1,2,3,7,8-PeCDF	*96*		*40 - 135*	*10/29/21 12:27*	*11/04/21 03:34*	*1*
13C-1,2,3,6,7,8-HxCDD	*77*		*40 - 135*	*10/29/21 12:27*	*11/04/21 03:34*	*1*
13C-1,2,3,4,7,8-HxCDF	*80*		*40 - 135*	*10/29/21 12:27*	*11/04/21 03:34*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*75*		*40 - 135*	*10/29/21 12:27*	*11/04/21 03:34*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*78*		*40 - 135*	*10/29/21 12:27*	*11/04/21 03:34*	*1*
13C-OCDD	*75*		*40 - 135*	*10/29/21 12:27*	*11/04/21 03:34*	*1*

Toxicity Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Client Sample ID: AOC1/AOC8-S4-0.5 — Lab Sample ID: 320-80878-3

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	2.2		0.97	0.24	pg/g	1	2.2	8290A
1,2,3,7,8-PeCDD	1.4	J	4.9	0.44	pg/g	1	1.4	8290A
1,2,3,7,8-PeCDF	2.1	J	4.9	0.83	pg/g	0.03	0.063	8290A
2,3,4,7,8-PeCDF	4.9		4.9	0.84	pg/g	0.3	1.5	8290A
1,2,3,4,7,8-HxCDD	1.8	J B	4.9	0.18	pg/g	0.1	0.18	8290A
1,2,3,6,7,8-HxCDD	4.1	J	4.9	0.17	pg/g	0.1	0.41	8290A
1,2,3,7,8,9-HxCDD	3.6	J B	4.9	0.15	pg/g	0.1	0.36	8290A
1,2,3,4,7,8-HxCDF	2.5	J	4.9	0.99	pg/g	0.1	0.25	8290A
1,2,3,6,7,8-HxCDF	5.4		4.9	0.95	pg/g	0.1	0.54	8290A
1,2,3,7,8,9-HxCDF	ND		4.9	1.0	pg/g	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	5.0		4.9	0.97	pg/g	0.1	0.50	8290A
1,2,3,4,6,7,8-HpCDD	85	B	4.9	0.87	pg/g	0.01	0.85	8290A
1,2,3,4,6,7,8-HpCDF	40	B	4.9	0.38	pg/g	0.01	0.40	8290A
1,2,3,4,7,8,9-HpCDF	2.5	J B	4.9	0.47	pg/g	0.01	0.025	8290A
OCDD	740	B	9.7	0.87	pg/g	0.0003	0.22	8290A
OCDF	90	B	9.7	0.14	pg/g	0.0003	0.027	8290A
2,3,7,8-TCDF - RA	7.0	G B	1.2	1.2	pg/g	0.1	0.70	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		9.6	TEQ

Client Sample ID: AOC1/AOC8-S4-0.5DUP — Lab Sample ID: 320-80878-4

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	1.3		0.95	0.15	pg/g	1	1.3	8290A
1,2,3,7,8-PeCDD	1.2	J	4.8	0.37	pg/g	1	1.2	8290A
1,2,3,7,8-PeCDF	2.4	J	4.8	0.99	pg/g	0.03	0.072	8290A
2,3,4,7,8-PeCDF	4.4	J	4.8	1.0	pg/g	0.3	1.3	8290A
1,2,3,4,7,8-HxCDD	1.2	J B	4.8	0.082	pg/g	0.1	0.12	8290A
1,2,3,6,7,8-HxCDD	3.3	J	4.8	0.079	pg/g	0.1	0.33	8290A
1,2,3,7,8,9-HxCDD	2.3	J B	4.8	0.070	pg/g	0.1	0.23	8290A
1,2,3,4,7,8-HxCDF	3.4	J	4.8	0.87	pg/g	0.1	0.34	8290A
1,2,3,6,7,8-HxCDF	7.6		4.8	0.84	pg/g	0.1	0.76	8290A
1,2,3,7,8,9-HxCDF	ND		4.8	0.89	pg/g	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	4.6	J	4.8	0.85	pg/g	0.1	0.46	8290A
1,2,3,4,6,7,8-HpCDD	60	B	4.8	0.28	pg/g	0.01	0.60	8290A
1,2,3,4,6,7,8-HpCDF	30	B	4.8	0.27	pg/g	0.01	0.30	8290A
1,2,3,4,7,8,9-HpCDF	1.8	J B	4.8	0.34	pg/g	0.01	0.018	8290A
OCDD	500	B	9.5	0.98	pg/g	0.0003	0.15	8290A
OCDF	62	B	9.5	0.076	pg/g	0.0003	0.019	8290A
2,3,7,8-TCDF - RA	4.9	G B	1.3	1.3	pg/g	0.1	0.49	8290A

TEF Reference:
WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Client Sample ID: AOC1/AOC8-S4-0.5DUP (Continued) — Lab Sample ID: 320-80878-4

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		7.7	TEQ

Client Sample ID: AOC1/AOC8-S4-2 — Lab Sample ID: 320-80878-5

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.91	0.059	pg/g	1	0.00	8290A
2,3,7,8-TCDF	**0.29**	**J B**	0.91	0.037	pg/g	0.1	**0.029**	8290A
1,2,3,7,8-PeCDD	ND		4.5	0.052	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	**0.10**	**J**	4.5	0.049	pg/g	0.03	**0.0030**	8290A
2,3,4,7,8-PeCDF	**0.13**	**J**	4.5	0.050	pg/g	0.3	**0.039**	8290A
1,2,3,4,7,8-HxCDD	**0.15**	**J B**	4.5	0.044	pg/g	0.1	**0.015**	8290A
1,2,3,6,7,8-HxCDD	**0.063**	**J**	4.5	0.042	pg/g	0.1	**0.0063**	8290A
1,2,3,7,8,9-HxCDD	**0.17**	**J B**	4.5	0.038	pg/g	0.1	**0.017**	8290A
1,2,3,4,7,8-HxCDF	ND		4.5	0.079	pg/g	0.1	0.00	8290A
1,2,3,6,7,8-HxCDF	**0.15**	**J**	4.5	0.075	pg/g	0.1	**0.015**	8290A
1,2,3,7,8,9-HxCDF	ND		4.5	0.081	pg/g	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	**0.081**	**J**	4.5	0.077	pg/g	0.1	**0.0081**	8290A
1,2,3,4,6,7,8-HpCDD	**1.4**	**J B**	4.5	0.038	pg/g	0.01	**0.014**	8290A
1,2,3,4,6,7,8-HpCDF	**0.67**	**J B**	4.5	0.036	pg/g	0.01	**0.0067**	8290A
1,2,3,4,7,8,9-HpCDF	ND		4.5	0.046	pg/g	0.01	0.00	8290A
OCDD	**12**	**B**	9.1	0.049	pg/g	0.0003	**0.0036**	8290A
OCDF	**1.2**	**J B**	9.1	0.039	pg/g	0.0003	**0.00036**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.16	TEQ

Client Sample ID: AOC1/AOC8-S10-0.5 — Lab Sample ID: 320-80878-13

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	**0.16**	**J**	0.99	0.12	pg/g	1	**0.16**	8290A
1,2,3,7,8-PeCDD	**0.55**	**J**	4.9	0.18	pg/g	1	**0.55**	8290A
1,2,3,7,8-PeCDF	**0.48**	**J**	4.9	0.16	pg/g	0.03	**0.014**	8290A
2,3,4,7,8-PeCDF	**0.71**	**J**	4.9	0.16	pg/g	0.3	**0.21**	8290A
1,2,3,4,7,8-HxCDD	**0.82**	**J B**	4.9	0.11	pg/g	0.1	**0.082**	8290A
1,2,3,6,7,8-HxCDD	**0.88**	**J**	4.9	0.10	pg/g	0.1	**0.088**	8290A
1,2,3,7,8,9-HxCDD	**0.90**	**J B**	4.9	0.090	pg/g	0.1	**0.090**	8290A
1,2,3,4,7,8-HxCDF	**0.84**	**J**	4.9	0.23	pg/g	0.1	**0.084**	8290A
1,2,3,6,7,8-HxCDF	**0.85**	**J**	4.9	0.22	pg/g	0.1	**0.085**	8290A
1,2,3,7,8,9-HxCDF	ND		4.9	0.24	pg/g	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	**0.54**	**J**	4.9	0.22	pg/g	0.1	**0.054**	8290A
1,2,3,4,6,7,8-HpCDD	**4.2**	**J B**	4.9	0.070	pg/g	0.01	**0.042**	8290A

TEF Reference:
WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Client Sample ID: AOC1/AOC8-S10-0.5 (Continued) — Lab Sample ID: 320-80878-13

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
1,2,3,4,6,7,8-HpCDF	**1.9**	**J B**	4.9	0.11	pg/g	0.01	**0.019**	8290A
1,2,3,4,7,8,9-HpCDF	ND		4.9	0.14	pg/g	0.01	0.00	8290A
OCDD	**15**	**B**	9.9	0.11	pg/g	0.0003	**0.0045**	8290A
OCDF	**1.3**	**J B**	9.9	0.098	pg/g	0.0003	**0.00039**	8290A
2,3,7,8-TCDF - RA	**0.82**	**J B**	0.99	0.41	pg/g	0.1	**0.082**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		1.6	TEQ

Client Sample ID: AOC1/AOC8-S10-2 — Lab Sample ID: 320-80878-14

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.93	0.20	pg/g	1	0.00	8290A
2,3,7,8-TCDF	ND		0.93	0.10	pg/g	0.1	0.00	8290A
1,2,3,7,8-PeCDD	**0.29**	**J**	4.7	0.17	pg/g	1	**0.29**	8290A
1,2,3,7,8-PeCDF	ND		4.7	0.12	pg/g	0.03	0.00	8290A
2,3,4,7,8-PeCDF	ND		4.7	0.12	pg/g	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	ND		4.7	0.15	pg/g	0.1	0.00	8290A
1,2,3,6,7,8-HxCDD	ND		4.7	0.14	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDD	ND		4.7	0.12	pg/g	0.1	0.00	8290A
1,2,3,4,7,8-HxCDF	ND		4.7	0.17	pg/g	0.1	0.00	8290A
1,2,3,6,7,8-HxCDF	ND		4.7	0.16	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDF	ND		4.7	0.18	pg/g	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	ND		4.7	0.17	pg/g	0.1	0.00	8290A
1,2,3,4,6,7,8-HpCDD	**0.62**	**J B**	4.7	0.12	pg/g	0.01	**0.0062**	8290A
1,2,3,4,6,7,8-HpCDF	**0.22**	**J B**	4.7	0.091	pg/g	0.01	**0.0022**	8290A
1,2,3,4,7,8,9-HpCDF	ND		4.7	0.12	pg/g	0.01	0.00	8290A
OCDD	**3.7**	**J B**	9.3	0.16	pg/g	0.0003	**0.0011**	8290A
OCDF	**0.58**	**J B**	9.3	0.18	pg/g	0.0003	**0.00017**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.30	TEQ

Client Sample ID: AOC3/AOC8-S1A-0.5 — Lab Sample ID: 320-80878-25

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		1.0	0.38	pg/g	1	0.00	8290A
2,3,7,8-TCDF	**0.91**	**J B**	1.0	0.42	pg/g	0.1	**0.091**	8290A
1,2,3,7,8-PeCDD	ND		5.0	0.43	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	ND		5.0	0.53	pg/g	0.03	0.00	8290A

TEF Reference:
WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Client Sample ID: AOC3/AOC8-S1A-0.5 (Continued)

Lab Sample ID: 320-80878-25

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,4,7,8-PeCDF	ND		5.0	0.54	pg/g	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	ND		5.0	0.34	pg/g	0.1	0.00	8290A
1,2,3,6,7,8-HxCDD	ND		5.0	0.33	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDD	ND		5.0	0.29	pg/g	0.1	0.00	8290A
1,2,3,4,7,8-HxCDF	ND		5.0	0.58	pg/g	0.1	0.00	8290A
1,2,3,6,7,8-HxCDF	**0.79**	**J**	5.0	0.56	pg/g	0.1	**0.079**	8290A
1,2,3,7,8,9-HxCDF	ND		5.0	0.60	pg/g	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	ND		5.0	0.57	pg/g	0.1	0.00	8290A
1,2,3,4,6,7,8-HpCDD	**4.7**	**J B**	5.0	0.21	pg/g	0.01	**0.047**	8290A
1,2,3,4,6,7,8-HpCDF	**1.6**	**J B**	5.0	0.23	pg/g	0.01	**0.016**	8290A
1,2,3,4,7,8,9-HpCDF	ND		5.0	0.29	pg/g	0.01	0.00	8290A
OCDD	**55**	**B**	10	0.36	pg/g	0.0003	**0.017**	8290A
OCDF	**2.7**	**J B**	10	0.33	pg/g	0.0003	**0.00081**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.25	TEQ

Client Sample ID: AOC3/AOC8-S1A-2

Lab Sample ID: 320-80878-26

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.97	0.062	pg/g	1	0.00	8290A
2,3,7,8-TCDF	**0.26**	**J B**	0.97	0.047	pg/g	0.1	**0.026**	8290A
1,2,3,7,8-PeCDD	ND		4.9	0.063	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	**0.12**	**J**	4.9	0.053	pg/g	0.03	**0.0036**	8290A
2,3,4,7,8-PeCDF	ND		4.9	0.053	pg/g	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	**0.22**	**J B**	4.9	0.057	pg/g	0.1	**0.022**	8290A
1,2,3,6,7,8-HxCDD	ND		4.9	0.055	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDD	**0.13**	**J B**	4.9	0.049	pg/g	0.1	**0.013**	8290A
1,2,3,4,7,8-HxCDF	ND		4.9	0.078	pg/g	0.1	0.00	8290A
1,2,3,6,7,8-HxCDF	ND		4.9	0.075	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDF	ND		4.9	0.080	pg/g	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	ND		4.9	0.076	pg/g	0.1	0.00	8290A
1,2,3,4,6,7,8-HpCDD	**0.56**	**J B**	4.9	0.045	pg/g	0.01	**0.0056**	8290A
1,2,3,4,6,7,8-HpCDF	**0.14**	**J B**	4.9	0.035	pg/g	0.01	**0.0014**	8290A
1,2,3,4,7,8,9-HpCDF	**0.089**	**J B**	4.9	0.044	pg/g	0.01	**0.00089**	8290A
OCDD	**5.3**	**J B**	9.7	0.074	pg/g	0.0003	**0.0016**	8290A
OCDF	**0.47**	**J B**	9.7	0.062	pg/g	0.0003	**0.00014**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.074	TEQ

TEF Reference:

WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Toxicity Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Client Sample ID: EB10262021

Lab Sample ID: 320-80878-35

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		9.6	0.86	pg/L	1	0.00	8290A
2,3,7,8-TCDF	ND		9.6	0.30	pg/L	0.1	0.00	8290A
1,2,3,7,8-PeCDD	ND		48	0.61	pg/L	1	0.00	8290A
1,2,3,7,8-PeCDF	**2.2**	**J**	48	0.32	pg/L	0.03	**0.066**	8290A
2,3,4,7,8-PeCDF	ND		48	0.33	pg/L	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	**2.6**	**J B**	48	0.46	pg/L	0.1	**0.26**	8290A
1,2,3,6,7,8-HxCDD	**1.3**	**J B**	48	0.42	pg/L	0.1	**0.13**	8290A
1,2,3,7,8,9-HxCDD	ND		48	0.41	pg/L	0.1	0.00	8290A
1,2,3,4,7,8-HxCDF	**1.0**	**J**	48	0.38	pg/L	0.1	**0.10**	8290A
1,2,3,6,7,8-HxCDF	**1.3**	**J**	48	0.34	pg/L	0.1	**0.13**	8290A
1,2,3,7,8,9-HxCDF	**5.4**	**J B**	48	0.36	pg/L	0.1	**0.54**	8290A
2,3,4,6,7,8-HxCDF	**0.66**	**J**	48	0.33	pg/L	0.1	**0.066**	8290A
1,2,3,4,6,7,8-HpCDD	**1.4**	**J B**	48	0.23	pg/L	0.01	**0.014**	8290A
1,2,3,4,6,7,8-HpCDF	**1.2**	**J**	48	0.49	pg/L	0.01	**0.012**	8290A
1,2,3,4,7,8,9-HpCDF	**2.0**	**J**	48	0.57	pg/L	0.01	**0.020**	8290A
OCDD	**4.2**	**J B**	96	0.67	pg/L	0.0003	**0.0013**	8290A
OCDF	**1.8**	**J**	96	0.57	pg/L	0.0003	**0.00054**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/L		1.3	TEQ

TEF Reference:

WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Isotope Dilution Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (40-135)	TCDF (40-135)	PeCDD (40-135)	PeCDF (40-135)	HxDD (40-135)	HxCDF (40-135)	HpCDD (40-135)	HpCDF (40-135)
320-80878-3	AOC1/AOC8-S4-0.5	69		75	77	68	69	88	79
320-80878-3 - RA	AOC1/AOC8-S4-0.5		84						
320-80878-4	AOC1/AOC8-S4-0.5DUP	69		80	78	70	71	91	80
320-80878-4 - RA	AOC1/AOC8-S4-0.5DUP		81						
320-80878-5	AOC1/AOC8-S4-2	91	88	99	98	90	93	118	102
320-80878-13	AOC1/AOC8-S10-0.5	70		79	81	72	72	77	72
320-80878-13 - RA	AOC1/AOC8-S10-0.5		77						
320-80878-14	AOC1/AOC8-S10-2	69	69	79	77	71	68	91	82
320-80878-25	AOC3/AOC8-S1A-0.5	74	70	87	84	68	69	79	74
320-80878-26	AOC3/AOC8-S1A-2	70	71	82	80	72	71	92	78
LCS 320-538203/2-A	Lab Control Sample	73	75	85	83	74	73	95	86
LCSD 320-538203/3-A	Lab Control Sample Dup	69	71	79	78	70	72	92	81
MB 320-538203/1-A	Method Blank	76	76	88	85	80	78	100	91

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OCDD (40-135)
320-80878-3	AOC1/AOC8-S4-0.5	86
320-80878-3 - RA	AOC1/AOC8-S4-0.5	
320-80878-4	AOC1/AOC8-S4-0.5DUP	91
320-80878-4 - RA	AOC1/AOC8-S4-0.5DUP	
320-80878-5	AOC1/AOC8-S4-2	116
320-80878-13	AOC1/AOC8-S10-0.5	69
320-80878-13 - RA	AOC1/AOC8-S10-0.5	
320-80878-14	AOC1/AOC8-S10-2	87
320-80878-25	AOC3/AOC8-S1A-0.5	70
320-80878-26	AOC3/AOC8-S1A-2	87
LCS 320-538203/2-A	Lab Control Sample	90
LCSD 320-538203/3-A	Lab Control Sample Dup	85
MB 320-538203/1-A	Method Blank	96

Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF = 13C-1,2,3,7,8-PeCDF
HxDD = 13C-1,2,3,6,7,8-HxCDD
HxCDF = 13C-1,2,3,4,7,8-HxCDF
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
OCDD = 13C-OCDD

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (40-135)	TCDF (40-135)	PeCDD (40-135)	PeCDF (40-135)	HxDD (40-135)	HxCDF (40-135)	HpCDD (40-135)	HpCDF (40-135)
320-80878-35	EB10262021	78	91	83	96	77	80	75	78
LCS 320-538262/2-A	Lab Control Sample	83	94	90	94	87	92	87	94
LCSD 320-538262/3-A	Lab Control Sample Dup	88	102	96	105	84	91	84	91

Isotope Dilution Summary

Client: Ninyo & Moore
Job ID: 320-80878-2
Project/Site: Cole School PEA

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Matrix: Water
Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (40-135)	TCDF (40-135)	PeCDD (40-135)	PeCDF (40-135)	HxDD (40-135)	HxCDF (40-135)	HpCDD (40-135)	HpCDF (40-135)
MB 320-538262/1-A	Method Blank	84	97	96	102	83	89	85	89

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OCDD (40-135)
320-80878-35	EB10262021	75
LCS 320-538262/2-A	Lab Control Sample	92
LCSD 320-538262/3-A	Lab Control Sample Dup	89
MB 320-538262/1-A	Method Blank	82

Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF = 13C-1,2,3,7,8-PeCDF
HxDD = 13C-1,2,3,6,7,8-HxCDD
HxCDF = 13C-1,2,3,4,7,8-HxCDF
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
OCDD = 13C-OCDD

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 320-538203/1-A
Matrix: Solid
Analysis Batch: 542535

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538203

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.0	0.092	pg/g		10/29/21 09:50	11/13/21 02:55	1
2,3,7,8-TCDF	0.147	J	1.0	0.047	pg/g		10/29/21 09:50	11/13/21 02:55	1
1,2,3,7,8-PeCDD	ND		5.0	0.074	pg/g		10/29/21 09:50	11/13/21 02:55	1
1,2,3,7,8-PeCDF	ND		5.0	0.058	pg/g		10/29/21 09:50	11/13/21 02:55	1
2,3,4,7,8-PeCDF	ND		5.0	0.059	pg/g		10/29/21 09:50	11/13/21 02:55	1
1,2,3,4,7,8-HxCDD	0.266	J	5.0	0.071	pg/g		10/29/21 09:50	11/13/21 02:55	1
1,2,3,6,7,8-HxCDD	ND		5.0	0.068	pg/g		10/29/21 09:50	11/13/21 02:55	1
1,2,3,7,8,9-HxCDD	0.169	J	5.0	0.060	pg/g		10/29/21 09:50	11/13/21 02:55	1
1,2,3,4,7,8-HxCDF	ND		5.0	0.10	pg/g		10/29/21 09:50	11/13/21 02:55	1
1,2,3,6,7,8-HxCDF	ND		5.0	0.10	pg/g		10/29/21 09:50	11/13/21 02:55	1
1,2,3,7,8,9-HxCDF	ND		5.0	0.11	pg/g		10/29/21 09:50	11/13/21 02:55	1
2,3,4,6,7,8-HxCDF	ND		5.0	0.10	pg/g		10/29/21 09:50	11/13/21 02:55	1
1,2,3,4,6,7,8-HpCDD	0.531	J	5.0	0.036	pg/g		10/29/21 09:50	11/13/21 02:55	1
1,2,3,4,6,7,8-HpCDF	0.440	J	5.0	0.036	pg/g		10/29/21 09:50	11/13/21 02:55	1
1,2,3,4,7,8,9-HpCDF	0.360	J	5.0	0.046	pg/g		10/29/21 09:50	11/13/21 02:55	1
OCDD	1.93	J	10	0.055	pg/g		10/29/21 09:50	11/13/21 02:55	1
OCDF	0.298	J	10	0.058	pg/g		10/29/21 09:50	11/13/21 02:55	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*76*		*40 - 135*	*10/29/21 09:50*	*11/13/21 02:55*	*1*
13C-2,3,7,8-TCDF	*76*		*40 - 135*	*10/29/21 09:50*	*11/13/21 02:55*	*1*
13C-1,2,3,7,8-PeCDD	*88*		*40 - 135*	*10/29/21 09:50*	*11/13/21 02:55*	*1*
13C-1,2,3,7,8-PeCDF	*85*		*40 - 135*	*10/29/21 09:50*	*11/13/21 02:55*	*1*
13C-1,2,3,6,7,8-HxCDD	*80*		*40 - 135*	*10/29/21 09:50*	*11/13/21 02:55*	*1*
13C-1,2,3,4,7,8-HxCDF	*78*		*40 - 135*	*10/29/21 09:50*	*11/13/21 02:55*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*100*		*40 - 135*	*10/29/21 09:50*	*11/13/21 02:55*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*91*		*40 - 135*	*10/29/21 09:50*	*11/13/21 02:55*	*1*
13C-OCDD	*96*		*40 - 135*	*10/29/21 09:50*	*11/13/21 02:55*	*1*

Lab Sample ID: LCS 320-538203/2-A
Matrix: Solid
Analysis Batch: 542535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538203

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	20.0	23.4		pg/g		117	77 - 130
2,3,7,8-TCDF	20.0	22.1		pg/g		111	79 - 137
1,2,3,7,8-PeCDD	100	110		pg/g		110	79 - 134
1,2,3,7,8-PeCDF	100	111		pg/g		111	81 - 134
2,3,4,7,8-PeCDF	100	107		pg/g		107	76 - 132
1,2,3,4,7,8-HxCDD	100	118		pg/g		118	65 - 144
1,2,3,6,7,8-HxCDD	100	114		pg/g		114	73 - 147
1,2,3,7,8,9-HxCDD	100	113		pg/g		113	80 - 143
1,2,3,4,7,8-HxCDF	100	118		pg/g		118	72 - 140
1,2,3,6,7,8-HxCDF	100	114		pg/g		114	63 - 152
1,2,3,7,8,9-HxCDF	100	122		pg/g		122	72 - 152
2,3,4,6,7,8-HxCDF	100	116		pg/g		116	72 - 151
1,2,3,4,6,7,8-HpCDD	100	108		pg/g		108	86 - 134
1,2,3,4,6,7,8-HpCDF	100	111		pg/g		111	81 - 137
1,2,3,4,7,8,9-HpCDF	100	126		pg/g		126	79 - 139

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-538203/2-A
Matrix: Solid
Analysis Batch: 542535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538203

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
OCDD			200	228		pg/g		114	80 - 137		
OCDF			200	239		pg/g		119	75 - 141		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*73*		*40 - 135*
13C-2,3,7,8-TCDF	*75*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*85*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*83*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*74*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*73*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*95*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*86*		*40 - 135*
13C-OCDD	*90*		*40 - 135*

Lab Sample ID: LCSD 320-538203/3-A
Matrix: Solid
Analysis Batch: 542535

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 538203

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,7,8-TCDD			20.0	23.4		pg/g		117	77 - 130	0	20
2,3,7,8-TCDF			20.0	22.3		pg/g		111	79 - 137	1	20
1,2,3,7,8-PeCDD			100	112		pg/g		112	79 - 134	1	20
1,2,3,7,8-PeCDF			100	112		pg/g		112	81 - 134	1	20
2,3,4,7,8-PeCDF			100	111		pg/g		111	76 - 132	4	20
1,2,3,4,7,8-HxCDD			100	123		pg/g		123	65 - 144	4	20
1,2,3,6,7,8-HxCDD			100	119		pg/g		119	73 - 147	5	20
1,2,3,7,8,9-HxCDD			100	117		pg/g		117	80 - 143	3	20
1,2,3,4,7,8-HxCDF			100	118		pg/g		118	72 - 140	1	20
1,2,3,6,7,8-HxCDF			100	114		pg/g		114	63 - 152	0	20
1,2,3,7,8,9-HxCDF			100	119		pg/g		119	72 - 152	2	20
2,3,4,6,7,8-HxCDF			100	115		pg/g		115	72 - 151	1	20
1,2,3,4,6,7,8-HpCDD			100	109		pg/g		109	86 - 134	0	20
1,2,3,4,6,7,8-HpCDF			100	117		pg/g		117	81 - 137	5	20
1,2,3,4,7,8,9-HpCDF			100	131		pg/g		131	79 - 139	4	20
OCDD			200	230		pg/g		115	80 - 137	1	20
OCDF			200	244		pg/g		122	75 - 141	2	20

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*69*		*40 - 135*
13C-2,3,7,8-TCDF	*71*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*79*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*78*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*70*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*72*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*92*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*81*		*40 - 135*
13C-OCDD	*85*		*40 - 135*

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-538262/1-A
Matrix: Water
Analysis Batch: 539721

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538262

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10	1.0	pg/L		10/29/21 12:13	11/04/21 01:09	1
2,3,7,8-TCDF	ND		10	0.40	pg/L		10/29/21 12:13	11/04/21 01:09	1
1,2,3,7,8-PeCDD	ND		50	0.77	pg/L		10/29/21 12:13	11/04/21 01:09	1
1,2,3,7,8-PeCDF	ND		50	0.44	pg/L		10/29/21 12:13	11/04/21 01:09	1
2,3,4,7,8-PeCDF	ND		50	0.46	pg/L		10/29/21 12:13	11/04/21 01:09	1
1,2,3,4,7,8-HxCDD	1.93	J	50	0.55	pg/L		10/29/21 12:13	11/04/21 01:09	1
1,2,3,6,7,8-HxCDD	0.839	J	50	0.50	pg/L		10/29/21 12:13	11/04/21 01:09	1
1,2,3,7,8,9-HxCDD	ND		50	0.49	pg/L		10/29/21 12:13	11/04/21 01:09	1
1,2,3,4,7,8-HxCDF	ND		50	0.42	pg/L		10/29/21 12:13	11/04/21 01:09	1
1,2,3,6,7,8-HxCDF	ND		50	0.37	pg/L		10/29/21 12:13	11/04/21 01:09	1
1,2,3,7,8,9-HxCDF	4.35	J	50	0.40	pg/L		10/29/21 12:13	11/04/21 01:09	1
2,3,4,6,7,8-HxCDF	ND		50	0.36	pg/L		10/29/21 12:13	11/04/21 01:09	1
1,2,3,4,6,7,8-HpCDD	0.977	J	50	0.27	pg/L		10/29/21 12:13	11/04/21 01:09	1
1,2,3,4,6,7,8-HpCDF	ND		50	0.51	pg/L		10/29/21 12:13	11/04/21 01:09	1
1,2,3,4,7,8,9-HpCDF	ND		50	0.59	pg/L		10/29/21 12:13	11/04/21 01:09	1
OCDD	3.25	J	100	0.82	pg/L		10/29/21 12:13	11/04/21 01:09	1
OCDF	ND		100	0.76	pg/L		10/29/21 12:13	11/04/21 01:09	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*84*		*40 - 135*	*10/29/21 12:13*	*11/04/21 01:09*	*1*
13C-2,3,7,8-TCDF	*97*		*40 - 135*	*10/29/21 12:13*	*11/04/21 01:09*	*1*
13C-1,2,3,7,8-PeCDD	*96*		*40 - 135*	*10/29/21 12:13*	*11/04/21 01:09*	*1*
13C-1,2,3,7,8-PeCDF	*102*		*40 - 135*	*10/29/21 12:13*	*11/04/21 01:09*	*1*
13C-1,2,3,6,7,8-HxCDD	*83*		*40 - 135*	*10/29/21 12:13*	*11/04/21 01:09*	*1*
13C-1,2,3,4,7,8-HxCDF	*89*		*40 - 135*	*10/29/21 12:13*	*11/04/21 01:09*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*85*		*40 - 135*	*10/29/21 12:13*	*11/04/21 01:09*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*89*		*40 - 135*	*10/29/21 12:13*	*11/04/21 01:09*	*1*
13C-OCDD	*82*		*40 - 135*	*10/29/21 12:13*	*11/04/21 01:09*	*1*

Lab Sample ID: LCS 320-538262/2-A
Matrix: Water
Analysis Batch: 539721

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538262

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	200	237		pg/L		119	64 - 142
2,3,7,8-TCDF	200	237		pg/L		119	71 - 142
1,2,3,7,8-PeCDD	1000	1080		pg/L		108	71 - 140
1,2,3,7,8-PeCDF	1000	1200		pg/L		120	76 - 135
2,3,4,7,8-PeCDF	1000	1230		pg/L		123	74 - 137
1,2,3,4,7,8-HxCDD	1000	1060		pg/L		106	56 - 146
1,2,3,6,7,8-HxCDD	1000	1130		pg/L		113	73 - 144
1,2,3,7,8,9-HxCDD	1000	1090		pg/L		109	71 - 151
1,2,3,4,7,8-HxCDF	1000	1140		pg/L		114	75 - 131
1,2,3,6,7,8-HxCDF	1000	1180		pg/L		118	76 - 133
1,2,3,7,8,9-HxCDF	1000	1140		pg/L		114	77 - 142
2,3,4,6,7,8-HxCDF	1000	1090		pg/L		109	80 - 137
1,2,3,4,6,7,8-HpCDD	1000	1000		pg/L		100	78 - 139
1,2,3,4,6,7,8-HpCDF	1000	1050		pg/L		105	79 - 133
1,2,3,4,7,8,9-HpCDF	1000	1010		pg/L		101	83 - 130

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-538262/2-A
Matrix: Water
Analysis Batch: 539721

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538262

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
OCDD			2000	2080		pg/L		104	80 - 132		
OCDF			2000	2180		pg/L		109	72 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*83*		*40 - 135*
13C-2,3,7,8-TCDF	*94*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*90*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*94*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*87*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*92*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*87*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*94*		*40 - 135*
13C-OCDD	*92*		*40 - 135*

Lab Sample ID: LCSD 320-538262/3-A
Matrix: Water
Analysis Batch: 539721

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 538262

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,7,8-TCDD			200	234		pg/L		117	64 - 142	1	20
2,3,7,8-TCDF			200	240		pg/L		120	71 - 142	1	20
1,2,3,7,8-PeCDD			1000	1080		pg/L		108	71 - 140	1	20
1,2,3,7,8-PeCDF			1000	1190		pg/L		119	76 - 135	1	20
2,3,4,7,8-PeCDF			1000	1220		pg/L		122	74 - 137	1	20
1,2,3,4,7,8-HxCDD			1000	1060		pg/L		106	56 - 146	0	20
1,2,3,6,7,8-HxCDD			1000	1130		pg/L		113	73 - 144	0	20
1,2,3,7,8,9-HxCDD			1000	1110		pg/L		111	71 - 151	2	20
1,2,3,4,7,8-HxCDF			1000	1090		pg/L		109	75 - 131	4	20
1,2,3,6,7,8-HxCDF			1000	1110		pg/L		111	76 - 133	6	20
1,2,3,7,8,9-HxCDF			1000	1110		pg/L		111	77 - 142	3	20
2,3,4,6,7,8-HxCDF			1000	1040		pg/L		104	80 - 137	4	20
1,2,3,4,6,7,8-HpCDD			1000	997		pg/L		100	78 - 139	0	20
1,2,3,4,6,7,8-HpCDF			1000	1020		pg/L		102	79 - 133	3	20
1,2,3,4,7,8,9-HpCDF			1000	996		pg/L		100	83 - 130	1	20
OCDD			2000	2020		pg/L		101	80 - 132	3	20
OCDF			2000	2110		pg/L		106	72 - 140	3	20

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*88*		*40 - 135*
13C-2,3,7,8-TCDF	*102*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*96*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*105*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*84*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*91*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*84*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*91*		*40 - 135*
13C-OCDD	*89*		*40 - 135*

Specialty Organics

Prep Batch: 538203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-3	AOC1/AOC8-S4-0.5	Total/NA	Solid	8290	
320-80878-3 - RA	AOC1/AOC8-S4-0.5	Total/NA	Solid	8290	
320-80878-4	AOC1/AOC8-S4-0.5DUP	Total/NA	Solid	8290	
320-80878-4 - RA	AOC1/AOC8-S4-0.5DUP	Total/NA	Solid	8290	
320-80878-5	AOC1/AOC8-S4-2	Total/NA	Solid	8290	
320-80878-13	AOC1/AOC8-S10-0.5	Total/NA	Solid	8290	
320-80878-13 - RA	AOC1/AOC8-S10-0.5	Total/NA	Solid	8290	
320-80878-14	AOC1/AOC8-S10-2	Total/NA	Solid	8290	
320-80878-25	AOC3/AOC8-S1A-0.5	Total/NA	Solid	8290	
320-80878-26	AOC3/AOC8-S1A-2	Total/NA	Solid	8290	
MB 320-538203/1-A	Method Blank	Total/NA	Solid	8290	
LCS 320-538203/2-A	Lab Control Sample	Total/NA	Solid	8290	
LCSD 320-538203/3-A	Lab Control Sample Dup	Total/NA	Solid	8290	

Prep Batch: 538262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-35	EB10262021	Total/NA	Water	8290	
MB 320-538262/1-A	Method Blank	Total/NA	Water	8290	
LCS 320-538262/2-A	Lab Control Sample	Total/NA	Water	8290	
LCSD 320-538262/3-A	Lab Control Sample Dup	Total/NA	Water	8290	

Analysis Batch: 539721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-35	EB10262021	Total/NA	Water	8290A	538262
MB 320-538262/1-A	Method Blank	Total/NA	Water	8290A	538262
LCS 320-538262/2-A	Lab Control Sample	Total/NA	Water	8290A	538262
LCSD 320-538262/3-A	Lab Control Sample Dup	Total/NA	Water	8290A	538262

Analysis Batch: 542535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-3	AOC1/AOC8-S4-0.5	Total/NA	Solid	8290A	538203
320-80878-4	AOC1/AOC8-S4-0.5DUP	Total/NA	Solid	8290A	538203
320-80878-5	AOC1/AOC8-S4-2	Total/NA	Solid	8290A	538203
320-80878-13	AOC1/AOC8-S10-0.5	Total/NA	Solid	8290A	538203
320-80878-14	AOC1/AOC8-S10-2	Total/NA	Solid	8290A	538203
320-80878-25	AOC3/AOC8-S1A-0.5	Total/NA	Solid	8290A	538203
320-80878-26	AOC3/AOC8-S1A-2	Total/NA	Solid	8290A	538203
MB 320-538203/1-A	Method Blank	Total/NA	Solid	8290A	538203
LCS 320-538203/2-A	Lab Control Sample	Total/NA	Solid	8290A	538203
LCSD 320-538203/3-A	Lab Control Sample Dup	Total/NA	Solid	8290A	538203

Analysis Batch: 542971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-3 - RA	AOC1/AOC8-S4-0.5	Total/NA	Solid	8290A	538203
320-80878-4 - RA	AOC1/AOC8-S4-0.5DUP	Total/NA	Solid	8290A	538203
320-80878-13 - RA	AOC1/AOC8-S10-0.5	Total/NA	Solid	8290A	538203

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Client Sample ID: AOC1/AOC8-S4-0.5

Lab Sample ID: 320-80878-3
Date Collected: 10/26/21 08:52
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.29 g	20.0 uL	538203	10/29/21 09:50	FC	TAL SAC
Total/NA	Analysis	8290A		1			542535	11/13/21 05:10	SMA	TAL SAC
Total/NA	Prep	8290	RA		10.29 g	20.0 uL	538203	10/29/21 09:50	FC	TAL SAC
Total/NA	Analysis	8290A	RA	1			542971	11/15/21 18:41	DB	TAL SAC

Client Sample ID: AOC1/AOC8-S4-0.5DUP

Lab Sample ID: 320-80878-4
Date Collected: 10/26/21 08:52
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.48 g	20.0 uL	538203	10/29/21 09:50	FC	TAL SAC
Total/NA	Analysis	8290A		1			542535	11/13/21 05:55	SMA	TAL SAC
Total/NA	Prep	8290	RA		10.48 g	20.0 uL	538203	10/29/21 09:50	FC	TAL SAC
Total/NA	Analysis	8290A	RA	1			542971	11/15/21 19:19	DB	TAL SAC

Client Sample ID: AOC1/AOC8-S4-2

Lab Sample ID: 320-80878-5
Date Collected: 10/26/21 08:54
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			11.02 g	20.0 uL	538203	10/29/21 09:50	FC	TAL SAC
Total/NA	Analysis	8290A		1			542535	11/13/21 06:40	SMA	TAL SAC

Client Sample ID: AOC1/AOC8-S10-0.5

Lab Sample ID: 320-80878-13
Date Collected: 10/26/21 12:57
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.11 g	20.0 uL	538203	10/29/21 09:50	FC	TAL SAC
Total/NA	Analysis	8290A		1			542535	11/13/21 07:25	SMA	TAL SAC
Total/NA	Prep	8290	RA		10.11 g	20.0 uL	538203	10/29/21 09:50	FC	TAL SAC
Total/NA	Analysis	8290A	RA	1			542971	11/15/21 19:58	DB	TAL SAC

Client Sample ID: AOC1/AOC8-S10-2

Lab Sample ID: 320-80878-14
Date Collected: 10/26/21 13:01
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.72 g	20.0 uL	538203	10/29/21 09:50	FC	TAL SAC
Total/NA	Analysis	8290A		1			542535	11/13/21 08:10	SMA	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Client Sample ID: AOC3/AOC8-S1A-0.5

Lab Sample ID: 320-80878-25

Date Collected: 10/26/21 14:11

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.04 g	20.0 uL	538203	10/29/21 09:50	FC	TAL SAC
Total/NA	Analysis	8290A		1			542535	11/13/21 08:55	SMA	TAL SAC

Client Sample ID: AOC3/AOC8-S1A-2

Lab Sample ID: 320-80878-26

Date Collected: 10/26/21 14:18

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.29 g	20.0 uL	538203	10/29/21 09:50	FC	TAL SAC
Total/NA	Analysis	8290A		1			542535	11/13/21 09:40	SMA	TAL SAC

Client Sample ID: EB10262021

Lab Sample ID: 320-80878-35

Date Collected: 10/26/21 16:30

Matrix: Water

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			1043.9 mL	20.0 uL	538262	10/29/21 12:27	CB	TAL SAC
Total/NA	Analysis	8290A		1			539721	11/04/21 03:34	KSS	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Laboratory: Eurofins TestAmerica, Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TEQ		Solid	Total Dioxin/Furan TEQ
TEQ		Water	Total Dioxin/Furan TEQ

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Method	Method Description	Protocol	Laboratory
8290A	Dioxins and Furans (HRGC/HRMS)	SW846	TAL SAC
TEQ	Total TEQ Calculation	Lab SOP	TAL SAC
8290	Separatory Funnel (Liquid-Liquid) Extraction of Dioxins and Furans	SW846	TAL SAC
8290	Soxhlet Extraction of Dioxins and Furans	SW846	TAL SAC

Protocol References:

Lab SOP = Laboratory Standard Operating Procedure

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-80878-3	AOC1/AOC8-S4-0.5	Solid	10/26/21 08:52	10/27/21 12:54
320-80878-4	AOC1/AOC8-S4-0.5DUP	Solid	10/26/21 08:52	10/27/21 12:54
320-80878-5	AOC1/AOC8-S4-2	Solid	10/26/21 08:54	10/27/21 12:54
320-80878-13	AOC1/AOC8-S10-0.5	Solid	10/26/21 12:57	10/27/21 12:54
320-80878-14	AOC1/AOC8-S10-2	Solid	10/26/21 13:01	10/27/21 12:54
320-80878-25	AOC3/AOC8-S1A-0.5	Solid	10/26/21 14:11	10/27/21 12:54
320-80878-26	AOC3/AOC8-S1A-2	Solid	10/26/21 14:18	10/27/21 12:54
320-80878-35	EB10262021	Water	10/26/21 16:30	10/27/21 12:54

201227

Chain of Custody Record

320-80878

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

eurofins

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemecio	Date: 10/26/21	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	1 of 4 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNR
Alameda California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below			Lab Sampling:
Project Name: Cole Schoo PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC1-S3-0.5	10/26/21	G	0843	Soil	1							X	X		X	
AOC1-S3-2			0845									X				
AOC1/AOC8-S4-0.5			0852									X	X	X	X	
AOC1/AOC8-S4-0.5 DUP			0852									X	X	X	X	
AOC1/AOC8-S4-2			0854									X		X		
AOC1/AOC2-S5-0.5			1050									X	X		X	
AOC1/AOC2-S5-2			1100									X				
AOC1-S6-0.5			1132									X	X		X	
AOC1-S6-2			1135									X				
AOC1/AOC7-S8-0.5			1153									X	X		X	
AOC1/AOC7-S8-2			1158									X	X			

320-80878 Chain of Custody

Preservation Used 1= Ice, 2= HCl; 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for ____ Months

Special Instructions/QC Requirements & Comments.
Hold samples for addional analys's

☐Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. | Cooler Temp (°C): Obs'd ____ Corr'd. ____ Therm ID No. ____

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Daysi Nemecio (Secured Location Alameda office)	N&M	10/26/21 1345	Leslie Jung	N&M	10/26/21 1945
Leslie Jung	N&M	10/27 1140		EPA-SJ	10/27/21 1140
	EPA-SJ	10-27-21/1254		EPA-SJ	10/27/21 1254

Received in Laboratory by:

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

(Rev. 1)

001227

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

320-80878

eurofins

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemecio	Date: 10/26/21	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: TestAmerica	2 of 4 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNP
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC1/AOC7-S8-2 DUP	10/26/21	1158	G	SOIL	1							X	X			
AOC1/AOC8-S10-0.5		1257										X	X	X	X	
AOC1/AOC8-S10-2		1301										X		X		
AOC1-S11-0.5		0916										X	X		X	
AOC1-S11-2		0918										X				
AOC2-S12-0.5		0936										X	X		X	
AOC2-S12-0.5 DUP		0936										X	X		X	
AOC2-S12-2		0941										X				
AOC2-S12-2 DUP		0941										X				
AOC2/AOC3-S13/S3I-0.5		1002										X	X		X	
AOC2/AOC3-S13/S3I-2		1004										X				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3 5=NaOH, 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No	Cooler Temp. (°C): Obs'd _____ Corr'd. _____ Therm ID No. _____			
Relinquished by: Daysi Nemecio (Sealed Location: Alameda office)	Company: NMM	Date/Time: 10/26/21 1745	Received by: Leslie Jung	Company: NMM	Date/Time: 10/26/21 1745
Relinquished by: Leslie Jung	Company: NMM	Date/Time: 10/27 11:40	Received by:	Company: EPA-ST	Date/Time: 102721 1140
Relinquished by: 0.0°C	Company: EPA ST	Date/Time: 102721/1254	Received in Laboratory by:	Company: TAES	Date/Time: 10/27/21 1254

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

Rev. 1)

20227

Chain of Custody Record

320-80878

eurofins

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemecio	Date: 10/26/2021	COC No. 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: TestAmerica	3 of 4 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DMP
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below ____			Lab Sampling
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes.
AOC2-S14-0.5	10/26/21	1027	G	Soil	1							X	X		X	
AOC2-S14-2		1029										X				
AOC3/AOC8-S1A-0.5		1411								X		X	X	X		
AOC3/AOC8-S1A-2		1418										X		X		
AOC3-S1B-0.5		1424										X	X		X	
AOC3-S1B-2		1426										X				
AOC3-S1C-0.5		1430										X	X		X	
AOC3-S1C-2		1509										X				
AOC3-S2B-0.5		1451										X	X		X	
AOC3-S2B-2		1454										X				
AOC3-S2C-0.5		1443										X	X		X	

Preservation Used 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for ____ Months

Special Instructions/QC Requirements & Comments:
Hold samples for addional analysis

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. | Cooler Temp. (°C): Obs'd. ____ Corr'd. ____ Therm ID No. ____

Relinquished by: Daysi Nemecio	Company: N&M	Date/Time: 10/26/21 1745	Received by: Leslie Jung	Company: N&M	Date/Time: 10/20/21	17 45
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10/27 1140	Received by:	Company: EA-SJ	Date/Time: 102721	1140
Relinquished by: 0.3°C	Company: EA-SJ	Date/Time: 102721/1254	Received in Laboratory by:	Company: EA SJ	Date/Time: 10/27/21	1254

Custody Seals Intact: ☐ Yes ☐ No — Custody Seal No. — Cooler Temp. (°C): Obs'd. ____ Corr'd. ____ Therm ID No. ____

Relinquished by: Daysi Nemecio — Company: N&M — Date/Time: 10/26/21 1745 — Received by: Leslie Jung — Company: N&M — Date/Time: 10/20/21 17 45

Relinquished by: Leslie Jung — Company: N&M — Date/Time: 10/27 1140 — Received by: — Company: EA-SJ — Date/Time: 102721 1140

Relinquished by: 0.3°C — Company: EA-SJ — Date/Time: 102721/1254 — Received in Laboratory by: — Company: EA SJ — Date/Time: 10/27/21 1254

Form No CA-C-WI-004, Rev 1 17 dated 6/27/2019

(Rev. 1)

201227

Chain of Custody Record

320 - 80878

eurofins

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemecio	Date 10/26/21	COC No 1
N'nyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier TestAmerica	4 of 4 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler DWP
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below			Lab Sampling
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3-S2C-2	10/26/21	1446	6	Soil	1							X				
EB10262021	1	1630	1	H_2O	3					X		X	X	X		

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Preservation Used 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3, 5=NaOH, 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments
Hold samples for addional analysis

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No | Cooler Temp. (°C). Obs'd: _____ Corr'd. _____ Therm ID No. _____

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Daysi Nemecio	N&M	10/26/21 1745	Leslie Jung	N&M	10/26/21 1745
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10/27 1140	Received by:	Company: ETA SV	Date/Time: 102721 1140
Relinquished by: 0.3°C	Company: ETA SV	Date/Time: 10/27/21/1254	Received in Laboratory by:	Company: TestA SC	Date/Time: 10/27/21 1254

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

TAL-8210 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247081.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80878-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/2/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: General - ASK PM IF OK TO USE	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
AOC1-S3-0.5 (320-80878-1)	10/26/21	08:43 Pacific		Solid			X	X	X			1	
AOC1-S3-2 (320-80878-2)	10/26/21	08:45 Pacific		Solid				X				1	
AOC1/AOC8-S4-0.5 (320-80878-3)	10/26/21	08:52 Pacific		Solid			X	X	X	X		1	
AOC1/AOC8-S4-0.5DUP (320-80878-4)	10/26/21	08:52 Pacific		Solid			X	X	X	X		1	
AOC1/AOC8-S4-2 (320-80878-5)	10/26/21	08:54 Pacific		Solid				X		X		1	
AOC1/AOC2-S5-0.5 (320-80878-6)	10/26/21	10:50 Pacific		Solid			X	X	X			1	
AOC1/AOC2-S5-2 (320-80878-7)	10/26/21	11:00 Pacific		Solid				X				1	
AOC1-S6-0.5 (320-80878-8)	10/26/21	11:32 Pacific		Solid			X	X	X			1	
AOC1-S6-2. (320-80878-9)	10/26/21	11:35 Pacific		Solid				X				1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/27/21 1615	EurSac		10/27/21 1615	DCS
2	Relinquished by:	Date/Time: 10/27/21 1950	Company DCS	Received by:	Date/Time: 10/27/21 1950	Company EurSac
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.5

Ver: 06/08/2021

12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247081.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 2 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80878-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/2/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: General - ASK PM IF OK TO USE	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
AOC1/AOC7-S8-0.5 (320-80878-10)	10/26/21	11:53 Pacific		Solid			X	X	X			1	
AOC1/AOC7-S8-2 (320-80878-11)	10/26/21	11:58 Pacific		Solid				X	X			1	
AOC1/AOC7-S8-2DUP (320-80878-12)	10/26/21	11:58 Pacific		Solid				X	X			1	
AOC1/AOC8-S10-0.5 (320-80878-13)	10/26/21	12:57 Pacific		Solid			X	X	X	X		1	
AOC1/AOC8-S10-2 (320-80878-14)	10/26/21	13:01 Pacific		Solid				X		X		1	
AOC1-S11-0.5 (320-80878-15)	10/26/21	09:16 Pacific		Solid			X	X	X			1	
AOC1-S11-2 (320-80878-16)	10/26/21	09:18 Pacific		Solid				X				1	
AOC2-S12-0.5 (320-80878-17)	10/26/21	09:36 Pacific		Solid			X	X	X			1	
AOC2-S12-0.5DUP (320-80878-18)	10/26/21	09:36 Pacific		Solid			X	X	X			1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/27/21 1600	EMSL		10/27/21 1600	EMSL
2	Relinquished by:	Date/Time: 10-27-21 1950	Company	Received by:	Date/Time: 10/27/21 1950	Company EETSAC
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247081.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 3 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80878-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/2/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: General - ASK PM IF OK TO USE	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
AOC2-S12-2 (320-80878-19)	10/26/21	09:41 Pacific		Solid				X				1	
AOC2-S12-2DUP (320-80878-20)	10/26/21	09:41 Pacific		Solid				X				1	
AOC2/AOC3-S13/S3I-0.5 (320-80878-21)	10/26/21	10:02 Pacific		Solid			X	X	X			1	
AOC2/AOC3-S13/S3I-2 (320-80878-22)	10/26/21	10:04 Pacific		Solid				X				1	
AOC2-S14-0.5 (320-80878-23)	10/26/21	10:27 Pacific		Solid			X	X	X			1	
AOC2-S14-2 (320-80878-24)	10/26/21	10:29 Pacific		Solid				X				1	
AOC3/AOC8-S1A-0.5 (320-80878-25)	10/26/21	14:11 Pacific		Solid				X	X	X		1	
AOC3/AOC8-S1A-2 (320-80878-26)	10/26/21	14:18 Pacific		Solid				X		X		1	
AOC3-S1B-0.5 (320-80878-27)	10/26/21	14:24 Pacific		Solid			X	X	X			1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/27/21 1615	EEFSAC		10/27/21 1610	DC
2		10-27-21 1650	DC		10/27/21 1950	EEFSAC
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247081.4
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 4 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80878-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/2/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: General - ASK PM IF OK TO USE	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
AOC3-S1B-2 (320-80878-28)	10/26/21	14:26 Pacific		Solid				X				1	
AOC3-S1C-0.5 (320-80878-29)	10/26/21	14:30 Pacific		Solid			X	X	X			1	
AOC3-S1C-2 (320-80878-30)	10/26/21	15:09 Pacific		Solid				X				1	
AOC3-S2B-0.5 (320-80878-31)	10/26/21	14:51 Pacific		Solid			X	X	X			1	
AOC3-S2B-2 (320-80878-32)	10/26/21	14:54 Pacific		Solid				X				1	
AOC3-S2C-0.5 (320-80878-33)	10/26/21	14:43 Pacific		Solid			X	X	X			1	
AOC3-S2C-2 (320-80878-34)	10/26/21	14:46 Pacific		Solid				X				1	
EB10262021 (320-80878-35)	10/26/21	16:30 Pacific		Water							X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/29/21 1615	TAAS		10/27/21 1615	DCS
2		10-27-21 1950	DCS		10/27/21 1950	EEISAC
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

92 APVA

92841
SNA
CA-US

TRK# 0201 5047 2941 7438

THU - 28 OCT 10:30A
PRIORITY OVERNIGHT

FedEx Express

ORIGIN ID:LVKA (928) 404-1919
SAMPLE RECEIVING
EUROFINS TEST AMERICA
780 MONTAGUE EXPRESSWAY
SUITE 802
SAN JOSE, CA 95131
UNITED STATES US

SHIP DATE: 27OCT21
ACTWGT: 45.35 LB
CAD: 0785504/CAFE3507
DIMS: 28x16x15 IN

BILL SENDER

TO SAMPLE RECEIVING
EUROFINS CALSCIENCE, LLC
7440 LINCOLN WAY

GARDEN GROVE CA 92841

(714) 895-5494

REF:

DEPT:

ST 6

R: 329

5 10:30 C 7438 10.28

320-80878 Waybill

Part # 159469-434 MTW EXP 07/22

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica CUSTODY

Signature:

Date:

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80878-2

Login Number: 80878
List Number: 1
Creator: Garcia, Hilario A

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80878-2

Login Number: 80878
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-80878-3
Client Project/Site: Cole School PEA
Revision: 1

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/14/2021 3:32:11 PM

Justinn Gonzales, Project Manager I
(925)484-1919
Justinn.Gonzales@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-3

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-3

Job ID: 320-80878-3

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-80878-3

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 11/19/2021. The report (revision 1) is being revised due to: Report samples to MDL per client request.

Receipt
The samples were received on 10/27/2021 12:54 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.3º C.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-542843 and analytical batch 320-543764 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-3

Client Sample ID: AOC1-S3-2 — Lab Sample ID: 320-80878-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	59	F1	0.99	0.26	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1/AOC8-S4-2 — Lab Sample ID: 320-80878-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	46		0.50	0.13	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1-S6-2 — Lab Sample ID: 320-80878-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.6		0.97	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1-S11-2 — Lab Sample ID: 320-80878-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	19		1.0	0.26	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-3

Client Sample ID: AOC1-S3-2
Date Collected: 10/26/21 08:45
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-2
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	59	F1	0.99	0.26	mg/Kg		11/15/21 13:38	11/17/21 14:09	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-3

Client Sample ID: AOC1/AOC8-S4-2

Date Collected: 10/26/21 08:54
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-5

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	46		0.50	0.13	mg/Kg		11/15/21 13:38	11/17/21 14:36	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-3

Client Sample ID: AOC1-S6-2

Date Collected: 10/26/21 11:35
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-9

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.6		0.97	0.25	mg/Kg		11/15/21 13:38	11/17/21 14:39	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-3

Client Sample ID: AOC1-S11-2

Date Collected: 10/26/21 09:18
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-16

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	19		1.0	0.26	mg/Kg		11/15/21 13:38	11/17/21 14:43	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 320-542843/1-A
Matrix: Solid
Analysis Batch: 543764

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 542843

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.26	mg/Kg		11/15/21 13:38	11/17/21 14:01	1

Lab Sample ID: LCS 320-542843/2-A
Matrix: Solid
Analysis Batch: 543764

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 542843

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			25.0	23.0		mg/Kg		92	80 - 120		

Lab Sample ID: 320-80878-2 MS
Matrix: Solid
Analysis Batch: 543764

Client Sample ID: AOC1-S3-2
Prep Type: Total/NA
Prep Batch: 542843

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	59	F1	24.5	151	F1	mg/Kg		375	80 - 120		

Lab Sample ID: 320-80878-2 MSD
Matrix: Solid
Analysis Batch: 543764

Client Sample ID: AOC1-S3-2
Prep Type: Total/NA
Prep Batch: 542843

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	59	F1	25.0	138	F1	mg/Kg		316	80 - 120	9	35

QC Association Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-3

Metals

Prep Batch: 542843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-2	AOC1-S3-2	Total/NA	Solid	3050B	
320-80878-5	AOC1/AOC8-S4-2	Total/NA	Solid	3050B	
320-80878-9	AOC1-S6-2	Total/NA	Solid	3050B	
320-80878-16	AOC1-S11-2	Total/NA	Solid	3050B	
MB 320-542843/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-542843/2-A	Lab Control Sample	Total/NA	Solid	3050B	
320-80878-2 MS	AOC1-S3-2	Total/NA	Solid	3050B	
320-80878-2 MSD	AOC1-S3-2	Total/NA	Solid	3050B	

Analysis Batch: 543764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-2	AOC1-S3-2	Total/NA	Solid	6010B	542843
320-80878-5	AOC1/AOC8-S4-2	Total/NA	Solid	6010B	542843
320-80878-9	AOC1-S6-2	Total/NA	Solid	6010B	542843
320-80878-16	AOC1-S11-2	Total/NA	Solid	6010B	542843
MB 320-542843/1-A	Method Blank	Total/NA	Solid	6010B	542843
LCS 320-542843/2-A	Lab Control Sample	Total/NA	Solid	6010B	542843
320-80878-2 MS	AOC1-S3-2	Total/NA	Solid	6010B	542843
320-80878-2 MSD	AOC1-S3-2	Total/NA	Solid	6010B	542843

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-3

Client Sample ID: AOC1-S3-2

Lab Sample ID: 320-80878-2

Date Collected: 10/26/21 08:45

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	100 mL	542843	11/15/21 13:38	JP	TAL SAC
Total/NA	Analysis	6010B		1			543764	11/17/21 14:09	SP	TAL SAC

Client Sample ID: AOC1/AOC8-S4-2

Lab Sample ID: 320-80878-5

Date Collected: 10/26/21 08:54

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			2.00 g	100 mL	542843	11/15/21 13:38	JP	TAL SAC
Total/NA	Analysis	6010B		1			543764	11/17/21 14:36	SP	TAL SAC

Client Sample ID: AOC1-S6-2

Lab Sample ID: 320-80878-9

Date Collected: 10/26/21 11:35

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	100 mL	542843	11/15/21 13:38	JP	TAL SAC
Total/NA	Analysis	6010B		1			543764	11/17/21 14:39	SP	TAL SAC

Client Sample ID: AOC1-S11-2

Lab Sample ID: 320-80878-16

Date Collected: 10/26/21 09:18

Matrix: Solid

Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	100 mL	542843	11/15/21 13:38	JP	TAL SAC
Total/NA	Analysis	6010B		1			543764	11/17/21 14:43	SP	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-3

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-3

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-80878-2	AOC1-S3-2	Solid	10/26/21 08:45	10/27/21 12:54
320-80878-5	AOC1/AOC8-S4-2	Solid	10/26/21 08:54	10/27/21 12:54
320-80878-9	AOC1-S6-2	Solid	10/26/21 11:35	10/27/21 12:54
320-80878-16	AOC1-S11-2	Solid	10/26/21 09:18	10/27/21 12:54

Gonzales, Justinn

From: Nathan Diem <ndiem@ninyoandmoore.com>
Sent: Friday, November 12, 2021 6:48 AM
To: Caparas, Criselda
Cc: Gonzales, Justinn
Subject: RE: Preliminary Data-Eurofins TestAmerica report files from 320-80878-1 Cole School PEA

Follow Up Flag: Follow up
Flag Status: Flagged

EXTERNAL EMAIL*

Hi Criselda,

I need to run lead for the following samples:

- AOC1-S3-2
- AOC1/AOC8-S4-2
- AOC1-S6-2
- AOC1-S11-2

Thank you,

Nathan Diem
Project Geologist
Ninyo & Moore
510.343.3000 (**x15226**)

From: Criselda Caparas [mailto:Criselda.Caparas@Eurofinset.com]
Sent: Thursday, November 11, 2021 8:21 AM
To: Daysi Nemecio Rodriguez <dnemeciorodriguez@ninyoandmoore.com>; Nathan Diem <ndiem@ninyoandmoore.com>
Subject: Preliminary Data-Eurofins TestAmerica report files from 320-80878-1 Cole School PEA

Hello,

This is a Preliminary Data- still waiting on few more PCB results

Attached please find the report files for job 320-80878-1; Cole School PEA

Please feel free to contact me or your PM Justinn Gonzales if you have any questions.

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80878-3

Login Number: 80878
List Number: 1
Creator: Garcia, Hilario A

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80878-3

Login Number: 80878
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-80878-5
Client Project/Site: Cole School PEA

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/14/2021 3:36:15 PM

Justinn Gonzales, Project Manager I
(925)484-1919
Justinn.Gonzales@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-5

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-5

Job ID: 320-80878-5

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-80878-5

Comments
No additional comments.

Receipt
The samples were received on 10/27/2021 12:54 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.3º C.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-549145 and analytical batch 320-549638 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-5

Client Sample ID: AOC3-S1B-2 — Lab Sample ID: 320-80878-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	28	B F1	0.96	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S1C-2 — Lab Sample ID: 320-80878-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	33	B	0.96	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S2B-2 — Lab Sample ID: 320-80878-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	40	B	0.96	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S2C-2 — Lab Sample ID: 320-80878-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	28	B	0.97	0.25	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-5

Client Sample ID: AOC3-S1B-2

Date Collected: 10/26/21 14:26
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-28

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	28	B F1	0.96	0.25	mg/Kg		12/08/21 15:20	12/09/21 15:49	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-5

Client Sample ID: AOC3-S1C-2

Date Collected: 10/26/21 15:09
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-30

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	33	B	0.96	0.25	mg/Kg		12/08/21 15:20	12/09/21 16:12	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-5

Client Sample ID: AOC3-S2B-2

Date Collected: 10/26/21 14:54
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-32

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	40	B	0.96	0.25	mg/Kg		12/08/21 15:20	12/09/21 16:16	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-5

Client Sample ID: AOC3-S2C-2
Date Collected: 10/26/21 14:46
Date Received: 10/27/21 12:54

Lab Sample ID: 320-80878-34
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	28	B	0.97	0.25	mg/Kg		12/08/21 15:20	12/09/21 16:21	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 320-549145/1-A
Matrix: Solid
Analysis Batch: 549638

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549145

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.333	J	1.0	0.26	mg/Kg		12/08/21 15:20	12/09/21 15:40	1

Lab Sample ID: LCS 320-549145/2-A
Matrix: Solid
Analysis Batch: 549638

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549145

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	25.0	22.8		mg/Kg		91	80 - 120

Lab Sample ID: 320-80878-28 MS
Matrix: Solid
Analysis Batch: 549638

Client Sample ID: AOC3-S1B-2
Prep Type: Total/NA
Prep Batch: 549145

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	28	B F1	24.0	41.0	F1	mg/Kg		55	80 - 120

Lab Sample ID: 320-80878-28 MSD
Matrix: Solid
Analysis Batch: 549638

Client Sample ID: AOC3-S1B-2
Prep Type: Total/NA
Prep Batch: 549145

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	28	B F1	25.0	45.4	F1	mg/Kg		71	80 - 120	10	35

QC Association Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-5

Metals

Prep Batch: 549145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-28	AOC3-S1B-2	Total/NA	Solid	3050B	
320-80878-30	AOC3-S1C-2	Total/NA	Solid	3050B	
320-80878-32	AOC3-S2B-2	Total/NA	Solid	3050B	
320-80878-34	AOC3-S2C-2	Total/NA	Solid	3050B	
MB 320-549145/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-549145/2-A	Lab Control Sample	Total/NA	Solid	3050B	
320-80878-28 MS	AOC3-S1B-2	Total/NA	Solid	3050B	
320-80878-28 MSD	AOC3-S1B-2	Total/NA	Solid	3050B	

Analysis Batch: 549638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80878-28	AOC3-S1B-2	Total/NA	Solid	6010B	549145
320-80878-30	AOC3-S1C-2	Total/NA	Solid	6010B	549145
320-80878-32	AOC3-S2B-2	Total/NA	Solid	6010B	549145
320-80878-34	AOC3-S2C-2	Total/NA	Solid	6010B	549145
MB 320-549145/1-A	Method Blank	Total/NA	Solid	6010B	549145
LCS 320-549145/2-A	Lab Control Sample	Total/NA	Solid	6010B	549145
320-80878-28 MS	AOC3-S1B-2	Total/NA	Solid	6010B	549145
320-80878-28 MSD	AOC3-S1B-2	Total/NA	Solid	6010B	549145

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-5

Client Sample ID: AOC3-S1B-2

Lab Sample ID: 320-80878-28
Date Collected: 10/26/21 14:26
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	100 mL	549145	12/08/21 15:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			549638	12/09/21 15:49	GSH	TAL SAC

Client Sample ID: AOC3-S1C-2

Lab Sample ID: 320-80878-30
Date Collected: 10/26/21 15:09
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	100 mL	549145	12/08/21 15:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			549638	12/09/21 16:12	GSH	TAL SAC

Client Sample ID: AOC3-S2B-2

Lab Sample ID: 320-80878-32
Date Collected: 10/26/21 14:54
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	100 mL	549145	12/08/21 15:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			549638	12/09/21 16:16	GSH	TAL SAC

Client Sample ID: AOC3-S2C-2

Lab Sample ID: 320-80878-34
Date Collected: 10/26/21 14:46
Matrix: Solid
Date Received: 10/27/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	100 mL	549145	12/08/21 15:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			549638	12/09/21 16:21	GSH	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-5

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-5

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80878-5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-80878-28	AOC3-S1B-2	Solid	10/26/21 14:26	10/27/21 12:54
320-80878-30	AOC3-S1C-2	Solid	10/26/21 15:09	10/27/21 12:54
320-80878-32	AOC3-S2B-2	Solid	10/26/21 14:54	10/27/21 12:54
320-80878-34	AOC3-S2C-2	Solid	10/26/21 14:46	10/27/21 12:54

Gonzales, Justinn

From: Nathan Diem <ndiem@ninyoandmoore.com>
Sent: Monday, December 6, 2021 9:38 AM
To: Gonzales, Justinn
Subject: RE: Eurofins TestAmerica report and EDD files from 320-80943-1 Cole School PEA

EXTERNAL EMAIL*

Thank you.

Can you see if the samples below were run for lead? If not, please analyze those on 5 TAT.

AOC3-S1B-2
AOC3-S1C-2
AOC3-S2B-2
AOC3-S2C-2

Nathan Diem
Project Geologist
Ninyo & Moore
510.343.3000 (**x15226**)

From: Gonzales, Justinn [mailto:Justinn.Gonzales@Eurofinset.com]
Sent: Monday, December 6, 2021 8:56 AM
To: Nathan Diem <ndiem@ninyoandmoore.com>
Subject: RE: Eurofins TestAmerica report and EDD files from 320-80943-1 Cole School PEA

Hi Nathan,
Let me see what the lab do.
Kind Regards,

Justinn Gonzales
Project Manager

Please take a minute to rate our service!



Phone: 925-484-1919
Direct: 916-374-4344

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80878-5

Login Number: 80878
List Number: 1
Creator: Garcia, Hilario A

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80878-5

Login Number: 80878
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-80943-1
Client Project/Site: Cole School PEA
Revision: 1

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/15/2021 9:20:26 AM

Justinn Gonzales, Project Manager I
(925)484-1919
Justinn.Gonzales@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
P	The %RPD between the primary and confirmation column/detector is >40%. The higher value has been reported
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
L	A negative instrument reading had an absolute value greater than the reporting limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 320-80943-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-80943-1

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 12/3/2021. The report (revision 1) is being revised due to: Report samples to MDL per client request.

Receipt
The samples were received on 10/28/2021 12:50 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.4º C and 2.5º C.

GC/MS Semi VOA
Method 8270C: The following samples were diluted due to the nature of the sample matrix: AOC3/AOC10-S8A-0.5 (320-80943-23), AOC3/AOC10-S8A-2 (320-80943-24), AOC3/AOC10-S8B-0.5 (320-80943-25), AOC3/AOC10-S8B-2 (320-80943-26), AOC3/AOC10-S9C-0.5 (320-80943-27), AOC3/AOC10-S9C-0.5DUP (320-80943-28) and AOC3/AOC10-S9C-2 (320-80943-29). Elevated reporting limits (RLs) are provided.

Method 8270C: The following samples were diluted due to the nature of the sample matrix: AOC3/AOC10-S8A-0.5 (320-80943-23), AOC3/AOC10-S8A-2 (320-80943-24), AOC3/AOC10-S8B-0.5 (320-80943-25), AOC3/AOC10-S8B-2 (320-80943-26), AOC3/AOC10-S9C-0.5 (320-80943-27), AOC3/AOC10-S9C-0.5DUP (320-80943-28) and AOC3/AOC10-S9C-2 (320-80943-29). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8270C: The following samples were diluted due to the nature of the sample matrix: (320-80943-A-29-E MS) and (320-80943-A-29-F MSD). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8270C SIM: The following samples were diluted due to the nature of the sample matrix: (320-80943-A-29-B MS) and (320-80943-A-29-C MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8270C SIM: The following samples were diluted due to the nature of the sample matrix: AOC3/AOC10-S8A-0.5 (320-80943-23), AOC3/AOC10-S8B-0.5 (320-80943-25), AOC3/AOC10-S9C-0.5 (320-80943-27), AOC3/AOC10-S9C-0.5DUP (320-80943-28) and AOC3/AOC10-S9C-2 (320-80943-29). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method 8081A: Surrogate recovery for the following samples were outside control limits: AOC3/AOC10-S8B-0.5 (320-80943-25), AOC3/AOC10-S8B-2 (320-80943-26) and AOC3-S6C-2 (320-80943-37). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC3/AOC10-S8B-0.5 (320-80943-25), AOC3/AOC10-S9C-0.5 (320-80943-27), AOC3/AOC10-S9C-0.5DUP (320-80943-28), AOC3-S8D-0.5 (320-80943-30), AOC3-S7C-0.5 (320-80943-34) and AOC3-S7D-0.5 (320-80943-38). Elevated reporting limits (RLs) are provided.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC3/AOC10-S9C-2 (320-80943-29), AOC3/AOC8-S8C-0.5 (320-80943-32) and AOC3-S6C-0.5 (320-80943-36). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC3-S3B-0.5 (320-80943-1), AOC3-S3B-2 (320-80943-2), AOC3/AOC8-S5B-2 (320-80943-14) and AOC3-S6B-0.5 (320-80943-15). Elevated reporting limits (RLs) are provided.

Job ID: 320-80943-1 (Continued)

Laboratory: Eurofins TestAmerica, Sacramento (Continued)

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC3-S2A-0.5 (320-80943-3), AOC3-S3A-0.5 (320-80943-5), AOC3-S4A-2 (320-80943-8), AOC3-S5A-0.5 (320-80943-9), AOC3-S4B-0.5 (320-80943-11), AOC3/AOC8-S5B-0.5 (320-80943-13) and AOC3-S6A-0.5 (320-80943-17). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8081A: Surrogate recovery for the following samples were outside control limits: AOC3-S3B-0.5 (320-80943-1), AOC3-S2A-2 (320-80943-4), AOC3-S3A-2 (320-80943-6), AOC3-S4B-2 (320-80943-12), (320-80943-A-16-B MS) and (320-80943-A-16-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8081A: Surrogate recovery for the following sample was outside control limits: AOC3-S5C-2 (320-80943-41). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8081A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-539858 and analytical batch 320-542188 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC3-S7A-0.5 (320-80943-19), AOC3-S7B-0.5 (320-80943-21), AOC3/AOC10-S8A-0.5 (320-80943-23) and AOC3-S5C-0.5 (320-80943-40). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC3-S6A-2 (320-80943-18) and AOC3-S7B-2 (320-80943-22). Elevated reporting limits (RLs) are provided.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: (320-80943-A-19-C MS) and (320-80943-A-19-D MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC3-S4C-0.5 (320-80943-42), AOC3-S3C-0.5 (320-80943-44), AOC3/AOC8-S1E-0.5 (320-80943-50), AOC3-S2E-0.5 (320-80943-52), AOC3-S3E-0.5 (320-80943-54), AOC3-S3D-0.5 (320-80943-56), AOC3-S4D-0.5 (320-80943-58) and AOC3-S4E-0.5 (320-80943-60). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: (320-80943-A-42-C MS) and (320-80943-A-42-D MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC3-S3C-2 (320-80943-45), AOC3-S1D-0.5 (320-80943-46) and AOC3/AOC8-S2D-0.5 (320-80943-48). Elevated reporting limits (RLs) are provided.

Method 8081A: The %RPD between the primary and confirmation column exceeded 40% for 4,4'-DDE for the following sample: AOC3-S5A-0.5 (320-80943-9). The results from primary column have been reported and qualified in accordance with the laboratory's SOP.

Method 8081A: The %RPD between the primary and confirmation column exceeded 40% for Endrin ketone, trans-Chlordane, 4,4'-DDD, 4,4'-DDE and Methoxychlorfor the following samples: (320-80943-A-42-C MS) and (320-80943-A-42-D MSD). The results from the primary column have been reported and qualified in accordance with the laboratory's SOP. 320-80943-42[MS] for Endrin ketone, trans-Chlordane, 4,4'-DDD, 4,4'-DDE and Methoxychlor. 320-80943-42[MSD] for Endrin ketone, 4,4'-DDD and Methoxychlor.

Method 8082: Surrogate recovery for the following samples were outside control limits: AOC3-S7B-0.5 (320-80943-21), AOC3/AOC10-S8A-0.5 (320-80943-23), (320-80943-A-21-D MS), AOC3/AOC10-S9C-0.5DUP (320-80943-28), AOC3-S5C-0.5 (320-80943-40), (320-80943-A-40-D MS), AOC3-S3B-0.5 (320-80943-1) and AOC3-S4C-0.5 (320-80943-42). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8082: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 320-539860 and

Job ID: 320-80943-1 (Continued)

Laboratory: Eurofins TestAmerica, Sacramento (Continued)

analytical batch 320-541881 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method 8082: The continuing calibration verification (CCV) associated with batch 320-541881 recovered above the upper control limit for DCB Decachlorobiphenyl. The samples associated with this CCV were non-detects for all PCB mixtures; therefore, the data have been reported. The associated samples are impacted: AOC3/AOC10-S8B-0.5 (320-80943-25), AOC3/AOC10-S9C-0.5 (320-80943-27), AOC3/AOC10-S9C-0.5DUP (320-80943-28), AOC3-S8D-0.5 (320-80943-30), AOC3/AOC8-S8C-0.5 (320-80943-32), AOC3-S7C-0.5 (320-80943-34), AOC3-S6C-0.5 (320-80943-36), AOC3-S7D-0.5 (320-80943-38), AOC3-S5C-0.5 (320-80943-40), (CCVRT 320-541881/3), (LCS 320-539860/2-A), (MB 320-539860/1-A), (320-80943-A-40-D MS) and (320-80943-A-40-E MSD).

Method 8082: The continuing calibration verification (CCV) associated with batch 320-543551 recovered above the upper control limit for PCB-1254. The samples associated with this CCV were non-detect for all PCB mixtures; therefore, the data have been reported. The associated samples are impacted: AOC3-S4C-0.5 (320-80943-42), AOC3-S3C-0.5 (320-80943-44), AOC3-S1D-0.5 (320-80943-46), AOC3/AOC8-S2D-0.5 (320-80943-48), AOC3/AOC8-S1E-0.5 (320-80943-50), AOC3-S2E-0.5 (320-80943-52), AOC3-S3E-0.5 (320-80943-54), AOC3-S3D-0.5 (320-80943-56), AOC3-S4D-0.5 (320-80943-58), AOC3-S4E-0.5 (320-80943-60), (CCV 320-543551/4), (LCS 320-540587/2-A) and (MB 320-540587/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The matrix spike (MS) recoveries for preparation batch 320-538889 and analytical batch 320-539464 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010B: The absolute response for Arsenic and Molybdenum was greater than the method reporting limit (RL) in the following sample: AOC3-S1D-0.5 (320-80943-46). The instrument raw data has been manually reviewed and the result can be reported as ND.

Method 6010B: The absolute response for Selenium was greater than the method reporting limit (RL) in the following sample: AOC3/AOC10-S8A-2 (320-80943-24). The instrument raw data has been manually reviewed and the result can be reported as ND.

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-192816 and analytical batch 570-193608 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010B: Due to the high concentration of Lead, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 570-192816 and analytical batch 570-193608 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3550B: Due to the matrix, the following sample(s) could not be concentrated to the final method required volume of 1mL,it was concentrated to final volume of 10mL. The reporting limits (RLs) are elevated proportionately. Samples are associated with method 8270C solids in preparation batch 320-539206 and 320-539206.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S3B-0.5 — Lab Sample ID: 320-80943-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	130		0.67	0.17	mg/Kg	1		6010B	Total/NA
Arsenic	7.3	F1	1.3	0.87	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S3B-2 — Lab Sample ID: 320-80943-2

No Detections.

Client Sample ID: AOC3-S2A-0.5 — Lab Sample ID: 320-80943-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	55		0.66	0.17	mg/Kg	1		6010B	Total/NA
Arsenic	6.5		1.3	0.86	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S2A-2 — Lab Sample ID: 320-80943-4

No Detections.

Client Sample ID: AOC3-S3A-0.5 — Lab Sample ID: 320-80943-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	110		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	6.1		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S3A-2 — Lab Sample ID: 320-80943-6

No Detections.

Client Sample ID: AOC3-S4A-0.5 — Lab Sample ID: 320-80943-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDE	0.24	J	1.7	0.20	ug/Kg	1		8081A	Total/NA
Lead	36		1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	2.1		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S4A-2 — Lab Sample ID: 320-80943-8

No Detections.

Client Sample ID: AOC3-S5A-0.5 — Lab Sample ID: 320-80943-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	5.7	J P	17	2.5	ug/Kg	10		8081A	Total/NA
Barium	84	F1	0.52	0.23	mg/Kg	1		6010B	Total/NA
Cadmium	0.30	J	0.52	0.21	mg/Kg	1		6010B	Total/NA
Cobalt	2.9		1.0	0.23	mg/Kg	1		6010B	Total/NA
Chromium	10		1.0	0.18	mg/Kg	1		6010B	Total/NA
Copper	15		1.0	0.52	mg/Kg	1		6010B	Total/NA
Nickel	14		0.52	0.44	mg/Kg	1		6010B	Total/NA
Vanadium	8.6		1.0	0.18	mg/Kg	1		6010B	Total/NA
Zinc	98	F1	10	5.3	mg/Kg	1		6010B	Total/NA
Lead	160		5.2	1.0	mg/Kg	1		6010B	Total/NA
Mercury	0.16		0.082	0.013	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S5A-2 — Lab Sample ID: 320-80943-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Heptachlor	0.70	J	1.6	0.15	ug/Kg	1		8081A	Total/NA

Client Sample ID: AOC3-S4B-0.5 — Lab Sample ID: 320-80943-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	290		1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	4.5		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S4B-2 — Lab Sample ID: 320-80943-12

No Detections.

Client Sample ID: AOC3/AOC8-S5B-0.5 — Lab Sample ID: 320-80943-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDE	3.8	J	16	2.0	ug/Kg	10		8081A	Total/NA
4,4'-DDT	4.1	J	16	2.4	ug/Kg	10		8081A	Total/NA
Lead	77		1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	11		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3/AOC8-S5B-2 — Lab Sample ID: 320-80943-14

No Detections.

Client Sample ID: AOC3-S6B-0.5 — Lab Sample ID: 320-80943-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	860		0.97	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	2.8		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S6B-2 — Lab Sample ID: 320-80943-16

No Detections.

Client Sample ID: AOC3-S6A-0.5 — Lab Sample ID: 320-80943-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	3.2	J	33	2.7	ug/Kg	1		8082	Total/NA
Lead	260		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	3.9		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S6A-2 — Lab Sample ID: 320-80943-18

No Detections.

Client Sample ID: AOC3-S7A-0.5 — Lab Sample ID: 320-80943-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	300		0.97	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	3.3		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S7A-2 — Lab Sample ID: 320-80943-20

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S7B-0.5 — Lab Sample ID: 320-80943-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	180		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	3.5		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S7B-2 — Lab Sample ID: 320-80943-22

No Detections.

Client Sample ID: AOC3/AOC10-S8A-0.5 — Lab Sample ID: 320-80943-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	82	J	250	36	ug/Kg	50		8270C SIM	Total/NA
Phenanthrene	36	J	250	36	ug/Kg	50		8270C SIM	Total/NA
PCB-1260	3.2	J	32	2.6	ug/Kg	1		8082	Total/NA
Barium	140		0.49	0.22	mg/Kg	1		6010B	Total/NA
Beryllium	0.29		0.25	0.17	mg/Kg	1		6010B	Total/NA
Cadmium	0.62		0.49	0.20	mg/Kg	1		6010B	Total/NA
Cobalt	4.9		0.99	0.22	mg/Kg	1		6010B	Total/NA
Chromium	22		0.99	0.17	mg/Kg	1		6010B	Total/NA
Copper	24		0.99	0.50	mg/Kg	1		6010B	Total/NA
Nickel	21		0.49	0.42	mg/Kg	1		6010B	Total/NA
Vanadium	18		0.99	0.17	mg/Kg	1		6010B	Total/NA
Zinc	160		9.9	5.0	mg/Kg	1		6010B	Total/NA
Lead	310		4.9	0.95	mg/Kg	1		6010B	Total/NA
Mercury	0.12		0.085	0.014	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC3/AOC10-S8A-2 — Lab Sample ID: 320-80943-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	1.5	J	4.9	0.75	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	0.89	J	4.9	0.70	ug/Kg	1		8270C SIM	Total/NA
Chrysene	2.7	J	4.9	0.70	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	1.3	J	4.9	0.70	ug/Kg	1		8270C SIM	Total/NA
Pyrene	1.0	J	4.9	0.73	ug/Kg	1		8270C SIM	Total/NA
Barium	110		0.48	0.21	mg/Kg	1		6010B	Total/NA
Beryllium	0.34		0.24	0.16	mg/Kg	1		6010B	Total/NA
Cadmium	0.68		0.48	0.19	mg/Kg	1		6010B	Total/NA
Cobalt	7.0		0.95	0.22	mg/Kg	1		6010B	Total/NA
Chromium	33		0.95	0.17	mg/Kg	1		6010B	Total/NA
Copper	13		0.95	0.48	mg/Kg	1		6010B	Total/NA
Nickel	27		0.48	0.41	mg/Kg	1		6010B	Total/NA
Vanadium	22		0.95	0.16	mg/Kg	1		6010B	Total/NA
Zinc	51		9.5	4.9	mg/Kg	1		6010B	Total/NA
Lead	94		4.8	0.92	mg/Kg	1		6010B	Total/NA
Mercury	0.19		0.083	0.014	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC3/AOC10-S8B-0.5 — Lab Sample ID: 320-80943-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	88	J	230	33	ug/Kg	50		8270C SIM	Total/NA
Barium	76		0.51	0.23	mg/Kg	1		6010B	Total/NA
Beryllium	0.24	J	0.26	0.18	mg/Kg	1		6010B	Total/NA
Cadmium	0.32	J	0.51	0.21	mg/Kg	1		6010B	Total/NA
Cobalt	4.2		1.0	0.23	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AOC3/AOC10-S8B-0.5 (Continued) — Lab Sample ID: 320-80943-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	27		1.0	0.18	mg/Kg	1		6010B	Total/NA
Copper	6.4		1.0	0.52	mg/Kg	1		6010B	Total/NA
Nickel	21		0.51	0.44	mg/Kg	1		6010B	Total/NA
Vanadium	14		1.0	0.18	mg/Kg	1		6010B	Total/NA
Zinc	20		10	5.2	mg/Kg	1		6010B	Total/NA
Lead	3.8	J	5.1	0.99	mg/Kg	1		6010B	Total/NA
Mercury	0.16		0.086	0.014	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC3/AOC10-S8B-2 — Lab Sample ID: 320-80943-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	1.0	J	4.6	0.71	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	0.73	J	4.6	0.66	ug/Kg	1		8270C SIM	Total/NA
Chrysene	2.7	J	4.6	0.66	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	1.3	J	4.6	0.66	ug/Kg	1		8270C SIM	Total/NA
Pyrene	0.81	J	4.6	0.69	ug/Kg	1		8270C SIM	Total/NA
Barium	120		0.51	0.22	mg/Kg	1		6010B	Total/NA
Beryllium	0.34		0.25	0.17	mg/Kg	1		6010B	Total/NA
Cadmium	0.70		0.51	0.20	mg/Kg	1		6010B	Total/NA
Cobalt	5.7		1.0	0.23	mg/Kg	1		6010B	Total/NA
Chromium	22		1.0	0.18	mg/Kg	1		6010B	Total/NA
Copper	26		1.0	0.51	mg/Kg	1		6010B	Total/NA
Nickel	20		0.51	0.43	mg/Kg	1		6010B	Total/NA
Vanadium	17		1.0	0.17	mg/Kg	1		6010B	Total/NA
Zinc	120		10	5.2	mg/Kg	1		6010B	Total/NA
Lead	150		5.1	0.98	mg/Kg	1		6010B	Total/NA
Mercury	0.18		0.082	0.013	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC3/AOC10-S9C-0.5 — Lab Sample ID: 320-80943-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	91	J	250	35	ug/Kg	50		8270C SIM	Total/NA
Phenanthrene	47	J	250	35	ug/Kg	50		8270C SIM	Total/NA
Barium	110		0.52	0.23	mg/Kg	1		6010B	Total/NA
Beryllium	0.31		0.26	0.18	mg/Kg	1		6010B	Total/NA
Cadmium	0.63		0.52	0.21	mg/Kg	1		6010B	Total/NA
Cobalt	5.2		1.0	0.24	mg/Kg	1		6010B	Total/NA
Chromium	17		1.0	0.18	mg/Kg	1		6010B	Total/NA
Copper	29		1.0	0.53	mg/Kg	1		6010B	Total/NA
Nickel	18		0.52	0.44	mg/Kg	1		6010B	Total/NA
Vanadium	15		1.0	0.18	mg/Kg	1		6010B	Total/NA
Zinc	120		10	5.3	mg/Kg	1		6010B	Total/NA
Lead	600		5.2	1.0	mg/Kg	1		6010B	Total/NA
Mercury	0.12		0.083	0.014	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC3/AOC10-S9C-0.5DUP — Lab Sample ID: 320-80943-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	37	J	250	35	ug/Kg	50		8270C SIM	Total/NA
Chrysene	110	J	250	36	ug/Kg	50		8270C SIM	Total/NA
Phenanthrene	54	J	250	36	ug/Kg	50		8270C SIM	Total/NA
Pyrene	44	J	250	37	ug/Kg	50		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AOC3/AOC10-S9C-0.5DUP (Continued) — Lab Sample ID: 320-80943-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	73		0.50	0.22	mg/Kg	1		6010B	Total/NA
Cadmium	0.50		0.50	0.20	mg/Kg	1		6010B	Total/NA
Cobalt	4.3		1.0	0.23	mg/Kg	1		6010B	Total/NA
Chromium	12		1.0	0.18	mg/Kg	1		6010B	Total/NA
Copper	14		1.0	0.51	mg/Kg	1		6010B	Total/NA
Nickel	13		0.50	0.43	mg/Kg	1		6010B	Total/NA
Vanadium	11		1.0	0.17	mg/Kg	1		6010B	Total/NA
Zinc	86		10	5.1	mg/Kg	1		6010B	Total/NA
Lead	120		5.0	0.97	mg/Kg	1		6010B	Total/NA
Mercury	0.15		0.085	0.014	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC3/AOC10-S9C-2 — Lab Sample ID: 320-80943-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	45	J F2 F1	250	35	ug/Kg	50		8270C SIM	Total/NA
Barium	110		0.49	0.22	mg/Kg	1		6010B	Total/NA
Beryllium	0.21	J	0.24	0.17	mg/Kg	1		6010B	Total/NA
Cadmium	0.49		0.49	0.20	mg/Kg	1		6010B	Total/NA
Cobalt	4.0		0.98	0.22	mg/Kg	1		6010B	Total/NA
Chromium	22		0.98	0.17	mg/Kg	1		6010B	Total/NA
Copper	14		0.98	0.49	mg/Kg	1		6010B	Total/NA
Nickel	19		0.49	0.42	mg/Kg	1		6010B	Total/NA
Vanadium	14		0.98	0.17	mg/Kg	1		6010B	Total/NA
Zinc	84		9.8	5.0	mg/Kg	1		6010B	Total/NA
Lead	99		4.9	0.94	mg/Kg	1		6010B	Total/NA
Mercury	0.18		0.079	0.013	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC3-S8D-0.5 — Lab Sample ID: 320-80943-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	5.0	J P	33	2.7	ug/Kg	1		8082	Total/NA
Lead	110		1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	9.2		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S8D-2 — Lab Sample ID: 320-80943-31

No Detections.

Client Sample ID: AOC3/AOC8-S8C-0.5 — Lab Sample ID: 320-80943-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	180		1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	5.4		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3/AOC8-S8C-2 — Lab Sample ID: 320-80943-33

No Detections.

Client Sample ID: AOC3-S7C-0.5 — Lab Sample ID: 320-80943-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	200		0.99	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	3.6		2.0	1.3	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S7C-2 — Lab Sample ID: 320-80943-35

No Detections.

Client Sample ID: AOC3-S6C-0.5 — Lab Sample ID: 320-80943-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	150		0.96	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	6.2		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S6C-2 — Lab Sample ID: 320-80943-37

No Detections.

Client Sample ID: AOC3-S7D-0.5 — Lab Sample ID: 320-80943-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	140		0.50	0.22	mg/Kg	1		6010B	Total/NA
Beryllium	0.24	J	0.25	0.17	mg/Kg	1		6010B	Total/NA
Cadmium	0.58		0.50	0.20	mg/Kg	1		6010B	Total/NA
Cobalt	5.5		1.0	0.23	mg/Kg	1		6010B	Total/NA
Chromium	12		1.0	0.18	mg/Kg	1		6010B	Total/NA
Copper	15		1.0	0.51	mg/Kg	1		6010B	Total/NA
Nickel	15		0.50	0.43	mg/Kg	1		6010B	Total/NA
Vanadium	14		1.0	0.17	mg/Kg	1		6010B	Total/NA
Zinc	58		10	5.1	mg/Kg	1		6010B	Total/NA
Lead	55		5.0	0.97	mg/Kg	1		6010B	Total/NA
Mercury	0.19		0.086	0.014	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC3-S7D-2 — Lab Sample ID: 320-80943-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	49		0.52	0.23	mg/Kg	1		6010B	Total/NA
Beryllium	0.18	J	0.26	0.18	mg/Kg	1		6010B	Total/NA
Cadmium	0.26	J	0.52	0.21	mg/Kg	1		6010B	Total/NA
Cobalt	3.9		1.0	0.23	mg/Kg	1		6010B	Total/NA
Chromium	20		1.0	0.18	mg/Kg	1		6010B	Total/NA
Copper	4.2		1.0	0.52	mg/Kg	1		6010B	Total/NA
Nickel	14		0.52	0.44	mg/Kg	1		6010B	Total/NA
Vanadium	14		1.0	0.18	mg/Kg	1		6010B	Total/NA
Zinc	14		10	5.3	mg/Kg	1		6010B	Total/NA
Lead	3.0	J	5.2	1.0	mg/Kg	1		6010B	Total/NA
Mercury	0.093		0.082	0.013	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC3-S5C-0.5 — Lab Sample ID: 320-80943-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	140		0.95	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	7.6		1.9	1.2	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5C-2 — Lab Sample ID: 320-80943-41

No Detections.

Client Sample ID: AOC3-S4C-0.5 — Lab Sample ID: 320-80943-42

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	65		0.96	0.25	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AOC3-S4C-0.5 (Continued) — Lab Sample ID: 320-80943-42

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	12		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S4C-2 — Lab Sample ID: 320-80943-43

No Detections.

Client Sample ID: AOC3-S3C-0.5 — Lab Sample ID: 320-80943-44

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	54		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	15		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S3C-2 — Lab Sample ID: 320-80943-45

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	230		1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	3.7		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S1D-0.5 — Lab Sample ID: 320-80943-46

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	150		0.51	0.23	mg/Kg	1		6010B	Total/NA
Beryllium	0.33		0.25	0.17	mg/Kg	1		6010B	Total/NA
Cadmium	0.81		0.51	0.20	mg/Kg	1		6010B	Total/NA
Cobalt	9.9		1.0	0.23	mg/Kg	1		6010B	Total/NA
Chromium	7.1		1.0	0.18	mg/Kg	1		6010B	Total/NA
Copper	18		1.0	0.51	mg/Kg	1		6010B	Total/NA
Nickel	13		0.51	0.44	mg/Kg	1		6010B	Total/NA
Antimony	1.9	J	3.0	1.4	mg/Kg	1		6010B	Total/NA
Vanadium	19		1.0	0.17	mg/Kg	1		6010B	Total/NA
Zinc	67		10	5.2	mg/Kg	1		6010B	Total/NA
Lead	6.2		5.1	0.98	mg/Kg	1		6010B	Total/NA
Mercury	0.13		0.083	0.014	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC3-S1D-2 — Lab Sample ID: 320-80943-47

No Detections.

Client Sample ID: AOC3/AOC8-S2D-0.5 — Lab Sample ID: 320-80943-48

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	100		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	9.0		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3/AOC8-S2D-2 — Lab Sample ID: 320-80943-49

No Detections.

Client Sample ID: AOC3/AOC8-S1E-0.5 — Lab Sample ID: 320-80943-50

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.8		0.95	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	6.8		1.9	1.2	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC8-S1E-2 — Lab Sample ID: 320-80943-51

No Detections.

Client Sample ID: AOC3-S2E-0.5 — Lab Sample ID: 320-80943-52

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	100	B	1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	10		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S2E-2 — Lab Sample ID: 320-80943-53

No Detections.

Client Sample ID: AOC3-S3E-0.5 — Lab Sample ID: 320-80943-54

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Heptachlor	2.6	J	16	1.4	ug/Kg	10		8081A	Total/NA
Lead	65	B	0.95	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	16		1.9	1.2	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S3E-2 — Lab Sample ID: 320-80943-55

No Detections.

Client Sample ID: AOC3-S3D-0.5 — Lab Sample ID: 320-80943-56

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	100	B	0.95	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	10		1.9	1.2	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S3D-2 — Lab Sample ID: 320-80943-57

No Detections.

Client Sample ID: AOC3-S4D-0.5 — Lab Sample ID: 320-80943-58

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	140	B	0.95	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	6.2		1.9	1.2	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S4D-2 — Lab Sample ID: 320-80943-59

No Detections.

Client Sample ID: AOC3-S4E-0.5 — Lab Sample ID: 320-80943-60

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	36		0.52	0.23	mg/Kg	1		6010B	Total/NA
Cobalt	1.4		1.0	0.24	mg/Kg	1		6010B	Total/NA
Chromium	2.6		1.0	0.18	mg/Kg	1		6010B	Total/NA
Copper	3.3		1.0	0.53	mg/Kg	1		6010B	Total/NA
Nickel	5.3		0.52	0.45	mg/Kg	1		6010B	Total/NA
Vanadium	0.96	J	1.0	0.18	mg/Kg	1		6010B	Total/NA
Zinc	25		10	5.3	mg/Kg	1		6010B	Total/NA
Lead	78		5.2	1.0	mg/Kg	1		6010B	Total/NA
Mercury	0.20		0.086	0.014	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S4E-2

Lab Sample ID: 320-80943-61

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S3B-0.5

Date Collected: 10/27/21 08:54
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-1

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.4	1.1	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
4,4'-DDE	ND		8.4	1.0	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
4,4'-DDT	ND		8.4	1.2	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
Aldrin	ND		8.4	0.69	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
alpha-BHC	ND		8.4	0.79	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
cis-Chlordane	ND		8.4	0.89	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
beta-BHC	ND		8.4	1.1	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
Chlordane (technical)	ND		99	46	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
delta-BHC	ND		8.4	1.7	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
Dieldrin	ND		8.4	0.99	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
Endosulfan I	ND		8.4	0.89	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
Endosulfan II	ND		8.4	0.89	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
Endosulfan sulfate	ND		8.4	1.7	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
Endrin	ND		8.4	0.99	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
Endrin aldehyde	ND		8.4	2.8	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
Endrin ketone	ND		8.4	1.3	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
trans-Chlordane	ND		8.4	3.0	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
gamma-BHC (Lindane)	ND		8.4	0.69	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
Heptachlor	ND		8.4	0.74	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
Heptachlor epoxide	ND		8.4	0.89	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
Methoxychlor	ND		17	2.8	ug/Kg		11/03/21 07:57	11/13/21 15:18	5
Toxaphene	ND		330	110	ug/Kg		11/03/21 07:57	11/13/21 15:18	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*45*	*S1-*	*46 - 109*	*11/03/21 07:57*	*11/13/21 15:18*	*5*
DCB Decachlorobiphenyl	*37*	*S1-*	*46 - 109*	*11/03/21 07:57*	*11/13/21 15:18*	*5*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/03/21 07:57*	*11/13/21 15:18*	*5*
Tetrachloro-m-xylene	*62*		*47 - 107*	*11/03/21 07:57*	*11/13/21 15:18*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/03/21 07:59	11/16/21 22:05	1
PCB-1221	ND		33	3.6	ug/Kg		11/03/21 07:59	11/16/21 22:05	1
PCB-1232	ND		33	4.7	ug/Kg		11/03/21 07:59	11/16/21 22:05	1
PCB-1242	ND		33	5.8	ug/Kg		11/03/21 07:59	11/16/21 22:05	1
PCB-1248	ND		33	2.4	ug/Kg		11/03/21 07:59	11/16/21 22:05	1
PCB-1254	ND		33	3.8	ug/Kg		11/03/21 07:59	11/16/21 22:05	1
PCB-1260	ND		33	2.7	ug/Kg		11/03/21 07:59	11/16/21 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*44*	*S1-*	*52 - 138*	*11/03/21 07:59*	*11/16/21 22:05*	*1*
Tetrachloro-m-xylene	*59*		*56 - 114*	*11/03/21 07:59*	*11/16/21 22:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**130**		0.67	0.17	mg/Kg		11/01/21 13:39	11/02/21 15:58	1
Arsenic	**7.3**	**F1**	1.3	0.87	mg/Kg		11/01/21 13:39	11/02/21 15:58	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S3B-2
Date Collected: 10/27/21 09:00
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-2
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.3	0.45	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
4,4'-DDE	ND		3.3	0.41	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
4,4'-DDT	ND		3.3	0.49	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
Aldrin	ND		3.3	0.28	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
alpha-BHC	ND		3.3	0.31	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
cis-Chlordane	ND		3.3	0.35	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
beta-BHC	ND		3.3	0.43	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
Chlordane (technical)	ND		39	18	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
delta-BHC	ND		3.3	0.69	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
Dieldrin	ND		3.3	0.39	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
Endosulfan I	ND		3.3	0.35	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
Endosulfan II	ND		3.3	0.35	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
Endosulfan sulfate	ND		3.3	0.69	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
Endrin	ND		3.3	0.39	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
Endrin aldehyde	ND		3.3	1.1	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
Endrin ketone	ND		3.3	0.53	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
trans-Chlordane	ND		3.3	1.2	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
gamma-BHC (Lindane)	ND		3.3	0.28	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
Heptachlor	ND		3.3	0.29	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
Heptachlor epoxide	ND		3.3	0.35	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
Methoxychlor	ND		6.7	1.1	ug/Kg		11/03/21 07:57	11/13/21 15:37	2
Toxaphene	ND		130	44	ug/Kg		11/03/21 07:57	11/13/21 15:37	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*51*		*46 - 109*	*11/03/21 07:57*	*11/13/21 15:37*	*2*
DCB Decachlorobiphenyl	*58*		*46 - 109*	*11/03/21 07:57*	*11/13/21 15:37*	*2*
Tetrachloro-m-xylene	*75*		*47 - 107*	*11/03/21 07:57*	*11/13/21 15:37*	*2*
Tetrachloro-m-xylene	*70*		*47 - 107*	*11/03/21 07:57*	*11/13/21 15:37*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S2A-0.5

Date Collected: 10/27/21 09:00
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-3

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.3	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
4,4'-DDE	ND		17	2.1	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
4,4'-DDT	ND		17	2.5	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
Aldrin	ND		17	1.4	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
alpha-BHC	ND		17	1.6	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
beta-BHC	ND		17	2.2	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
Chlordane (technical)	ND		200	93	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
delta-BHC	ND		17	3.4	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
Dieldrin	ND		17	2.0	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
Endosulfan I	ND		17	1.8	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
Endosulfan II	ND		17	1.8	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
Endosulfan sulfate	ND		17	3.4	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
Endrin	ND		17	2.0	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
Endrin aldehyde	ND		17	5.6	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
Endrin ketone	ND		17	2.7	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
trans-Chlordane	ND		17	5.9	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
Heptachlor	ND		17	1.5	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
Methoxychlor	ND		34	5.5	ug/Kg		11/03/21 07:57	11/13/21 15:56	10
Toxaphene	ND		660	220	ug/Kg		11/03/21 07:57	11/13/21 15:56	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*74*		*46 - 109*	*11/03/21 07:57*	*11/13/21 15:56*	*10*
DCB Decachlorobiphenyl	*60*		*46 - 109*	*11/03/21 07:57*	*11/13/21 15:56*	*10*
Tetrachloro-m-xylene	*98*		*47 - 107*	*11/03/21 07:57*	*11/13/21 15:56*	*10*
Tetrachloro-m-xylene	*90*		*47 - 107*	*11/03/21 07:57*	*11/13/21 15:56*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/03/21 07:59	11/16/21 22:25	1
PCB-1221	ND		33	3.6	ug/Kg		11/03/21 07:59	11/16/21 22:25	1
PCB-1232	ND		33	4.7	ug/Kg		11/03/21 07:59	11/16/21 22:25	1
PCB-1242	ND		33	5.8	ug/Kg		11/03/21 07:59	11/16/21 22:25	1
PCB-1248	ND		33	2.4	ug/Kg		11/03/21 07:59	11/16/21 22:25	1
PCB-1254	ND		33	3.8	ug/Kg		11/03/21 07:59	11/16/21 22:25	1
PCB-1260	ND		33	2.7	ug/Kg		11/03/21 07:59	11/16/21 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*60*		*52 - 138*	*11/03/21 07:59*	*11/16/21 22:25*	*1*
Tetrachloro-m-xylene	*71*		*56 - 114*	*11/03/21 07:59*	*11/16/21 22:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**55**		0.66	0.17	mg/Kg		11/01/21 13:39	11/02/21 16:17	1
Arsenic	**6.5**		1.3	0.86	mg/Kg		11/01/21 13:39	11/02/21 16:17	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S2A-2
Date Collected: 10/27/21 09:02
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-4
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
4,4'-DDT	ND		1.6	0.23	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
Aldrin	ND		1.6	0.13	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
Chlordane (technical)	ND		19	8.8	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
Endrin	ND		1.6	0.19	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
Endrin aldehyde	ND		1.6	0.53	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
Endrin ketone	ND		1.6	0.25	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
trans-Chlordane	ND		1.6	0.56	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
Methoxychlor	ND		3.2	0.53	ug/Kg		11/03/21 07:57	11/13/21 16:15	1
Toxaphene	ND		63	21	ug/Kg		11/03/21 07:57	11/13/21 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*34*	*S1-*	*46 - 109*	*11/03/21 07:57*	*11/13/21 16:15*	*1*
DCB Decachlorobiphenyl	*33*	*S1-*	*46 - 109*	*11/03/21 07:57*	*11/13/21 16:15*	*1*
Tetrachloro-m-xylene	*56*		*47 - 107*	*11/03/21 07:57*	*11/13/21 16:15*	*1*
Tetrachloro-m-xylene	*53*		*47 - 107*	*11/03/21 07:57*	*11/13/21 16:15*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S3A-0.5

Date Collected: 10/27/21 09:06
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-5

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
Aldrin	ND		16	1.3	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
alpha-BHC	ND		16	1.5	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
beta-BHC	ND		16	2.1	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
Chlordane (technical)	ND		190	91	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
delta-BHC	ND		16	3.4	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
Dieldrin	ND		16	1.9	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
Endosulfan I	ND		16	1.7	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
Endosulfan II	ND		16	1.7	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
Endrin	ND		16	1.9	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
Endrin ketone	ND		16	2.6	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
Heptachlor	ND		16	1.4	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
Methoxychlor	ND		33	5.4	ug/Kg		11/03/21 07:57	11/13/21 16:34	10
Toxaphene	ND		650	220	ug/Kg		11/03/21 07:57	11/13/21 16:34	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*68*		*46 - 109*	*11/03/21 07:57*	*11/13/21 16:34*	*10*
DCB Decachlorobiphenyl	*48*		*46 - 109*	*11/03/21 07:57*	*11/13/21 16:34*	*10*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/03/21 07:57*	*11/13/21 16:34*	*10*
Tetrachloro-m-xylene	*61*		*47 - 107*	*11/03/21 07:57*	*11/13/21 16:34*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/03/21 07:59	11/16/21 22:46	1
PCB-1221	ND		32	3.5	ug/Kg		11/03/21 07:59	11/16/21 22:46	1
PCB-1232	ND		32	4.6	ug/Kg		11/03/21 07:59	11/16/21 22:46	1
PCB-1242	ND		32	5.7	ug/Kg		11/03/21 07:59	11/16/21 22:46	1
PCB-1248	ND		32	2.3	ug/Kg		11/03/21 07:59	11/16/21 22:46	1
PCB-1254	ND		32	3.7	ug/Kg		11/03/21 07:59	11/16/21 22:46	1
PCB-1260	ND		32	2.6	ug/Kg		11/03/21 07:59	11/16/21 22:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*54*		*52 - 138*	*11/03/21 07:59*	*11/16/21 22:46*	*1*
Tetrachloro-m-xylene	*62*		*56 - 114*	*11/03/21 07:59*	*11/16/21 22:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**110**		0.98	0.25	mg/Kg		11/01/21 13:39	11/02/21 16:20	1
Arsenic	**6.1**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 16:20	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S3A-2
Date Collected: 10/27/21 09:10
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-6
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
4,4'-DDT	ND		1.6	0.23	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
Aldrin	ND		1.6	0.13	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
Chlordane (technical)	ND		19	8.8	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
Endrin	ND		1.6	0.19	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
Endrin aldehyde	ND		1.6	0.53	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
Endrin ketone	ND		1.6	0.25	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
trans-Chlordane	ND		1.6	0.56	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
Methoxychlor	ND		3.2	0.53	ug/Kg		11/03/21 07:57	11/13/21 16:52	1
Toxaphene	ND		63	21	ug/Kg		11/03/21 07:57	11/13/21 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*34*	*S1-*	*46 - 109*	*11/03/21 07:57*	*11/13/21 16:52*	*1*
DCB Decachlorobiphenyl	*27*	*S1-*	*46 - 109*	*11/03/21 07:57*	*11/13/21 16:52*	*1*
Tetrachloro-m-xylene	*52*		*47 - 107*	*11/03/21 07:57*	*11/13/21 16:52*	*1*
Tetrachloro-m-xylene	*51*		*47 - 107*	*11/03/21 07:57*	*11/13/21 16:52*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S4A-0.5

Date Collected: 10/27/21 09:43
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-7

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.22	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
4,4'-DDE	**0.24**	**J**	1.7	0.20	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
4,4'-DDT	ND		1.7	0.24	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
Aldrin	ND		1.7	0.14	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
beta-BHC	ND		1.7	0.21	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
Chlordane (technical)	ND		19	9.2	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
Dieldrin	ND		1.7	0.19	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
Endrin	ND		1.7	0.19	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
Endrin ketone	ND		1.7	0.26	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
trans-Chlordane	ND		1.7	0.58	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
Methoxychlor	ND		3.3	0.55	ug/Kg		11/03/21 07:57	11/13/21 17:11	1
Toxaphene	ND		65	22	ug/Kg		11/03/21 07:57	11/13/21 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*51*		*46 - 109*	*11/03/21 07:57*	*11/13/21 17:11*	*1*
DCB Decachlorobiphenyl	*55*		*46 - 109*	*11/03/21 07:57*	*11/13/21 17:11*	*1*
Tetrachloro-m-xylene	*71*		*47 - 107*	*11/03/21 07:57*	*11/13/21 17:11*	*1*
Tetrachloro-m-xylene	*66*		*47 - 107*	*11/03/21 07:57*	*11/13/21 17:11*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/03/21 07:59	11/16/21 23:06	1
PCB-1221	ND		32	3.5	ug/Kg		11/03/21 07:59	11/16/21 23:06	1
PCB-1232	ND		32	4.7	ug/Kg		11/03/21 07:59	11/16/21 23:06	1
PCB-1242	ND		32	5.7	ug/Kg		11/03/21 07:59	11/16/21 23:06	1
PCB-1248	ND		32	2.4	ug/Kg		11/03/21 07:59	11/16/21 23:06	1
PCB-1254	ND		32	3.7	ug/Kg		11/03/21 07:59	11/16/21 23:06	1
PCB-1260	ND		32	2.6	ug/Kg		11/03/21 07:59	11/16/21 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*68*		*52 - 138*	*11/03/21 07:59*	*11/16/21 23:06*	*1*
Tetrachloro-m-xylene	*79*		*56 - 114*	*11/03/21 07:59*	*11/16/21 23:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**36**		1.0	0.26	mg/Kg		11/01/21 13:39	11/02/21 16:24	1
Arsenic	**2.1**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 16:24	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S4A-2

Date Collected: 10/27/21 09:45
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-8

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.5	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
4,4'-DDE	ND		33	4.1	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
4,4'-DDT	ND		33	4.9	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
Aldrin	ND		33	2.8	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
alpha-BHC	ND		33	3.1	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
beta-BHC	ND		33	4.3	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
Chlordane (technical)	ND		390	180	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
delta-BHC	ND		33	6.9	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
Dieldrin	ND		33	3.9	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
Endosulfan I	ND		33	3.5	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
Endosulfan II	ND		33	3.5	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
Endosulfan sulfate	ND		33	6.9	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
Endrin	ND		33	3.9	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
Endrin aldehyde	ND		33	11	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
Endrin ketone	ND		33	5.3	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
trans-Chlordane	ND		33	12	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
gamma-BHC (Lindane)	ND		33	2.8	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
Heptachlor	ND		33	2.9	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
Methoxychlor	ND		67	11	ug/Kg		11/03/21 07:57	11/13/21 17:30	20
Toxaphene	ND		1300	440	ug/Kg		11/03/21 07:57	11/13/21 17:30	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*6*	*S1-*	*46 - 109*	*11/03/21 07:57*	*11/13/21 17:30*	*20*
DCB Decachlorobiphenyl	*53*		*46 - 109*	*11/03/21 07:57*	*11/13/21 17:30*	*20*
Tetrachloro-m-xylene	*104*		*47 - 107*	*11/03/21 07:57*	*11/13/21 17:30*	*20*
Tetrachloro-m-xylene	*86*		*47 - 107*	*11/03/21 07:57*	*11/13/21 17:30*	*20*

Client Sample ID: AOC3-S5A-0.5

Date Collected: 10/27/21 09:45
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-9

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.3	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
4,4'-DDE	ND		17	2.1	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
4,4'-DDT	**5.7**	**J P**	17	2.5	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
Aldrin	ND		17	1.4	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
alpha-BHC	ND		17	1.6	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
beta-BHC	ND		17	2.2	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
Chlordane (technical)	ND		200	93	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
delta-BHC	ND		17	3.5	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
Dieldrin	ND		17	2.0	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
Endosulfan I	ND		17	1.8	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
Endosulfan II	ND		17	1.8	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
Endosulfan sulfate	ND		17	3.5	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
Endrin	ND		17	2.0	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
Endrin aldehyde	ND		17	5.6	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
Endrin ketone	ND		17	2.7	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
trans-Chlordane	ND		17	5.9	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
Heptachlor	ND		17	1.5	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
Methoxychlor	ND		34	5.5	ug/Kg		11/03/21 07:57	11/13/21 17:49	10
Toxaphene	ND		660	220	ug/Kg		11/03/21 07:57	11/13/21 17:49	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*46 - 109*	*11/03/21 07:57*	*11/13/21 17:49*	*10*
DCB Decachlorobiphenyl	*39*	*S1-*	*46 - 109*	*11/03/21 07:57*	*11/13/21 17:49*	*10*
Tetrachloro-m-xylene	*78*		*47 - 107*	*11/03/21 07:57*	*11/13/21 17:49*	*10*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/03/21 07:57*	*11/13/21 17:49*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/03/21 07:59	11/16/21 23:27	1
PCB-1221	ND		33	3.6	ug/Kg		11/03/21 07:59	11/16/21 23:27	1
PCB-1232	ND		33	4.7	ug/Kg		11/03/21 07:59	11/16/21 23:27	1
PCB-1242	ND		33	5.8	ug/Kg		11/03/21 07:59	11/16/21 23:27	1
PCB-1248	ND		33	2.4	ug/Kg		11/03/21 07:59	11/16/21 23:27	1
PCB-1254	ND		33	3.8	ug/Kg		11/03/21 07:59	11/16/21 23:27	1
PCB-1260	ND		33	2.7	ug/Kg		11/03/21 07:59	11/16/21 23:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*52 - 138*	*11/03/21 07:59*	*11/16/21 23:27*	*1*
Tetrachloro-m-xylene	*63*		*56 - 114*	*11/03/21 07:59*	*11/16/21 23:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 17:27	1
Arsenic	ND		2.6	2.3	mg/Kg		11/09/21 08:59	11/10/21 17:27	1
Barium	**84**	**F1**	0.52	0.23	mg/Kg		11/09/21 08:59	11/10/21 17:27	1
Beryllium	ND		0.26	0.18	mg/Kg		11/09/21 08:59	11/10/21 17:27	1
Cadmium	**0.30**	**J**	0.52	0.21	mg/Kg		11/09/21 08:59	11/10/21 17:27	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S5A-0.5

Date Collected: 10/27/21 09:45
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-9

Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	2.9		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 17:27	1
Chromium	10		1.0	0.18	mg/Kg		11/09/21 08:59	11/10/21 17:27	1
Copper	15		1.0	0.52	mg/Kg		11/09/21 08:59	11/10/21 17:27	1
Molybdenum	ND		0.52	0.46	mg/Kg		11/09/21 08:59	11/10/21 17:27	1
Nickel	14		0.52	0.44	mg/Kg		11/09/21 08:59	11/10/21 17:27	1
Antimony	ND		3.1	1.4	mg/Kg		11/09/21 08:59	11/10/21 17:27	1
Selenium	ND		5.2	1.9	mg/Kg		11/09/21 08:59	11/10/21 17:27	1
Thallium	ND		5.2	1.5	mg/Kg		11/09/21 08:59	11/10/21 17:27	1
Vanadium	8.6		1.0	0.18	mg/Kg		11/09/21 08:59	11/10/21 17:27	1
Zinc	98	F1	10	5.3	mg/Kg		11/09/21 08:59	11/10/21 17:27	1
Lead	160		5.2	1.0	mg/Kg		11/09/21 08:59	11/10/21 17:27	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16		0.082	0.013	mg/Kg		11/09/21 08:55	11/09/21 12:26	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S5A-2
Date Collected: 10/27/21 09:50
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-10
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
Aldrin	ND		1.6	0.14	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
alpha-BHC	ND		1.6	0.16	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
Chlordane (technical)	ND		19	9.1	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
delta-BHC	ND		1.6	0.34	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
Endosulfan sulfate	ND		1.6	0.34	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
Endrin	ND		1.6	0.19	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
Endrin aldehyde	ND		1.6	0.55	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
trans-Chlordane	ND		1.6	0.58	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
gamma-BHC (Lindane)	ND		1.6	0.14	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
Heptachlor	**0.70**	**J**	1.6	0.15	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/03/21 07:57	11/13/21 18:08	1
Toxaphene	ND		65	22	ug/Kg		11/03/21 07:57	11/13/21 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*49*		*46 - 109*	*11/03/21 07:57*	*11/13/21 18:08*	*1*
DCB Decachlorobiphenyl	*53*		*46 - 109*	*11/03/21 07:57*	*11/13/21 18:08*	*1*
Tetrachloro-m-xylene	*73*		*47 - 107*	*11/03/21 07:57*	*11/13/21 18:08*	*1*
Tetrachloro-m-xylene	*67*		*47 - 107*	*11/03/21 07:57*	*11/13/21 18:08*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S4B-0.5

Date Collected: 10/27/21 09:56
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-11

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.3	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
4,4'-DDE	ND		17	2.1	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
4,4'-DDT	ND		17	2.4	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
Aldrin	ND		17	1.4	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
alpha-BHC	ND		17	1.6	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
beta-BHC	ND		17	2.2	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
Chlordane (technical)	ND		200	92	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
delta-BHC	ND		17	3.4	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
Dieldrin	ND		17	2.0	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
Endosulfan I	ND		17	1.8	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
Endosulfan II	ND		17	1.8	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
Endosulfan sulfate	ND		17	3.4	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
Endrin	ND		17	2.0	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
Endrin aldehyde	ND		17	5.6	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
Endrin ketone	ND		17	2.6	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
trans-Chlordane	ND		17	5.9	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
Heptachlor	ND		17	1.5	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
Methoxychlor	ND		33	5.5	ug/Kg		11/03/21 07:57	11/13/21 18:27	10
Toxaphene	ND		660	220	ug/Kg		11/03/21 07:57	11/13/21 18:27	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*109*		*46 - 109*	*11/03/21 07:57*	*11/13/21 18:27*	*10*
DCB Decachlorobiphenyl	*78*		*46 - 109*	*11/03/21 07:57*	*11/13/21 18:27*	*10*
Tetrachloro-m-xylene	*79*		*47 - 107*	*11/03/21 07:57*	*11/13/21 18:27*	*10*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/03/21 07:57*	*11/13/21 18:27*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/03/21 07:59	11/16/21 23:48	1
PCB-1221	ND		32	3.5	ug/Kg		11/03/21 07:59	11/16/21 23:48	1
PCB-1232	ND		32	4.7	ug/Kg		11/03/21 07:59	11/16/21 23:48	1
PCB-1242	ND		32	5.8	ug/Kg		11/03/21 07:59	11/16/21 23:48	1
PCB-1248	ND		32	2.4	ug/Kg		11/03/21 07:59	11/16/21 23:48	1
PCB-1254	ND		32	3.7	ug/Kg		11/03/21 07:59	11/16/21 23:48	1
PCB-1260	ND		32	2.6	ug/Kg		11/03/21 07:59	11/16/21 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*52 - 138*	*11/03/21 07:59*	*11/16/21 23:48*	*1*
Tetrachloro-m-xylene	*60*		*56 - 114*	*11/03/21 07:59*	*11/16/21 23:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**290**		1.0	0.26	mg/Kg		11/01/21 13:39	11/02/21 16:28	1
Arsenic	**4.5**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 16:28	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S4B-2
Date Collected: 10/27/21 09:58
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-12
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.22	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
4,4'-DDT	ND		1.7	0.24	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
Aldrin	ND		1.7	0.14	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
Chlordane (technical)	ND		20	9.2	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
Endrin	ND		1.7	0.20	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
Endrin ketone	ND		1.7	0.26	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
Methoxychlor	ND		3.3	0.55	ug/Kg		11/03/21 07:57	11/13/21 18:46	1
Toxaphene	ND		66	22	ug/Kg		11/03/21 07:57	11/13/21 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*43*	*S1-*	*46 - 109*	*11/03/21 07:57*	*11/13/21 18:46*	*1*
DCB Decachlorobiphenyl	*50*		*46 - 109*	*11/03/21 07:57*	*11/13/21 18:46*	*1*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/03/21 07:57*	*11/13/21 18:46*	*1*
Tetrachloro-m-xylene	*65*		*47 - 107*	*11/03/21 07:57*	*11/13/21 18:46*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC8-S5B-0.5

Date Collected: 10/27/21 10:00
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-13

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
4,4'-DDE	**3.8**	**J**	16	2.0	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
4,4'-DDT	**4.1**	**J**	16	2.4	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
Aldrin	ND		16	1.4	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
alpha-BHC	ND		16	1.5	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
beta-BHC	ND		16	2.1	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
Chlordane (technical)	ND		190	91	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
delta-BHC	ND		16	3.4	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
Dieldrin	ND		16	1.9	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
Endosulfan I	ND		16	1.7	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
Endosulfan II	ND		16	1.7	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
Endrin	ND		16	1.9	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
Endrin ketone	ND		16	2.6	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
gamma-BHC (Lindane)	ND		16	1.4	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
Heptachlor	ND		16	1.4	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
Methoxychlor	ND		33	5.4	ug/Kg		11/03/21 07:57	11/13/21 19:04	10
Toxaphene	ND		650	220	ug/Kg		11/03/21 07:57	11/13/21 19:04	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*63*		*46 - 109*	*11/03/21 07:57*	*11/13/21 19:04*	*10*
DCB Decachlorobiphenyl	*55*		*46 - 109*	*11/03/21 07:57*	*11/13/21 19:04*	*10*
Tetrachloro-m-xylene	*78*		*47 - 107*	*11/03/21 07:57*	*11/13/21 19:04*	*10*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/03/21 07:57*	*11/13/21 19:04*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/03/21 07:59	11/17/21 00:08	1
PCB-1221	ND		32	3.5	ug/Kg		11/03/21 07:59	11/17/21 00:08	1
PCB-1232	ND		32	4.6	ug/Kg		11/03/21 07:59	11/17/21 00:08	1
PCB-1242	ND		32	5.7	ug/Kg		11/03/21 07:59	11/17/21 00:08	1
PCB-1248	ND		32	2.4	ug/Kg		11/03/21 07:59	11/17/21 00:08	1
PCB-1254	ND		32	3.7	ug/Kg		11/03/21 07:59	11/17/21 00:08	1
PCB-1260	ND		32	2.6	ug/Kg		11/03/21 07:59	11/17/21 00:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*58*		*52 - 138*	*11/03/21 07:59*	*11/17/21 00:08*	*1*
Tetrachloro-m-xylene	*62*		*56 - 114*	*11/03/21 07:59*	*11/17/21 00:08*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**77**		1.0	0.26	mg/Kg		11/01/21 13:39	11/02/21 16:32	1
Arsenic	**11**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 16:32	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC8-S5B-2
Date Collected: 10/27/21 10:02
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-14
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.3	1.1	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
4,4'-DDE	ND		8.3	1.0	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
4,4'-DDT	ND		8.3	1.2	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
Aldrin	ND		8.3	0.68	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
alpha-BHC	ND		8.3	0.78	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
cis-Chlordane	ND		8.3	0.88	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
beta-BHC	ND		8.3	1.1	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
Chlordane (technical)	ND		98	46	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
delta-BHC	ND		8.3	1.7	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
Dieldrin	ND		8.3	0.98	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
Endosulfan I	ND		8.3	0.88	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
Endosulfan II	ND		8.3	0.88	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
Endosulfan sulfate	ND		8.3	1.7	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
Endrin	ND		8.3	0.98	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
Endrin aldehyde	ND		8.3	2.8	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
Endrin ketone	ND		8.3	1.3	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
trans-Chlordane	ND		8.3	2.9	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
gamma-BHC (Lindane)	ND		8.3	0.68	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
Heptachlor	ND		8.3	0.73	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
Heptachlor epoxide	ND		8.3	0.88	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
Methoxychlor	ND		17	2.7	ug/Kg		11/03/21 07:57	11/13/21 19:23	5
Toxaphene	ND		330	110	ug/Kg		11/03/21 07:57	11/13/21 19:23	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*46*		*46 - 109*	*11/03/21 07:57*	*11/13/21 19:23*	*5*
DCB Decachlorobiphenyl	*60*		*46 - 109*	*11/03/21 07:57*	*11/13/21 19:23*	*5*
Tetrachloro-m-xylene	*82*		*47 - 107*	*11/03/21 07:57*	*11/13/21 19:23*	*5*
Tetrachloro-m-xylene	*76*		*47 - 107*	*11/03/21 07:57*	*11/13/21 19:23*	*5*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S6B-0.5

Date Collected: 10/27/21 10:23
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-15

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.5	1.1	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
4,4'-DDE	ND		8.5	1.0	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
4,4'-DDT	ND		8.5	1.2	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
Aldrin	ND		8.5	0.70	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
alpha-BHC	ND		8.5	0.80	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
cis-Chlordane	ND		8.5	0.90	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
beta-BHC	ND		8.5	1.1	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
Chlordane (technical)	ND		100	47	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
delta-BHC	ND		8.5	1.7	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
Dieldrin	ND		8.5	1.0	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
Endosulfan I	ND		8.5	0.90	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
Endosulfan II	ND		8.5	0.90	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
Endosulfan sulfate	ND		8.5	1.7	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
Endrin	ND		8.5	1.0	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
Endrin aldehyde	ND		8.5	2.8	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
Endrin ketone	ND		8.5	1.3	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
trans-Chlordane	ND		8.5	3.0	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
gamma-BHC (Lindane)	ND		8.5	0.70	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
Heptachlor	ND		8.5	0.75	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
Heptachlor epoxide	ND		8.5	0.90	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
Methoxychlor	ND		17	2.8	ug/Kg		11/03/21 07:57	11/13/21 19:42	5
Toxaphene	ND		330	110	ug/Kg		11/03/21 07:57	11/13/21 19:42	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*89*		*46 - 109*	*11/03/21 07:57*	*11/13/21 19:42*	*5*
DCB Decachlorobiphenyl	*48*		*46 - 109*	*11/03/21 07:57*	*11/13/21 19:42*	*5*
Tetrachloro-m-xylene	*77*		*47 - 107*	*11/03/21 07:57*	*11/13/21 19:42*	*5*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/03/21 07:57*	*11/13/21 19:42*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/03/21 07:59	11/17/21 00:29	1
PCB-1221	ND		33	3.6	ug/Kg		11/03/21 07:59	11/17/21 00:29	1
PCB-1232	ND		33	4.8	ug/Kg		11/03/21 07:59	11/17/21 00:29	1
PCB-1242	ND		33	5.9	ug/Kg		11/03/21 07:59	11/17/21 00:29	1
PCB-1248	ND		33	2.4	ug/Kg		11/03/21 07:59	11/17/21 00:29	1
PCB-1254	ND		33	3.8	ug/Kg		11/03/21 07:59	11/17/21 00:29	1
PCB-1260	ND		33	2.7	ug/Kg		11/03/21 07:59	11/17/21 00:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*52 - 138*	*11/03/21 07:59*	*11/17/21 00:29*	*1*
Tetrachloro-m-xylene	*64*		*56 - 114*	*11/03/21 07:59*	*11/17/21 00:29*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**860**		0.97	0.25	mg/Kg		11/01/21 13:39	11/02/21 16:43	1
Arsenic	**2.8**		1.9	1.3	mg/Kg		11/01/21 13:39	11/02/21 16:43	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S6B-2
Date Collected: 10/27/21 10:26
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-16
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
4,4'-DDT	ND		1.6	0.23	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
Aldrin	ND		1.6	0.13	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
Chlordane (technical)	ND		19	8.8	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
Endrin	ND		1.6	0.19	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
Endrin aldehyde	ND		1.6	0.53	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
Endrin ketone	ND		1.6	0.25	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
trans-Chlordane	ND		1.6	0.56	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
Methoxychlor	ND		3.2	0.53	ug/Kg		11/03/21 07:57	11/13/21 20:01	1
Toxaphene	ND		63	21	ug/Kg		11/03/21 07:57	11/13/21 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*46*		*46 - 109*	*11/03/21 07:57*	*11/13/21 20:01*	*1*
DCB Decachlorobiphenyl	*50*		*46 - 109*	*11/03/21 07:57*	*11/13/21 20:01*	*1*
Tetrachloro-m-xylene	*71*		*47 - 107*	*11/03/21 07:57*	*11/13/21 20:01*	*1*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/03/21 07:57*	*11/13/21 20:01*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S6A-0.5

Date Collected: 10/27/21 10:28
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-17

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		34	4.6	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
4,4'-DDE	ND		34	4.2	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
4,4'-DDT	ND		34	5.0	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
Aldrin	ND		34	2.8	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
alpha-BHC	ND		34	3.2	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
cis-Chlordane	ND		34	3.6	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
beta-BHC	ND		34	4.4	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
Chlordane (technical)	ND		400	190	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
delta-BHC	ND		34	7.0	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
Dieldrin	ND		34	4.0	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
Endosulfan I	ND		34	3.6	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
Endosulfan II	ND		34	3.6	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
Endosulfan sulfate	ND		34	7.0	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
Endrin	ND		34	4.0	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
Endrin aldehyde	ND		34	11	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
Endrin ketone	ND		34	5.4	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
trans-Chlordane	ND		34	12	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
gamma-BHC (Lindane)	ND		34	2.8	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
Heptachlor	ND		34	3.0	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
Heptachlor epoxide	ND		34	3.6	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
Methoxychlor	ND		68	11	ug/Kg		11/03/21 07:57	11/13/21 20:58	20
Toxaphene	ND		1300	450	ug/Kg		11/03/21 07:57	11/13/21 20:58	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*76*		*46 - 109*	*11/03/21 07:57*	*11/13/21 20:58*	*20*
DCB Decachlorobiphenyl	*81*		*46 - 109*	*11/03/21 07:57*	*11/13/21 20:58*	*20*
Tetrachloro-m-xylene	*79*		*47 - 107*	*11/03/21 07:57*	*11/13/21 20:58*	*20*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/03/21 07:57*	*11/13/21 20:58*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/03/21 07:59	11/17/21 00:49	1
PCB-1221	ND		33	3.6	ug/Kg		11/03/21 07:59	11/17/21 00:49	1
PCB-1232	ND		33	4.8	ug/Kg		11/03/21 07:59	11/17/21 00:49	1
PCB-1242	ND		33	5.9	ug/Kg		11/03/21 07:59	11/17/21 00:49	1
PCB-1248	ND		33	2.4	ug/Kg		11/03/21 07:59	11/17/21 00:49	1
PCB-1254	ND		33	3.8	ug/Kg		11/03/21 07:59	11/17/21 00:49	1
PCB-1260	**3.2**	**J**	33	2.7	ug/Kg		11/03/21 07:59	11/17/21 00:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*52 - 138*	*11/03/21 07:59*	*11/17/21 00:49*	*1*
Tetrachloro-m-xylene	*62*		*56 - 114*	*11/03/21 07:59*	*11/17/21 00:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**260**		0.98	0.25	mg/Kg		11/01/21 13:39	11/02/21 16:47	1
Arsenic	**3.9**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 16:47	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S6A-2
Date Collected: 10/27/21 10:30
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-18
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.3	0.44	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
4,4'-DDE	ND		3.3	0.40	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
4,4'-DDT	ND		3.3	0.48	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
Aldrin	ND		3.3	0.27	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
alpha-BHC	ND		3.3	0.31	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
cis-Chlordane	ND		3.3	0.34	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
beta-BHC	ND		3.3	0.42	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
Chlordane (technical)	ND		38	18	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
delta-BHC	ND		3.3	0.67	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
Dieldrin	ND		3.3	0.38	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
Endosulfan I	ND		3.3	0.34	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
Endosulfan II	ND		3.3	0.34	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
Endosulfan sulfate	ND		3.3	0.67	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
Endrin	ND		3.3	0.38	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
Endrin aldehyde	ND		3.3	1.1	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
Endrin ketone	ND		3.3	0.52	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
trans-Chlordane	ND		3.3	1.1	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
gamma-BHC (Lindane)	ND		3.3	0.27	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
Heptachlor	ND		3.3	0.29	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
Heptachlor epoxide	ND		3.3	0.34	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
Methoxychlor	ND		6.5	1.1	ug/Kg		11/03/21 10:14	11/12/21 18:24	2
Toxaphene	ND		130	43	ug/Kg		11/03/21 10:14	11/12/21 18:24	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*46 - 109*	*11/03/21 10:14*	*11/12/21 18:24*	*2*
DCB Decachlorobiphenyl	*58*		*46 - 109*	*11/03/21 10:14*	*11/12/21 18:24*	*2*
Tetrachloro-m-xylene	*78*		*47 - 107*	*11/03/21 10:14*	*11/12/21 18:24*	*2*
Tetrachloro-m-xylene	*76*		*47 - 107*	*11/03/21 10:14*	*11/12/21 18:24*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S7A-0.5

Date Collected: 10/27/21 10:35
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-19

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	F1	17	2.2	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
4,4'-DDE	ND	F1	17	2.1	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
4,4'-DDT	ND		17	2.4	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
Aldrin	ND	F1	17	1.4	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
alpha-BHC	ND		17	1.6	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
cis-Chlordane	ND	F1	17	1.8	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
beta-BHC	ND		17	2.1	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
Chlordane (technical)	ND		200	92	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
delta-BHC	ND		17	3.4	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
Dieldrin	ND	F1	17	2.0	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
Endosulfan I	ND		17	1.8	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
Endosulfan II	ND	F1	17	1.8	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
Endosulfan sulfate	ND	F1	17	3.4	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
Endrin	ND	F1	17	2.0	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
Endrin aldehyde	ND	F1	17	5.6	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
Endrin ketone	ND	F1	17	2.6	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
trans-Chlordane	ND	F1	17	5.9	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
Heptachlor	ND		17	1.5	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
Heptachlor epoxide	ND	F1	17	1.8	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
Methoxychlor	ND		33	5.5	ug/Kg		11/03/21 10:14	11/12/21 18:42	10
Toxaphene	ND		650	220	ug/Kg		11/03/21 10:14	11/12/21 18:42	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*68*		*46 - 109*	*11/03/21 10:14*	*11/12/21 18:42*	*10*
DCB Decachlorobiphenyl	*61*		*46 - 109*	*11/03/21 10:14*	*11/12/21 18:42*	*10*
Tetrachloro-m-xylene	*86*		*47 - 107*	*11/03/21 10:14*	*11/12/21 18:42*	*10*
Tetrachloro-m-xylene	*77*		*47 - 107*	*11/03/21 10:14*	*11/12/21 18:42*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/03/21 10:18	11/18/21 19:25	1
PCB-1221	ND		32	3.5	ug/Kg		11/03/21 10:18	11/18/21 19:25	1
PCB-1232	ND		32	4.7	ug/Kg		11/03/21 10:18	11/18/21 19:25	1
PCB-1242	ND		32	5.8	ug/Kg		11/03/21 10:18	11/18/21 19:25	1
PCB-1248	ND		32	2.4	ug/Kg		11/03/21 10:18	11/18/21 19:25	1
PCB-1254	ND		32	3.7	ug/Kg		11/03/21 10:18	11/18/21 19:25	1
PCB-1260	ND		32	2.6	ug/Kg		11/03/21 10:18	11/18/21 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*52*		*52 - 138*	*11/03/21 10:18*	*11/18/21 19:25*	*1*
Tetrachloro-m-xylene	*66*		*56 - 114*	*11/03/21 10:18*	*11/18/21 19:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**300**		0.97	0.25	mg/Kg		11/01/21 13:39	11/02/21 16:51	1
Arsenic	**3.3**		1.9	1.3	mg/Kg		11/01/21 13:39	11/02/21 16:51	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S7A-2
Date Collected: 10/27/21 10:38
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-20
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
Aldrin	ND		1.6	0.14	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
alpha-BHC	ND		1.6	0.16	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
Chlordane (technical)	ND		19	9.1	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
delta-BHC	ND		1.6	0.34	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
Endosulfan sulfate	ND		1.6	0.34	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
Endrin	ND		1.6	0.19	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
Endrin aldehyde	ND		1.6	0.55	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
trans-Chlordane	ND		1.6	0.58	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
gamma-BHC (Lindane)	ND		1.6	0.14	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
Heptachlor	ND		1.6	0.15	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/03/21 10:14	11/12/21 19:39	1
Toxaphene	ND		65	22	ug/Kg		11/03/21 10:14	11/12/21 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*46*		*46 - 109*	*11/03/21 10:14*	*11/12/21 19:39*	*1*
DCB Decachlorobiphenyl	*43*	*S1-*	*46 - 109*	*11/03/21 10:14*	*11/12/21 19:39*	*1*
Tetrachloro-m-xylene	*65*		*47 - 107*	*11/03/21 10:14*	*11/12/21 19:39*	*1*
Tetrachloro-m-xylene	*60*		*47 - 107*	*11/03/21 10:14*	*11/12/21 19:39*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S7B-0.5

Date Collected: 10/27/21 10:43
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-21

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
Aldrin	ND		16	1.3	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
alpha-BHC	ND		16	1.5	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
beta-BHC	ND		16	2.1	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
Chlordane (technical)	ND		190	90	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
delta-BHC	ND		16	3.3	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
Dieldrin	ND		16	1.9	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
Endosulfan I	ND		16	1.7	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
Endosulfan II	ND		16	1.7	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
Endosulfan sulfate	ND		16	3.3	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
Endrin	ND		16	1.9	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
Endrin aldehyde	ND		16	5.4	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
Endrin ketone	ND		16	2.6	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
trans-Chlordane	ND		16	5.7	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
Heptachlor	ND		16	1.4	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
Methoxychlor	ND		32	5.3	ug/Kg		11/03/21 10:17	11/12/21 19:58	10
Toxaphene	ND		640	210	ug/Kg		11/03/21 10:17	11/12/21 19:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*46 - 109*	*11/03/21 10:17*	*11/12/21 19:58*	*10*
DCB Decachlorobiphenyl	*72*		*46 - 109*	*11/03/21 10:17*	*11/12/21 19:58*	*10*
Tetrachloro-m-xylene	*87*		*47 - 107*	*11/03/21 10:17*	*11/12/21 19:58*	*10*
Tetrachloro-m-xylene	*78*		*47 - 107*	*11/03/21 10:17*	*11/12/21 19:58*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.4	ug/Kg		11/03/21 10:18	11/18/21 19:46	1
PCB-1221	ND		32	3.5	ug/Kg		11/03/21 10:18	11/18/21 19:46	1
PCB-1232	ND		32	4.6	ug/Kg		11/03/21 10:18	11/18/21 19:46	1
PCB-1242	ND		32	5.6	ug/Kg		11/03/21 10:18	11/18/21 19:46	1
PCB-1248	ND		32	2.3	ug/Kg		11/03/21 10:18	11/18/21 19:46	1
PCB-1254	ND		32	3.6	ug/Kg		11/03/21 10:18	11/18/21 19:46	1
PCB-1260	ND		32	2.6	ug/Kg		11/03/21 10:18	11/18/21 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*51*	*S1-*	*52 - 138*	*11/03/21 10:18*	*11/18/21 19:46*	*1*
Tetrachloro-m-xylene	*65*		*56 - 114*	*11/03/21 10:18*	*11/18/21 19:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**180**		0.98	0.25	mg/Kg		11/01/21 13:39	11/02/21 16:55	1
Arsenic	**3.5**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 16:55	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S7B-2
Date Collected: 10/27/21 10:47
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-22
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.2	0.44	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
4,4'-DDE	ND		3.2	0.40	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
4,4'-DDT	ND		3.2	0.47	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
Aldrin	ND		3.2	0.27	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
alpha-BHC	ND		3.2	0.30	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
cis-Chlordane	ND		3.2	0.34	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
beta-BHC	ND		3.2	0.42	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
Chlordane (technical)	ND		38	18	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
delta-BHC	ND		3.2	0.66	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
Dieldrin	ND		3.2	0.38	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
Endosulfan I	ND		3.2	0.34	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
Endosulfan II	ND		3.2	0.34	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
Endosulfan sulfate	ND		3.2	0.66	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
Endrin	ND		3.2	0.38	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
Endrin aldehyde	ND		3.2	1.1	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
Endrin ketone	ND		3.2	0.51	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
trans-Chlordane	ND		3.2	1.1	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
gamma-BHC (Lindane)	ND		3.2	0.27	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
Heptachlor	ND		3.2	0.28	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
Heptachlor epoxide	ND		3.2	0.34	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
Methoxychlor	ND		6.4	1.1	ug/Kg		11/03/21 10:17	11/12/21 20:17	2
Toxaphene	ND		130	42	ug/Kg		11/03/21 10:17	11/12/21 20:17	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*27*	*S1-*	*46 - 109*	*11/03/21 10:17*	*11/12/21 20:17*	*2*
DCB Decachlorobiphenyl	*33*	*S1-*	*46 - 109*	*11/03/21 10:17*	*11/12/21 20:17*	*2*
Tetrachloro-m-xylene	*47*		*47 - 107*	*11/03/21 10:17*	*11/12/21 20:17*	*2*
Tetrachloro-m-xylene	*46*	*S1-*	*47 - 107*	*11/03/21 10:17*	*11/12/21 20:17*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S8A-0.5
Date Collected: 10/27/21 11:01
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-23
Matrix: Solid

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		250	31	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Acenaphthylene	ND		250	33	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Anthracene	ND		250	33	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Benzo[a]anthracene	ND		250	35	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Benzo[a]pyrene	ND		250	35	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Benzo[b]fluoranthene	ND		250	38	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Benzo[g,h,i]perylene	ND		250	36	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Benzo[k]fluoranthene	ND		250	36	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Chrysene	**82**	**J**	250	36	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Dibenz(a,h)anthracene	ND		250	38	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Fluoranthene	ND		250	40	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Fluorene	ND		250	32	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Indeno[1,2,3-cd]pyrene	ND		250	38	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Naphthalene	ND		250	33	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Phenanthrene	**36**	**J**	250	36	ug/Kg		11/02/21 09:36	11/08/21 11:04	50
Pyrene	ND		250	37	ug/Kg		11/02/21 09:36	11/08/21 11:04	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*113*		*53 - 121*	*11/02/21 09:36*	*11/08/21 11:04*	*50*
Fluoranthene-d10 (Surr)	*94*		*50 - 150*	*11/02/21 09:36*	*11/08/21 11:04*	*50*
2-methylnaphthalene-d10	*83*		*50 - 150*	*11/02/21 09:36*	*11/08/21 11:04*	*50*
2-Fluorobiphenyl (Surr)	*84*		*43 - 109*	*11/02/21 09:36*	*11/08/21 11:04*	*50*
Nitrobenzene-d5 (Surr)	*99*		*49 - 114*	*11/02/21 09:36*	*11/08/21 11:04*	*50*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Acenaphthylene	ND		130000	34000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Anthracene	ND		130000	34000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Benzo[a]anthracene	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Benzoic acid	ND		640000	110000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Benzo[b]fluoranthene	ND		130000	38000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Benzo[k]fluoranthene	ND		130000	45000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Benzyl alcohol	ND		130000	68000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Bis(2-chloroethoxy)methane	ND		130000	35000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Bis(2-chloroethyl)ether	ND		130000	32000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
4-Bromophenyl phenyl ether	ND		130000	34000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Butyl benzyl phthalate	ND		130000	38000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
2,4-Dimethylphenol	ND		130000	66000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Dimethyl phthalate	ND		130000	35000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
2-Methyl-4,6-dinitrophenol	ND		640000	32000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
2,4-Dinitrophenol	ND		640000	85000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
2,4-Dinitrotoluene	ND		130000	35000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
2,6-Dinitrotoluene	ND		130000	39000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Fluoranthene	ND		130000	38000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Fluorene	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Hexachlorobenzene	ND		130000	35000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Hexachlorobutadiene	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Hexachlorocyclopentadiene	ND		640000	25000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Hexachloroethane	ND		130000	32000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40

Client Sample ID: AOC3/AOC10-S8A-0.5
Date Collected: 10/27/21 11:01
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-23
Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		130000	34000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
N-Nitrosodi-n-propylamine	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
1,4-Dichlorobenzene	ND		130000	31000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
2-Chloronaphthalene	ND		130000	32000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
2-Chlorophenol	ND		130000	35000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
4-Chlorophenyl phenyl ether	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Chrysene	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Dibenz(a,h)anthracene	ND		130000	41000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Dibenzofuran	ND		130000	34000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Benzo[g,h,i]perylene	ND		130000	44000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Benzo[a]pyrene	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Di-n-butyl phthalate	ND		130000	39000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
1,2-Dichlorobenzene	ND		130000	30000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
1,3-Dichlorobenzene	ND		130000	31000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
3,3'-Dichlorobenzidine	ND		640000	37000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
2,4-Dichlorophenol	ND		130000	35000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Diethyl phthalate	ND		130000	36000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Indeno[1,2,3-cd]pyrene	ND		130000	38000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Isophorone	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
2-Methylnaphthalene	ND		130000	34000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
2-Methylphenol	ND		130000	23000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Naphthalene	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
2-Nitroaniline	ND		640000	33000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
3-Nitroaniline	ND		640000	66000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
4-Nitroaniline	ND		640000	35000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Nitrobenzene	ND		130000	30000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
2-Nitrophenol	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
4-Nitrophenol	ND		640000	110000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Pyrene	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Pyridine	ND		260000	29000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Pentachlorophenol	ND		640000	20000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Phenanthrene	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
1,2,4-Trichlorobenzene	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
2,4,5-Trichlorophenol	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
2,4,6-Trichlorophenol	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Phenol	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Azobenzene	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
4-Chloroaniline	ND		130000	23000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Bis(2-ethylhexyl) phthalate	ND		130000	39000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
Di-n-octyl phthalate	ND		130000	39000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40
4-Chloro-3-methylphenol	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 11:17	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*54*		*53 - 113*	*11/02/21 11:54*	*11/11/21 11:17*	*40*
Nitrobenzene-d5	*96*		*54 - 114*	*11/02/21 11:54*	*11/11/21 11:17*	*40*
Terphenyl-d14	*72*		*66 - 126*	*11/02/21 11:54*	*11/11/21 11:17*	*40*
2,4,6-Tribromophenol	*0*	*S1-*	*60 - 120*	*11/02/21 11:54*	*11/11/21 11:17*	*40*
2-Fluorobiphenyl (Surr)	*50*		*47 - 107*	*11/02/21 11:54*	*11/11/21 11:17*	*40*
Phenol-d5	*97*		*54 - 114*	*11/02/21 11:54*	*11/11/21 11:17*	*40*

Client Sample ID: AOC3/AOC10-S8A-0.5

Lab Sample ID: 320-80943-23

Date Collected: 10/27/21 11:01

Matrix: Solid

Date Received: 10/28/21 12:50

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.2	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
4,4'-DDE	ND		17	2.1	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
4,4'-DDT	ND		17	2.4	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
Aldrin	ND		17	1.4	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
alpha-BHC	ND		17	1.6	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
beta-BHC	ND		17	2.2	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
Chlordane (technical)	ND		200	92	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
delta-BHC	ND		17	3.4	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
Dieldrin	ND		17	2.0	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
Endosulfan I	ND		17	1.8	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
Endosulfan II	ND		17	1.8	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
Endosulfan sulfate	ND		17	3.4	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
Endrin	ND		17	2.0	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
Endrin aldehyde	ND		17	5.6	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
Endrin ketone	ND		17	2.6	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
trans-Chlordane	ND		17	5.9	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
Heptachlor	ND		17	1.5	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
Methoxychlor	ND		33	5.5	ug/Kg		11/03/21 10:17	11/12/21 20:36	10
Toxaphene	ND		660	220	ug/Kg		11/03/21 10:17	11/12/21 20:36	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*61*		*46 - 109*	*11/03/21 10:17*	*11/12/21 20:36*	*10*
DCB Decachlorobiphenyl	*54*		*46 - 109*	*11/03/21 10:17*	*11/12/21 20:36*	*10*
Tetrachloro-m-xylene	*82*		*47 - 107*	*11/03/21 10:17*	*11/12/21 20:36*	*10*
Tetrachloro-m-xylene	*63*		*47 - 107*	*11/03/21 10:17*	*11/12/21 20:36*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/03/21 10:18	11/18/21 20:48	1
PCB-1221	ND		32	3.5	ug/Kg		11/03/21 10:18	11/18/21 20:48	1
PCB-1232	ND		32	4.7	ug/Kg		11/03/21 10:18	11/18/21 20:48	1
PCB-1242	ND		32	5.8	ug/Kg		11/03/21 10:18	11/18/21 20:48	1
PCB-1248	ND		32	2.4	ug/Kg		11/03/21 10:18	11/18/21 20:48	1
PCB-1254	ND		32	3.7	ug/Kg		11/03/21 10:18	11/18/21 20:48	1
PCB-1260	**3.2**	**J**	32	2.6	ug/Kg		11/03/21 10:18	11/18/21 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*41*	*S1-*	*52 - 138*	*11/03/21 10:18*	*11/18/21 20:48*	*1*
Tetrachloro-m-xylene	*57*		*56 - 114*	*11/03/21 10:18*	*11/18/21 20:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.99	0.22	mg/Kg		11/09/21 08:59	11/10/21 17:32	1
Arsenic	ND		2.5	2.2	mg/Kg		11/09/21 08:59	11/10/21 17:32	1
Barium	**140**		0.49	0.22	mg/Kg		11/09/21 08:59	11/10/21 17:32	1
Beryllium	**0.29**		0.25	0.17	mg/Kg		11/09/21 08:59	11/10/21 17:32	1
Cadmium	**0.62**		0.49	0.20	mg/Kg		11/09/21 08:59	11/10/21 17:32	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S8A-0.5
Date Collected: 10/27/21 11:01
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-23
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	4.9		0.99	0.22	mg/Kg		11/09/21 08:59	11/10/21 17:32	1
Chromium	22		0.99	0.17	mg/Kg		11/09/21 08:59	11/10/21 17:32	1
Copper	24		0.99	0.50	mg/Kg		11/09/21 08:59	11/10/21 17:32	1
Molybdenum	ND		0.49	0.44	mg/Kg		11/09/21 08:59	11/10/21 17:32	1
Nickel	21		0.49	0.42	mg/Kg		11/09/21 08:59	11/10/21 17:32	1
Antimony	ND		3.0	1.3	mg/Kg		11/09/21 08:59	11/10/21 17:32	1
Selenium	ND		4.9	1.8	mg/Kg		11/09/21 08:59	11/10/21 17:32	1
Thallium	ND		4.9	1.5	mg/Kg		11/09/21 08:59	11/10/21 17:32	1
Vanadium	18		0.99	0.17	mg/Kg		11/09/21 08:59	11/10/21 17:32	1
Zinc	160		9.9	5.0	mg/Kg		11/09/21 08:59	11/10/21 17:32	1
Lead	310		4.9	0.95	mg/Kg		11/09/21 08:59	11/10/21 17:32	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.085	0.014	mg/Kg		11/09/21 08:55	11/09/21 12:31	1

Client Sample ID: AOC3/AOC10-S8A-2

Lab Sample ID: 320-80943-24

Date Collected: 10/27/21 11:03

Matrix: Solid

Date Received: 10/28/21 12:50

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.9	0.62	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Acenaphthylene	ND		4.9	0.64	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Anthracene	ND		4.9	0.65	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Benzo[a]anthracene	ND		4.9	0.69	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Benzo[a]pyrene	ND		4.9	0.68	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Benzo[b]fluoranthene	**1.5**	**J**	4.9	0.75	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Benzo[g,h,i]perylene	**0.89**	**J**	4.9	0.70	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Benzo[k]fluoranthene	ND		4.9	0.70	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Chrysene	**2.7**	**J**	4.9	0.70	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Dibenz(a,h)anthracene	ND		4.9	0.75	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Fluoranthene	ND		4.9	0.79	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Fluorene	ND		4.9	0.63	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Indeno[1,2,3-cd]pyrene	ND		4.9	0.75	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Naphthalene	ND		4.9	0.65	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Phenanthrene	**1.3**	**J**	4.9	0.70	ug/Kg		11/02/21 09:36	12/02/21 15:01	1
Pyrene	**1.0**	**J**	4.9	0.73	ug/Kg		11/02/21 09:36	12/02/21 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*98*		*53 - 121*	*11/02/21 09:36*	*12/02/21 15:01*	*1*
Fluoranthene-d10 (Surr)	*95*		*50 - 150*	*11/02/21 09:36*	*12/02/21 15:01*	*1*
2-methylnaphthalene-d10	*86*		*50 - 150*	*11/02/21 09:36*	*12/02/21 15:01*	*1*
2-Fluorobiphenyl (Surr)	*83*		*43 - 109*	*11/02/21 09:36*	*12/02/21 15:01*	*1*
Nitrobenzene-d5 (Surr)	*91*		*49 - 114*	*11/02/21 09:36*	*12/02/21 15:01*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		6500	1600	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Acenaphthylene	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Anthracene	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Benzo[a]anthracene	ND		6500	1800	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Benzoic acid	ND		31000	5700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Benzo[b]fluoranthene	ND		6500	1900	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Benzo[k]fluoranthene	ND		6500	2200	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Benzyl alcohol	ND		6500	3300	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Bis(2-chloroethoxy)methane	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Bis(2-chloroethyl)ether	ND		6500	1600	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
4-Bromophenyl phenyl ether	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Butyl benzyl phthalate	ND		6500	1900	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
2,4-Dimethylphenol	ND		6500	3300	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Dimethyl phthalate	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
2-Methyl-4,6-dinitrophenol	ND		31000	1600	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
2,4-Dinitrophenol	ND		31000	4200	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
2,4-Dinitrotoluene	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
2,6-Dinitrotoluene	ND		6500	1900	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Fluoranthene	ND		6500	1900	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Fluorene	ND		6500	1800	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Hexachlorobenzene	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Hexachlorobutadiene	ND		6500	1600	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Hexachlorocyclopentadiene	ND		31000	1200	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Hexachloroethane	ND		6500	1600	ug/Kg		11/02/21 11:54	11/11/21 11:41	20

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S8A-2
Date Collected: 10/27/21 11:03
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-24
Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
N-Nitrosodi-n-propylamine	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
1,4-Dichlorobenzene	ND		6500	1500	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
2-Chloronaphthalene	ND		6500	1600	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
2-Chlorophenol	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
4-Chlorophenyl phenyl ether	ND		6500	1800	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Chrysene	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Dibenz(a,h)anthracene	ND		6500	2000	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Dibenzofuran	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Benzo[g,h,i]perylene	ND		6500	2200	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Benzo[a]pyrene	ND		6500	1800	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Di-n-butyl phthalate	ND		6500	1900	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
1,2-Dichlorobenzene	ND		6500	1500	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
1,3-Dichlorobenzene	ND		6500	1500	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
3,3'-Dichlorobenzidine	ND		31000	1800	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
2,4-Dichlorophenol	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Diethyl phthalate	ND		6500	1800	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Indeno[1,2,3-cd]pyrene	ND		6500	1900	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Isophorone	ND		6500	1800	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
2-Methylnaphthalene	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
2-Methylphenol	ND		6500	1100	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Naphthalene	ND		6500	1600	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
2-Nitroaniline	ND		31000	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
3-Nitroaniline	ND		31000	3300	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
4-Nitroaniline	ND		31000	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Nitrobenzene	ND		6500	1500	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
2-Nitrophenol	ND		6500	1600	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
4-Nitrophenol	ND		31000	5500	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Pyrene	ND		6500	1800	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Pyridine	ND		13000	1400	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Pentachlorophenol	ND		31000	1000	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Phenanthrene	ND		6500	1800	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
1,2,4-Trichlorobenzene	ND		6500	1600	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
2,4,5-Trichlorophenol	ND		6500	1600	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
2,4,6-Trichlorophenol	ND		6500	1700	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Phenol	ND		6500	1600	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Azobenzene	ND		6500	1800	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
4-Chloroaniline	ND		6500	1100	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Bis(2-ethylhexyl) phthalate	ND		6500	1900	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
Di-n-octyl phthalate	ND		6500	1900	ug/Kg		11/02/21 11:54	11/11/21 11:41	20
4-Chloro-3-methylphenol	ND		6500	1800	ug/Kg		11/02/21 11:54	11/11/21 11:41	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*61*		*53 - 113*	*11/02/21 11:54*	*11/11/21 11:41*	*20*
Nitrobenzene-d5	*54*		*54 - 114*	*11/02/21 11:54*	*11/11/21 11:41*	*20*
Terphenyl-d14	*76*		*66 - 126*	*11/02/21 11:54*	*11/11/21 11:41*	*20*
2,4,6-Tribromophenol	*77*		*60 - 120*	*11/02/21 11:54*	*11/11/21 11:41*	*20*
2-Fluorobiphenyl (Surr)	*64*		*47 - 107*	*11/02/21 11:54*	*11/11/21 11:41*	*20*
Phenol-d5	*58*		*54 - 114*	*11/02/21 11:54*	*11/11/21 11:41*	*20*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S8A-2

Date Collected: 10/27/21 11:03
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-24

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
Aldrin	ND		1.6	0.13	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
Chlordane (technical)	ND		19	8.9	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
Endrin	ND		1.6	0.19	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
Endrin aldehyde	ND		1.6	0.54	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
trans-Chlordane	ND		1.6	0.57	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
Methoxychlor	ND		3.2	0.53	ug/Kg		11/03/21 10:17	11/12/21 20:54	1
Toxaphene	ND		64	21	ug/Kg		11/03/21 10:17	11/12/21 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*22*	*S1-*	*46 - 109*	*11/03/21 10:17*	*11/12/21 20:54*	*1*
DCB Decachlorobiphenyl	*23*	*S1-*	*46 - 109*	*11/03/21 10:17*	*11/12/21 20:54*	*1*
Tetrachloro-m-xylene	*45*	*S1-*	*47 - 107*	*11/03/21 10:17*	*11/12/21 20:54*	*1*
Tetrachloro-m-xylene	*40*	*S1-*	*47 - 107*	*11/03/21 10:17*	*11/12/21 20:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.95	0.21	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Arsenic	ND		2.4	2.2	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Barium	**110**		0.48	0.21	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Beryllium	**0.34**		0.24	0.16	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Cadmium	**0.68**		0.48	0.19	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Cobalt	**7.0**		0.95	0.22	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Chromium	**33**		0.95	0.17	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Copper	**13**		0.95	0.48	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Molybdenum	ND		0.48	0.43	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Nickel	**27**		0.48	0.41	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Antimony	ND		2.9	1.3	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Selenium	ND	L	4.8	1.8	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Thallium	ND		4.8	1.4	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Vanadium	**22**		0.95	0.16	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Zinc	**51**		9.5	4.9	mg/Kg		11/09/21 08:59	11/10/21 17:34	1
Lead	**94**		4.8	0.92	mg/Kg		11/09/21 08:59	11/10/21 17:34	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S8A-2

Date Collected: 10/27/21 11:03
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-24

Matrix: Solid

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.083	0.014	mg/Kg		11/09/21 08:55	11/09/21 12:33	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S8B-0.5
Date Collected: 10/27/21 11:27
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-25
Matrix: Solid

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		230	29	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Acenaphthylene	ND		230	30	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Anthracene	ND		230	31	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Benzo[a]anthracene	ND		230	33	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Benzo[a]pyrene	ND		230	32	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Benzo[b]fluoranthene	ND		230	35	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Benzo[g,h,i]perylene	ND		230	33	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Benzo[k]fluoranthene	ND		230	33	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Chrysene	**88**	**J**	230	33	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Dibenz(a,h)anthracene	ND		230	35	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Fluoranthene	ND		230	37	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Fluorene	ND		230	29	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Indeno[1,2,3-cd]pyrene	ND		230	35	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Naphthalene	ND		230	31	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Phenanthrene	ND		230	33	ug/Kg		11/02/21 09:36	11/08/21 12:03	50
Pyrene	ND		230	35	ug/Kg		11/02/21 09:36	11/08/21 12:03	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*115*		*53 - 121*	*11/02/21 09:36*	*11/08/21 12:03*	*50*
Fluoranthene-d10 (Surr)	*97*		*50 - 150*	*11/02/21 09:36*	*11/08/21 12:03*	*50*
2-methylnaphthalene-d10	*107*		*50 - 150*	*11/02/21 09:36*	*11/08/21 12:03*	*50*
2-Fluorobiphenyl (Surr)	*89*		*43 - 109*	*11/02/21 09:36*	*11/08/21 12:03*	*50*
Nitrobenzene-d5 (Surr)	*95*		*49 - 114*	*11/02/21 09:36*	*11/08/21 12:03*	*50*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		130000	32000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Acenaphthylene	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Anthracene	ND		130000	34000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Benzo[a]anthracene	ND		130000	36000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Benzoic acid	ND		630000	110000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Benzo[b]fluoranthene	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Benzo[k]fluoranthene	ND		130000	44000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Benzyl alcohol	ND		130000	66000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Bis(2-chloroethoxy)methane	ND		130000	34000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Bis(2-chloroethyl)ether	ND		130000	32000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
4-Bromophenyl phenyl ether	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Butyl benzyl phthalate	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
2,4-Dimethylphenol	ND		130000	65000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Dimethyl phthalate	ND		130000	34000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
2-Methyl-4,6-dinitrophenol	ND		630000	32000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
2,4-Dinitrophenol	ND		630000	84000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
2,4-Dinitrotoluene	ND		130000	35000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
2,6-Dinitrotoluene	ND		130000	39000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Fluoranthene	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Fluorene	ND		130000	36000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Hexachlorobenzene	ND		130000	35000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Hexachlorobutadiene	ND		130000	32000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Hexachlorocyclopentadiene	ND		630000	24000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Hexachloroethane	ND		130000	32000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40

Client Sample ID: AOC3/AOC10-S8B-0.5
Date Collected: 10/27/21 11:27
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-25
Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		130000	34000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
N-Nitrosodi-n-propylamine	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
1,4-Dichlorobenzene	ND		130000	30000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
2-Chloronaphthalene	ND		130000	32000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
2-Chlorophenol	ND		130000	34000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
4-Chlorophenyl phenyl ether	ND		130000	36000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Chrysene	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Dibenz(a,h)anthracene	ND		130000	40000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Dibenzofuran	ND		130000	34000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Benzo[g,h,i]perylene	ND		130000	43000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Benzo[a]pyrene	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Di-n-butyl phthalate	ND		130000	38000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
1,2-Dichlorobenzene	ND		130000	29000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
1,3-Dichlorobenzene	ND		130000	30000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
3,3'-Dichlorobenzidine	ND		630000	37000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
2,4-Dichlorophenol	ND		130000	35000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Diethyl phthalate	ND		130000	35000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Indeno[1,2,3-cd]pyrene	ND		130000	38000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Isophorone	ND		130000	36000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
2-Methylnaphthalene	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
2-Methylphenol	ND		130000	23000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Naphthalene	ND		130000	32000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
2-Nitroaniline	ND		630000	33000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
3-Nitroaniline	ND		630000	65000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
4-Nitroaniline	ND		630000	34000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Nitrobenzene	ND		130000	30000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
2-Nitrophenol	ND		130000	32000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
4-Nitrophenol	ND		630000	110000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Pyrene	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Pyridine	ND		260000	28000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Pentachlorophenol	ND		630000	20000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Phenanthrene	ND		130000	37000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
1,2,4-Trichlorobenzene	ND		130000	32000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
2,4,5-Trichlorophenol	ND		130000	32000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
2,4,6-Trichlorophenol	ND		130000	33000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Phenol	ND		130000	32000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Azobenzene	ND		130000	36000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
4-Chloroaniline	ND		130000	23000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Bis(2-ethylhexyl) phthalate	ND		130000	38000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
Di-n-octyl phthalate	ND		130000	38000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40
4-Chloro-3-methylphenol	ND		130000	36000	ug/Kg		11/02/21 11:54	11/11/21 12:06	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*54*		*53 - 113*	*11/02/21 11:54*	*11/11/21 12:06*	*40*
Nitrobenzene-d5	*90*		*54 - 114*	*11/02/21 11:54*	*11/11/21 12:06*	*40*
Terphenyl-d14	*90*		*66 - 126*	*11/02/21 11:54*	*11/11/21 12:06*	*40*
2,4,6-Tribromophenol	*0*	*S1-*	*60 - 120*	*11/02/21 11:54*	*11/11/21 12:06*	*40*
2-Fluorobiphenyl (Surr)	*71*		*47 - 107*	*11/02/21 11:54*	*11/11/21 12:06*	*40*
Phenol-d5	*48*	*S1-*	*54 - 114*	*11/02/21 11:54*	*11/11/21 12:06*	*40*

Client Sample ID: AOC3/AOC10-S8B-0.5

Date Collected: 10/27/21 11:27
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-25

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.0	1.1	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
4,4'-DDE	ND		8.0	0.99	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
4,4'-DDT	ND		8.0	1.2	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
Aldrin	ND		8.0	0.66	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
alpha-BHC	ND		8.0	0.75	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
cis-Chlordane	ND		8.0	0.85	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
beta-BHC	ND		8.0	1.0	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
Chlordane (technical)	ND		94	44	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
delta-BHC	ND		8.0	1.6	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
Dieldrin	ND		8.0	0.94	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
Endosulfan I	ND		8.0	0.85	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
Endosulfan II	ND		8.0	0.85	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
Endosulfan sulfate	ND		8.0	1.6	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
Endrin	ND		8.0	0.94	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
Endrin aldehyde	ND		8.0	2.7	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
Endrin ketone	ND		8.0	1.3	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
trans-Chlordane	ND		8.0	2.8	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
gamma-BHC (Lindane)	ND		8.0	0.66	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
Heptachlor	ND		8.0	0.71	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
Heptachlor epoxide	ND		8.0	0.85	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
Methoxychlor	ND		16	2.6	ug/Kg		11/04/21 09:18	11/10/21 19:05	5
Toxaphene	ND		320	110	ug/Kg		11/04/21 09:18	11/10/21 19:05	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*46 - 109*	*11/04/21 09:18*	*11/10/21 19:05*	*5*
DCB Decachlorobiphenyl	*36*	*S1-*	*46 - 109*	*11/04/21 09:18*	*11/10/21 19:05*	*5*
Tetrachloro-m-xylene	*73*		*47 - 107*	*11/04/21 09:18*	*11/10/21 19:05*	*5*
Tetrachloro-m-xylene	*59*		*47 - 107*	*11/04/21 09:18*	*11/10/21 19:05*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/04/21 09:21	11/11/21 14:21	1
PCB-1221	ND		31	3.4	ug/Kg		11/04/21 09:21	11/11/21 14:21	1
PCB-1232	ND		31	4.5	ug/Kg		11/04/21 09:21	11/11/21 14:21	1
PCB-1242	ND		31	5.5	ug/Kg		11/04/21 09:21	11/11/21 14:21	1
PCB-1248	ND		31	2.3	ug/Kg		11/04/21 09:21	11/11/21 14:21	1
PCB-1254	ND		31	3.6	ug/Kg		11/04/21 09:21	11/11/21 14:21	1
PCB-1260	ND		31	2.5	ug/Kg		11/04/21 09:21	11/11/21 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*52 - 138*	*11/04/21 09:21*	*11/11/21 14:21*	*1*
Tetrachloro-m-xylene	*59*		*56 - 114*	*11/04/21 09:21*	*11/11/21 14:21*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 17:36	1
Arsenic	ND		2.6	2.3	mg/Kg		11/09/21 08:59	11/10/21 17:36	1
Barium	**76**		0.51	0.23	mg/Kg		11/09/21 08:59	11/10/21 17:36	1
Beryllium	**0.24**	**J**	0.26	0.18	mg/Kg		11/09/21 08:59	11/10/21 17:36	1
Cadmium	**0.32**	**J**	0.51	0.21	mg/Kg		11/09/21 08:59	11/10/21 17:36	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S8B-0.5
Date Collected: 10/27/21 11:27
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-25
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	4.2		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 17:36	1
Chromium	27		1.0	0.18	mg/Kg		11/09/21 08:59	11/10/21 17:36	1
Copper	6.4		1.0	0.52	mg/Kg		11/09/21 08:59	11/10/21 17:36	1
Molybdenum	ND		0.51	0.46	mg/Kg		11/09/21 08:59	11/10/21 17:36	1
Nickel	21		0.51	0.44	mg/Kg		11/09/21 08:59	11/10/21 17:36	1
Antimony	ND		3.1	1.4	mg/Kg		11/09/21 08:59	11/10/21 17:36	1
Selenium	ND		5.1	1.9	mg/Kg		11/09/21 08:59	11/10/21 17:36	1
Thallium	ND		5.1	1.5	mg/Kg		11/09/21 08:59	11/10/21 17:36	1
Vanadium	14		1.0	0.18	mg/Kg		11/09/21 08:59	11/10/21 17:36	1
Zinc	20		10	5.2	mg/Kg		11/09/21 08:59	11/10/21 17:36	1
Lead	3.8	J	5.1	0.99	mg/Kg		11/09/21 08:59	11/10/21 17:36	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16		0.086	0.014	mg/Kg		11/09/21 08:55	11/09/21 12:35	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S8B-2

Date Collected: 10/27/21 11:29
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-26

Matrix: Solid

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.6	0.58	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Acenaphthylene	ND		4.6	0.60	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Anthracene	ND		4.6	0.61	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Benzo[a]anthracene	ND		4.6	0.65	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Benzo[a]pyrene	ND		4.6	0.64	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Benzo[b]fluoranthene	**1.0**	**J**	4.6	0.71	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Benzo[g,h,i]perylene	**0.73**	**J**	4.6	0.66	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Benzo[k]fluoranthene	ND		4.6	0.66	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Chrysene	**2.7**	**J**	4.6	0.66	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Dibenz(a,h)anthracene	ND		4.6	0.71	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Fluoranthene	ND		4.6	0.74	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Fluorene	ND		4.6	0.59	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Indeno[1,2,3-cd]pyrene	ND		4.6	0.71	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Naphthalene	ND		4.6	0.61	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Phenanthrene	**1.3**	**J**	4.6	0.66	ug/Kg		11/02/21 09:36	12/02/21 15:30	1
Pyrene	**0.81**	**J**	4.6	0.69	ug/Kg		11/02/21 09:36	12/02/21 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*93*		*53 - 121*	*11/02/21 09:36*	*12/02/21 15:30*	*1*
Fluoranthene-d10 (Surr)	*93*		*50 - 150*	*11/02/21 09:36*	*12/02/21 15:30*	*1*
2-methylnaphthalene-d10	*82*		*50 - 150*	*11/02/21 09:36*	*12/02/21 15:30*	*1*
2-Fluorobiphenyl (Surr)	*80*		*43 - 109*	*11/02/21 09:36*	*12/02/21 15:30*	*1*
Nitrobenzene-d5 (Surr)	*90*		*49 - 114*	*11/02/21 09:36*	*12/02/21 15:30*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		13000	3200	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Acenaphthylene	ND		13000	3300	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Anthracene	ND		13000	3300	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Benzo[a]anthracene	ND		13000	3600	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Benzoic acid	ND		62000	11000	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Benzo[b]fluoranthene	ND		13000	3700	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Benzo[k]fluoranthene	ND		13000	4400	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Benzyl alcohol	ND		13000	6600	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Bis(2-chloroethoxy)methane	ND		13000	3400	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Bis(2-chloroethyl)ether	ND		13000	3100	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
4-Bromophenyl phenyl ether	ND		13000	3300	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Butyl benzyl phthalate	ND		13000	3700	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
2,4-Dimethylphenol	ND		13000	6500	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Dimethyl phthalate	ND		13000	3400	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
2-Methyl-4,6-dinitrophenol	ND		62000	3100	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
2,4-Dinitrophenol	ND		62000	8300	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
2,4-Dinitrotoluene	ND		13000	3500	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
2,6-Dinitrotoluene	ND		13000	3800	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Fluoranthene	ND		13000	3700	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Fluorene	ND		13000	3600	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Hexachlorobenzene	ND		13000	3500	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Hexachlorobutadiene	ND		13000	3200	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Hexachlorocyclopentadiene	ND		62000	2400	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Hexachloroethane	ND		13000	3100	ug/Kg		11/02/21 11:54	11/11/21 12:31	40

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S8B-2
Date Collected: 10/27/21 11:29
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-26
Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		13000	3300	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
N-Nitrosodi-n-propylamine	ND		13000	3300	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
1,4-Dichlorobenzene	ND		13000	3000	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
2-Chloronaphthalene	ND		13000	3100	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
2-Chlorophenol	ND		13000	3400	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
4-Chlorophenyl phenyl ether	ND		13000	3600	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Chrysene	ND		13000	3300	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Dibenz(a,h)anthracene	ND		13000	4000	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Dibenzofuran	ND		13000	3300	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Benzo[g,h,i]perylene	ND		13000	4300	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Benzo[a]pyrene	ND		13000	3600	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Di-n-butyl phthalate	ND		13000	3800	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
1,2-Dichlorobenzene	ND		13000	2900	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
1,3-Dichlorobenzene	ND		13000	3000	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
3,3'-Dichlorobenzidine	ND		62000	3600	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
2,4-Dichlorophenol	ND		13000	3500	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Diethyl phthalate	ND		13000	3500	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Indeno[1,2,3-cd]pyrene	ND		13000	3700	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Isophorone	ND		13000	3600	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
2-Methylnaphthalene	ND		13000	3300	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
2-Methylphenol	ND		13000	2300	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Naphthalene	ND		13000	3200	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
2-Nitroaniline	ND		62000	3300	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
3-Nitroaniline	ND		62000	6500	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
4-Nitroaniline	ND		62000	3400	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Nitrobenzene	ND		13000	2900	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
2-Nitrophenol	ND		13000	3200	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
4-Nitrophenol	ND		62000	11000	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Pyrene	ND		13000	3600	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Pyridine	ND		26000	2800	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Pentachlorophenol	ND		62000	2000	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Phenanthrene	ND		13000	3600	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
1,2,4-Trichlorobenzene	ND		13000	3200	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
2,4,5-Trichlorophenol	ND		13000	3200	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
2,4,6-Trichlorophenol	ND		13000	3300	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Phenol	ND		13000	3200	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Azobenzene	ND		13000	3600	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
4-Chloroaniline	ND		13000	2300	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Bis(2-ethylhexyl) phthalate	ND		13000	3800	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
Di-n-octyl phthalate	ND		13000	3800	ug/Kg		11/02/21 11:54	11/11/21 12:31	40
4-Chloro-3-methylphenol	ND		13000	3600	ug/Kg		11/02/21 11:54	11/11/21 12:31	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*56*		*53 - 113*	*11/02/21 11:54*	*11/11/21 12:31*	*40*
Nitrobenzene-d5	*61*		*54 - 114*	*11/02/21 11:54*	*11/11/21 12:31*	*40*
Terphenyl-d14	*74*		*66 - 126*	*11/02/21 11:54*	*11/11/21 12:31*	*40*
2,4,6-Tribromophenol	*91*		*60 - 120*	*11/02/21 11:54*	*11/11/21 12:31*	*40*
2-Fluorobiphenyl (Surr)	*71*		*47 - 107*	*11/02/21 11:54*	*11/11/21 12:31*	*40*
Phenol-d5	*60*		*54 - 114*	*11/02/21 11:54*	*11/11/21 12:31*	*40*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S8B-2

Date Collected: 10/27/21 11:29
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-26

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
4,4'-DDT	ND		1.7	0.24	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
Aldrin	ND		1.7	0.14	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
Chlordane (technical)	ND		20	9.2	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
Endrin	ND		1.7	0.20	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
Endrin ketone	ND		1.7	0.26	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
Methoxychlor	ND		3.3	0.55	ug/Kg		11/04/21 09:18	11/10/21 19:23	1
Toxaphene	ND		66	22	ug/Kg		11/04/21 09:18	11/10/21 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*47*		*46 - 109*	*11/04/21 09:18*	*11/10/21 19:23*	*1*
DCB Decachlorobiphenyl	*45*	*S1-*	*46 - 109*	*11/04/21 09:18*	*11/10/21 19:23*	*1*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/04/21 09:18*	*11/10/21 19:23*	*1*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/04/21 09:18*	*11/10/21 19:23*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Arsenic	ND		2.5	2.3	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Barium	**120**		0.51	0.22	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Beryllium	**0.34**		0.25	0.17	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Cadmium	**0.70**		0.51	0.20	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Cobalt	**5.7**		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Chromium	**22**		1.0	0.18	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Copper	**26**		1.0	0.51	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Molybdenum	ND		0.51	0.46	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Nickel	**20**		0.51	0.43	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Antimony	ND		3.0	1.4	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Selenium	ND		5.1	1.9	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Thallium	ND		5.1	1.5	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Vanadium	**17**		1.0	0.17	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Zinc	**120**		10	5.2	mg/Kg		11/09/21 08:59	11/10/21 17:38	1
Lead	**150**		5.1	0.98	mg/Kg		11/09/21 08:59	11/10/21 17:38	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S8B-2

Lab Sample ID: 320-80943-26

Date Collected: 10/27/21 11:29

Matrix: Solid

Date Received: 10/28/21 12:50

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18		0.082	0.013	mg/Kg		11/09/21 08:55	11/09/21 12:37	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S9C-0.5
Date Collected: 10/27/21 11:41
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-27
Matrix: Solid

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		250	31	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Acenaphthylene	ND		250	32	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Anthracene	ND		250	33	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Benzo[a]anthracene	ND		250	35	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Benzo[a]pyrene	ND		250	34	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Benzo[b]fluoranthene	ND		250	38	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Benzo[g,h,i]perylene	ND		250	35	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Benzo[k]fluoranthene	ND		250	35	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Chrysene	**91**	**J**	250	35	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Dibenz(a,h)anthracene	ND		250	38	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Fluoranthene	ND		250	40	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Fluorene	ND		250	31	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Indeno[1,2,3-cd]pyrene	ND		250	38	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Naphthalene	ND		250	33	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Phenanthrene	**47**	**J**	250	35	ug/Kg		11/02/21 09:36	11/08/21 13:03	50
Pyrene	ND		250	37	ug/Kg		11/02/21 09:36	11/08/21 13:03	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*96*		*53 - 121*	*11/02/21 09:36*	*11/08/21 13:03*	*50*
Fluoranthene-d10 (Surr)	*102*		*50 - 150*	*11/02/21 09:36*	*11/08/21 13:03*	*50*
2-methylnaphthalene-d10	*103*		*50 - 150*	*11/02/21 09:36*	*11/08/21 13:03*	*50*
2-Fluorobiphenyl (Surr)	*93*		*43 - 109*	*11/02/21 09:36*	*11/08/21 13:03*	*50*
Nitrobenzene-d5 (Surr)	*121*	*S1+*	*49 - 114*	*11/02/21 09:36*	*11/08/21 13:03*	*50*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Acenaphthylene	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Anthracene	ND		130000	34000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Benzo[a]anthracene	ND		130000	36000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Benzoic acid	ND		630000	110000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Benzo[b]fluoranthene	ND		130000	37000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Benzo[k]fluoranthene	ND		130000	44000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Benzyl alcohol	ND		130000	67000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Bis(2-chloroethoxy)methane	ND		130000	34000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Bis(2-chloroethyl)ether	ND		130000	32000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
4-Bromophenyl phenyl ether	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Butyl benzyl phthalate	ND		130000	37000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
2,4-Dimethylphenol	ND		130000	65000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Dimethyl phthalate	ND		130000	34000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
2-Methyl-4,6-dinitrophenol	ND		630000	32000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
2,4-Dinitrophenol	ND		630000	84000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
2,4-Dinitrotoluene	ND		130000	35000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
2,6-Dinitrotoluene	ND		130000	39000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Fluoranthene	ND		130000	37000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Fluorene	ND		130000	36000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Hexachlorobenzene	ND		130000	35000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Hexachlorobutadiene	ND		130000	32000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Hexachlorocyclopentadiene	ND		630000	24000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Hexachloroethane	ND		130000	32000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40

Client Sample ID: AOC3/AOC10-S9C-0.5
Date Collected: 10/27/21 11:41
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-27
Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		130000	34000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
N-Nitrosodi-n-propylamine	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
1,4-Dichlorobenzene	ND		130000	30000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
2-Chloronaphthalene	ND		130000	32000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
2-Chlorophenol	ND		130000	34000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
4-Chlorophenyl phenyl ether	ND		130000	36000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Chrysene	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Dibenz(a,h)anthracene	ND		130000	40000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Dibenzofuran	ND		130000	34000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Benzo[g,h,i]perylene	ND		130000	43000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Benzo[a]pyrene	ND		130000	37000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Di-n-butyl phthalate	ND		130000	38000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
1,2-Dichlorobenzene	ND		130000	29000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
1,3-Dichlorobenzene	ND		130000	31000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
3,3'-Dichlorobenzidine	ND		630000	37000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
2,4-Dichlorophenol	ND		130000	35000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Diethyl phthalate	ND		130000	35000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Indeno[1,2,3-cd]pyrene	ND		130000	38000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Isophorone	ND		130000	36000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
2-Methylnaphthalene	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
2-Methylphenol	ND		130000	23000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Naphthalene	ND		130000	32000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
2-Nitroaniline	ND		630000	33000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
3-Nitroaniline	ND		630000	65000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
4-Nitroaniline	ND		630000	34000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Nitrobenzene	ND		130000	30000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
2-Nitrophenol	ND		130000	32000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
4-Nitrophenol	ND		630000	110000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Pyrene	ND		130000	37000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Pyridine	ND		260000	28000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Pentachlorophenol	ND		630000	20000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Phenanthrene	ND		130000	37000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
1,2,4-Trichlorobenzene	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
2,4,5-Trichlorophenol	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
2,4,6-Trichlorophenol	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Phenol	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Azobenzene	ND		130000	36000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
4-Chloroaniline	ND		130000	23000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Bis(2-ethylhexyl) phthalate	ND		130000	38000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
Di-n-octyl phthalate	ND		130000	38000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40
4-Chloro-3-methylphenol	ND		130000	36000	ug/Kg		11/02/21 11:59	11/11/21 12:56	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*37*	*S1-*	*53 - 113*	*11/02/21 11:59*	*11/11/21 12:56*	*40*
Nitrobenzene-d5	*64*		*54 - 114*	*11/02/21 11:59*	*11/11/21 12:56*	*40*
Terphenyl-d14	*87*		*66 - 126*	*11/02/21 11:59*	*11/11/21 12:56*	*40*
2,4,6-Tribromophenol	*0*	*S1-*	*60 - 120*	*11/02/21 11:59*	*11/11/21 12:56*	*40*
2-Fluorobiphenyl (Surr)	*100*		*47 - 107*	*11/02/21 11:59*	*11/11/21 12:56*	*40*
Phenol-d5	*67*		*54 - 114*	*11/02/21 11:59*	*11/11/21 12:56*	*40*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S9C-0.5

Date Collected: 10/27/21 11:41
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-27

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.3	1.1	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
4,4'-DDE	ND		8.3	1.0	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
4,4'-DDT	ND		8.3	1.2	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
Aldrin	ND		8.3	0.68	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
alpha-BHC	ND		8.3	0.78	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
cis-Chlordane	ND		8.3	0.87	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
beta-BHC	ND		8.3	1.1	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
Chlordane (technical)	ND		97	46	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
delta-BHC	ND		8.3	1.7	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
Dieldrin	ND		8.3	0.97	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
Endosulfan I	ND		8.3	0.87	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
Endosulfan II	ND		8.3	0.87	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
Endosulfan sulfate	ND		8.3	1.7	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
Endrin	ND		8.3	0.97	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
Endrin aldehyde	ND		8.3	2.8	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
Endrin ketone	ND		8.3	1.3	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
trans-Chlordane	ND		8.3	2.9	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
gamma-BHC (Lindane)	ND		8.3	0.68	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
Heptachlor	ND		8.3	0.73	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
Heptachlor epoxide	ND		8.3	0.87	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
Methoxychlor	ND		17	2.7	ug/Kg		11/04/21 09:18	11/10/21 19:42	5
Toxaphene	ND		330	110	ug/Kg		11/04/21 09:18	11/10/21 19:42	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*46 - 109*	*11/04/21 09:18*	*11/10/21 19:42*	*5*
DCB Decachlorobiphenyl	*47*		*46 - 109*	*11/04/21 09:18*	*11/10/21 19:42*	*5*
Tetrachloro-m-xylene	*76*		*47 - 107*	*11/04/21 09:18*	*11/10/21 19:42*	*5*
Tetrachloro-m-xylene	*62*		*47 - 107*	*11/04/21 09:18*	*11/10/21 19:42*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/04/21 09:21	11/11/21 14:42	1
PCB-1221	ND		32	3.5	ug/Kg		11/04/21 09:21	11/11/21 14:42	1
PCB-1232	ND		32	4.7	ug/Kg		11/04/21 09:21	11/11/21 14:42	1
PCB-1242	ND		32	5.7	ug/Kg		11/04/21 09:21	11/11/21 14:42	1
PCB-1248	ND		32	2.4	ug/Kg		11/04/21 09:21	11/11/21 14:42	1
PCB-1254	ND		32	3.7	ug/Kg		11/04/21 09:21	11/11/21 14:42	1
PCB-1260	ND		32	2.6	ug/Kg		11/04/21 09:21	11/11/21 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*58*		*52 - 138*	*11/04/21 09:21*	*11/11/21 14:42*	*1*
Tetrachloro-m-xylene	*58*		*56 - 114*	*11/04/21 09:21*	*11/11/21 14:42*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 17:40	1
Arsenic	ND		2.6	2.3	mg/Kg		11/09/21 08:59	11/10/21 17:40	1
Barium	**110**		0.52	0.23	mg/Kg		11/09/21 08:59	11/10/21 17:40	1
Beryllium	**0.31**		0.26	0.18	mg/Kg		11/09/21 08:59	11/10/21 17:40	1
Cadmium	**0.63**		0.52	0.21	mg/Kg		11/09/21 08:59	11/10/21 17:40	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S9C-0.5
Date Collected: 10/27/21 11:41
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-27
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	5.2		1.0	0.24	mg/Kg		11/09/21 08:59	11/10/21 17:40	1
Chromium	17		1.0	0.18	mg/Kg		11/09/21 08:59	11/10/21 17:40	1
Copper	29		1.0	0.53	mg/Kg		11/09/21 08:59	11/10/21 17:40	1
Molybdenum	ND		0.52	0.47	mg/Kg		11/09/21 08:59	11/10/21 17:40	1
Nickel	18		0.52	0.44	mg/Kg		11/09/21 08:59	11/10/21 17:40	1
Antimony	ND		3.1	1.4	mg/Kg		11/09/21 08:59	11/10/21 17:40	1
Selenium	ND		5.2	1.9	mg/Kg		11/09/21 08:59	11/10/21 17:40	1
Thallium	ND		5.2	1.5	mg/Kg		11/09/21 08:59	11/10/21 17:40	1
Vanadium	15		1.0	0.18	mg/Kg		11/09/21 08:59	11/10/21 17:40	1
Zinc	120		10	5.3	mg/Kg		11/09/21 08:59	11/10/21 17:40	1
Lead	600		5.2	1.0	mg/Kg		11/09/21 08:59	11/10/21 17:40	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.083	0.014	mg/Kg		11/09/21 08:55	11/09/21 12:42	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S9C-0.5DUP

Lab Sample ID: 320-80943-28

Date Collected: 10/27/21 11:41

Matrix: Solid

Date Received: 10/28/21 12:50

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		250	31	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Acenaphthylene	ND		250	33	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Anthracene	ND		250	33	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Benzo[a]anthracene	ND		250	35	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Benzo[a]pyrene	**37**	**J**	250	35	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Benzo[b]fluoranthene	ND		250	38	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Benzo[g,h,i]perylene	ND		250	36	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Benzo[k]fluoranthene	ND		250	36	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Chrysene	**110**	**J**	250	36	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Dibenz(a,h)anthracene	ND		250	38	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Fluoranthene	ND		250	40	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Fluorene	ND		250	32	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Indeno[1,2,3-cd]pyrene	ND		250	38	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Naphthalene	ND		250	33	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Phenanthrene	**54**	**J**	250	36	ug/Kg		11/02/21 09:36	11/08/21 13:32	50
Pyrene	**44**	**J**	250	37	ug/Kg		11/02/21 09:36	11/08/21 13:32	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*83*		*53 - 121*	*11/02/21 09:36*	*11/08/21 13:32*	*50*
Fluoranthene-d10 (Surr)	*112*		*50 - 150*	*11/02/21 09:36*	*11/08/21 13:32*	*50*
2-methylnaphthalene-d10	*90*		*50 - 150*	*11/02/21 09:36*	*11/08/21 13:32*	*50*
2-Fluorobiphenyl (Surr)	*86*		*43 - 109*	*11/02/21 09:36*	*11/08/21 13:32*	*50*
Nitrobenzene-d5 (Surr)	*78*		*49 - 114*	*11/02/21 09:36*	*11/08/21 13:32*	*50*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		130000	32000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Acenaphthylene	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Anthracene	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Benzo[a]anthracene	ND		130000	36000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Benzoic acid	ND		620000	110000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Benzo[b]fluoranthene	ND		130000	37000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Benzo[k]fluoranthene	ND		130000	44000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Benzyl alcohol	ND		130000	66000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Bis(2-chloroethoxy)methane	ND		130000	34000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Bis(2-chloroethyl)ether	ND		130000	31000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
4-Bromophenyl phenyl ether	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Butyl benzyl phthalate	ND		130000	37000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
2,4-Dimethylphenol	ND		130000	65000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Dimethyl phthalate	ND		130000	34000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
2-Methyl-4,6-dinitrophenol	ND		620000	31000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
2,4-Dinitrophenol	ND		620000	83000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
2,4-Dinitrotoluene	ND		130000	35000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
2,6-Dinitrotoluene	ND		130000	38000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Fluoranthene	ND		130000	37000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Fluorene	ND		130000	36000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Hexachlorobenzene	ND		130000	35000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Hexachlorobutadiene	ND		130000	32000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Hexachlorocyclopentadiene	ND		620000	24000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Hexachloroethane	ND		130000	31000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S9C-0.5DUP
Date Collected: 10/27/21 11:41
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-28
Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
N-Nitrosodi-n-propylamine	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
1,4-Dichlorobenzene	ND		130000	30000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
2-Chloronaphthalene	ND		130000	31000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
2-Chlorophenol	ND		130000	34000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
4-Chlorophenyl phenyl ether	ND		130000	36000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Chrysene	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Dibenz(a,h)anthracene	ND		130000	40000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Dibenzofuran	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Benzo[g,h,i]perylene	ND		130000	43000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Benzo[a]pyrene	ND		130000	37000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Di-n-butyl phthalate	ND		130000	38000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
1,2-Dichlorobenzene	ND		130000	29000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
1,3-Dichlorobenzene	ND		130000	30000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
3,3'-Dichlorobenzidine	ND		620000	37000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
2,4-Dichlorophenol	ND		130000	35000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Diethyl phthalate	ND		130000	35000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Indeno[1,2,3-cd]pyrene	ND		130000	37000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Isophorone	ND		130000	36000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
2-Methylnaphthalene	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
2-Methylphenol	ND		130000	23000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Naphthalene	ND		130000	32000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
2-Nitroaniline	ND		620000	33000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
3-Nitroaniline	ND		620000	65000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
4-Nitroaniline	ND		620000	34000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Nitrobenzene	ND		130000	30000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
2-Nitrophenol	ND		130000	32000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
4-Nitrophenol	ND		620000	110000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Pyrene	ND		130000	37000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Pyridine	ND		260000	28000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Pentachlorophenol	ND		620000	20000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Phenanthrene	ND		130000	37000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
1,2,4-Trichlorobenzene	ND		130000	32000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
2,4,5-Trichlorophenol	ND		130000	32000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
2,4,6-Trichlorophenol	ND		130000	33000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Phenol	ND		130000	32000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Azobenzene	ND		130000	36000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
4-Chloroaniline	ND		130000	23000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Bis(2-ethylhexyl) phthalate	ND		130000	38000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
Di-n-octyl phthalate	ND		130000	38000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40
4-Chloro-3-methylphenol	ND		130000	36000	ug/Kg		11/02/21 11:59	11/11/21 13:21	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*42*	*S1-*	*53 - 113*	*11/02/21 11:59*	*11/11/21 13:21*	*40*
Nitrobenzene-d5	*55*		*54 - 114*	*11/02/21 11:59*	*11/11/21 13:21*	*40*
Terphenyl-d14	*100*		*66 - 126*	*11/02/21 11:59*	*11/11/21 13:21*	*40*
2,4,6-Tribromophenol	*0*	*S1-*	*60 - 120*	*11/02/21 11:59*	*11/11/21 13:21*	*40*
2-Fluorobiphenyl (Surr)	*69*		*47 - 107*	*11/02/21 11:59*	*11/11/21 13:21*	*40*
Phenol-d5	*50*	*S1-*	*54 - 114*	*11/02/21 11:59*	*11/11/21 13:21*	*40*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S9C-0.5DUP

Date Collected: 10/27/21 11:41
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-28

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.3	1.1	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
4,4'-DDE	ND		8.3	1.0	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
4,4'-DDT	ND		8.3	1.2	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
Aldrin	ND		8.3	0.69	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
alpha-BHC	ND		8.3	0.78	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
cis-Chlordane	ND		8.3	0.88	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
beta-BHC	ND		8.3	1.1	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
Chlordane (technical)	ND		98	46	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
delta-BHC	ND		8.3	1.7	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
Dieldrin	ND		8.3	0.98	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
Endosulfan I	ND		8.3	0.88	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
Endosulfan II	ND		8.3	0.88	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
Endosulfan sulfate	ND		8.3	1.7	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
Endrin	ND		8.3	0.98	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
Endrin aldehyde	ND		8.3	2.8	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
Endrin ketone	ND		8.3	1.3	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
trans-Chlordane	ND		8.3	2.9	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
gamma-BHC (Lindane)	ND		8.3	0.69	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
Heptachlor	ND		8.3	0.74	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
Heptachlor epoxide	ND		8.3	0.88	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
Methoxychlor	ND		17	2.7	ug/Kg		11/04/21 09:18	11/10/21 20:01	5
Toxaphene	ND		330	110	ug/Kg		11/04/21 09:18	11/10/21 20:01	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*74*		*46 - 109*	*11/04/21 09:18*	*11/10/21 20:01*	*5*
DCB Decachlorobiphenyl	*52*		*46 - 109*	*11/04/21 09:18*	*11/10/21 20:01*	*5*
Tetrachloro-m-xylene	*62*		*47 - 107*	*11/04/21 09:18*	*11/10/21 20:01*	*5*
Tetrachloro-m-xylene	*54*		*47 - 107*	*11/04/21 09:18*	*11/10/21 20:01*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/04/21 09:21	11/11/21 15:02	1
PCB-1221	ND		32	3.5	ug/Kg		11/04/21 09:21	11/11/21 15:02	1
PCB-1232	ND		32	4.7	ug/Kg		11/04/21 09:21	11/11/21 15:02	1
PCB-1242	ND		32	5.8	ug/Kg		11/04/21 09:21	11/11/21 15:02	1
PCB-1248	ND		32	2.4	ug/Kg		11/04/21 09:21	11/11/21 15:02	1
PCB-1254	ND		32	3.7	ug/Kg		11/04/21 09:21	11/11/21 15:02	1
PCB-1260	ND		32	2.6	ug/Kg		11/04/21 09:21	11/11/21 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*51*	*S1-*	*52 - 138*	*11/04/21 09:21*	*11/11/21 15:02*	*1*
Tetrachloro-m-xylene	*55*	*S1-*	*56 - 114*	*11/04/21 09:21*	*11/11/21 15:02*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 17:49	1
Arsenic	ND		2.5	2.3	mg/Kg		11/09/21 08:59	11/10/21 17:49	1
Barium	**73**		0.50	0.22	mg/Kg		11/09/21 08:59	11/10/21 17:49	1
Beryllium	ND		0.25	0.17	mg/Kg		11/09/21 08:59	11/10/21 17:49	1
Cadmium	**0.50**		0.50	0.20	mg/Kg		11/09/21 08:59	11/10/21 17:49	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S9C-0.5DUP

Lab Sample ID: 320-80943-28

Date Collected: 10/27/21 11:41

Matrix: Solid

Date Received: 10/28/21 12:50

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	4.3		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 17:49	1
Chromium	12		1.0	0.18	mg/Kg		11/09/21 08:59	11/10/21 17:49	1
Copper	14		1.0	0.51	mg/Kg		11/09/21 08:59	11/10/21 17:49	1
Molybdenum	ND		0.50	0.45	mg/Kg		11/09/21 08:59	11/10/21 17:49	1
Nickel	13		0.50	0.43	mg/Kg		11/09/21 08:59	11/10/21 17:49	1
Antimony	ND		3.0	1.4	mg/Kg		11/09/21 08:59	11/10/21 17:49	1
Selenium	ND		5.0	1.9	mg/Kg		11/09/21 08:59	11/10/21 17:49	1
Thallium	ND		5.0	1.5	mg/Kg		11/09/21 08:59	11/10/21 17:49	1
Vanadium	11		1.0	0.17	mg/Kg		11/09/21 08:59	11/10/21 17:49	1
Zinc	86		10	5.1	mg/Kg		11/09/21 08:59	11/10/21 17:49	1
Lead	120		5.0	0.97	mg/Kg		11/09/21 08:59	11/10/21 17:49	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15		0.085	0.014	mg/Kg		11/09/21 08:55	11/09/21 12:44	1

Client Sample ID: AOC3/AOC10-S9C-2

Lab Sample ID: 320-80943-29

Date Collected: 10/27/21 11:44

Matrix: Solid

Date Received: 10/28/21 12:50

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		250	31	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Acenaphthylene	ND		250	32	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Anthracene	ND		250	33	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Benzo[a]anthracene	ND	F2	250	35	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Benzo[a]pyrene	ND	F2	250	34	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Benzo[b]fluoranthene	ND	F2	250	38	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Benzo[g,h,i]perylene	**45**	**J F2 F1**	250	35	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Benzo[k]fluoranthene	ND		250	35	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Chrysene	ND	F2	250	35	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Dibenz(a,h)anthracene	ND		250	38	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Fluoranthene	ND		250	40	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Fluorene	ND		250	31	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Indeno[1,2,3-cd]pyrene	ND	F2	250	38	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Naphthalene	ND		250	33	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Phenanthrene	ND		250	35	ug/Kg		11/02/21 09:36	11/08/21 14:02	50
Pyrene	ND	F2	250	37	ug/Kg		11/02/21 09:36	11/08/21 14:02	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*0*	*S1-*	*53 - 121*	*11/02/21 09:36*	*11/08/21 14:02*	*50*
Fluoranthene-d10 (Surr)	*84*		*50 - 150*	*11/02/21 09:36*	*11/08/21 14:02*	*50*
2-methylnaphthalene-d10	*82*		*50 - 150*	*11/02/21 09:36*	*11/08/21 14:02*	*50*
2-Fluorobiphenyl (Surr)	*71*		*43 - 109*	*11/02/21 09:36*	*11/08/21 14:02*	*50*
Nitrobenzene-d5 (Surr)	*66*		*49 - 114*	*11/02/21 09:36*	*11/08/21 14:02*	*50*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		320000	81000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Acenaphthylene	ND		320000	83000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Anthracene	ND		320000	84000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Benzo[a]anthracene	ND		320000	90000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Benzoic acid	ND		1600000	280000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Benzo[b]fluoranthene	ND		320000	93000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Benzo[k]fluoranthene	ND		320000	110000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Benzyl alcohol	ND		320000	170000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Bis(2-chloroethoxy)methane	ND		320000	86000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Bis(2-chloroethyl)ether	ND		320000	79000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
4-Bromophenyl phenyl ether	ND		320000	83000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Butyl benzyl phthalate	ND		320000	93000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
2,4-Dimethylphenol	ND		320000	160000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Dimethyl phthalate	ND		320000	85000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
2-Methyl-4,6-dinitrophenol	ND		1600000	79000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
2,4-Dinitrophenol	ND		1600000	210000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
2,4-Dinitrotoluene	ND		320000	87000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
2,6-Dinitrotoluene	ND		320000	97000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Fluoranthene	ND		320000	93000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Fluorene	ND		320000	90000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Hexachlorobenzene	ND		320000	87000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Hexachlorobutadiene	ND		320000	80000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Hexachlorocyclopentadiene	ND		1600000	61000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Hexachloroethane	ND		320000	79000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S9C-2
Date Collected: 10/27/21 11:44
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-29
Matrix: Solid

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		320000	84000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
N-Nitrosodi-n-propylamine	ND		320000	82000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
1,4-Dichlorobenzene	ND		320000	75000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
2-Chloronaphthalene	ND		320000	79000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
2-Chlorophenol	ND		320000	86000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
4-Chlorophenyl phenyl ether	ND		320000	91000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Chrysene	ND		320000	82000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Dibenz(a,h)anthracene	ND		320000	100000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Dibenzofuran	ND		320000	84000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Benzo[g,h,i]perylene	ND		320000	110000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Benzo[a]pyrene	ND		320000	92000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Di-n-butyl phthalate	ND		320000	95000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
1,2-Dichlorobenzene	ND		320000	73000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
1,3-Dichlorobenzene	ND		320000	76000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
3,3'-Dichlorobenzidine	ND		1600000	92000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
2,4-Dichlorophenol	ND		320000	87000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Diethyl phthalate	ND		320000	88000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Indeno[1,2,3-cd]pyrene	ND		320000	94000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Isophorone	ND		320000	91000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
2-Methylnaphthalene	ND		320000	83000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
2-Methylphenol	ND		320000	57000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Naphthalene	ND		320000	80000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
2-Nitroaniline	ND		1600000	82000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
3-Nitroaniline	ND		1600000	160000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
4-Nitroaniline	ND		1600000	86000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Nitrobenzene	ND		320000	74000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
2-Nitrophenol	ND		320000	80000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
4-Nitrophenol	ND		1600000	270000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Pyrene	ND		320000	92000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Pyridine	ND		640000	70000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Pentachlorophenol	ND		1600000	50000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Phenanthrene	ND		320000	92000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
1,2,4-Trichlorobenzene	ND		320000	81000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
2,4,5-Trichlorophenol	ND		320000	81000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
2,4,6-Trichlorophenol	ND		320000	82000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Phenol	ND		320000	81000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Azobenzene	ND		320000	90000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
4-Chloroaniline	ND		320000	57000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Bis(2-ethylhexyl) phthalate	ND		320000	96000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
Di-n-octyl phthalate	ND		320000	95000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100
4-Chloro-3-methylphenol	ND		320000	90000	ug/Kg		11/02/21 11:59	11/11/21 13:46	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*50*	*S1-*	*53 - 113*	*11/02/21 11:59*	*11/11/21 13:46*	*100*
Nitrobenzene-d5	*29*	*S1-*	*54 - 114*	*11/02/21 11:59*	*11/11/21 13:46*	*100*
Terphenyl-d14	*131*	*S1+*	*66 - 126*	*11/02/21 11:59*	*11/11/21 13:46*	*100*
2,4,6-Tribromophenol	*0*	*S1-*	*60 - 120*	*11/02/21 11:59*	*11/11/21 13:46*	*100*
2-Fluorobiphenyl (Surr)	*114*	*S1+*	*47 - 107*	*11/02/21 11:59*	*11/11/21 13:46*	*100*
Phenol-d5	*100*		*54 - 114*	*11/02/21 11:59*	*11/11/21 13:46*	*100*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S9C-2

Date Collected: 10/27/21 11:44
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-29

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
Aldrin	ND		16	1.3	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
alpha-BHC	ND		16	1.5	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
beta-BHC	ND		16	2.1	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
Chlordane (technical)	ND		190	90	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
delta-BHC	ND		16	3.4	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
Dieldrin	ND		16	1.9	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
Endosulfan I	ND		16	1.7	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
Endosulfan II	ND		16	1.7	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
Endrin	ND		16	1.9	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
Endrin ketone	ND		16	2.6	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
Heptachlor	ND		16	1.4	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
Methoxychlor	ND		33	5.4	ug/Kg		11/04/21 09:18	11/10/21 20:20	10
Toxaphene	ND		640	220	ug/Kg		11/04/21 09:18	11/10/21 20:20	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*88*		*46 - 109*	*11/04/21 09:18*	*11/10/21 20:20*	*10*
DCB Decachlorobiphenyl	*92*		*46 - 109*	*11/04/21 09:18*	*11/10/21 20:20*	*10*
Tetrachloro-m-xylene	*94*		*47 - 107*	*11/04/21 09:18*	*11/10/21 20:20*	*10*
Tetrachloro-m-xylene	*80*		*47 - 107*	*11/04/21 09:18*	*11/10/21 20:20*	*10*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.98	0.22	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Arsenic	ND		2.4	2.2	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Barium	**110**		0.49	0.22	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Beryllium	**0.21**	**J**	0.24	0.17	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Cadmium	**0.49**		0.49	0.20	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Cobalt	**4.0**		0.98	0.22	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Chromium	**22**		0.98	0.17	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Copper	**14**		0.98	0.49	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Molybdenum	ND		0.49	0.44	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Nickel	**19**		0.49	0.42	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Antimony	ND		2.9	1.3	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Selenium	ND		4.9	1.8	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Thallium	ND		4.9	1.4	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Vanadium	**14**		0.98	0.17	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Zinc	**84**		9.8	5.0	mg/Kg		11/09/21 08:59	11/10/21 17:51	1
Lead	**99**		4.9	0.94	mg/Kg		11/09/21 08:59	11/10/21 17:51	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S9C-2
Date Collected: 10/27/21 11:44
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-29
Matrix: Solid

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18		0.079	0.013	mg/Kg		11/09/21 08:55	11/09/21 12:46	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S8D-0.5

Date Collected: 10/27/21 11:45
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-30

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.4	1.1	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
4,4'-DDE	ND		8.4	1.0	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
4,4'-DDT	ND		8.4	1.2	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
Aldrin	ND		8.4	0.69	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
alpha-BHC	ND		8.4	0.79	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
cis-Chlordane	ND		8.4	0.89	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
beta-BHC	ND		8.4	1.1	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
Chlordane (technical)	ND		99	46	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
delta-BHC	ND		8.4	1.7	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
Dieldrin	ND		8.4	0.99	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
Endosulfan I	ND		8.4	0.89	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
Endosulfan II	ND		8.4	0.89	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
Endosulfan sulfate	ND		8.4	1.7	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
Endrin	ND		8.4	0.99	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
Endrin aldehyde	ND		8.4	2.8	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
Endrin ketone	ND		8.4	1.3	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
trans-Chlordane	ND		8.4	3.0	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
gamma-BHC (Lindane)	ND		8.4	0.69	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
Heptachlor	ND		8.4	0.74	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
Heptachlor epoxide	ND		8.4	0.89	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
Methoxychlor	ND		17	2.8	ug/Kg		11/04/21 09:18	11/10/21 20:39	5
Toxaphene	ND		330	110	ug/Kg		11/04/21 09:18	11/10/21 20:39	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*46 - 109*	*11/04/21 09:18*	*11/10/21 20:39*	*5*
DCB Decachlorobiphenyl	*54*		*46 - 109*	*11/04/21 09:18*	*11/10/21 20:39*	*5*
Tetrachloro-m-xylene	*78*		*47 - 107*	*11/04/21 09:18*	*11/10/21 20:39*	*5*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/04/21 09:18*	*11/10/21 20:39*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/04/21 09:21	11/11/21 15:23	1
PCB-1221	ND		33	3.6	ug/Kg		11/04/21 09:21	11/11/21 15:23	1
PCB-1232	ND		33	4.7	ug/Kg		11/04/21 09:21	11/11/21 15:23	1
PCB-1242	ND		33	5.8	ug/Kg		11/04/21 09:21	11/11/21 15:23	1
PCB-1248	ND		33	2.4	ug/Kg		11/04/21 09:21	11/11/21 15:23	1
PCB-1254	ND		33	3.8	ug/Kg		11/04/21 09:21	11/11/21 15:23	1
PCB-1260	**5.0**	**J P**	33	2.7	ug/Kg		11/04/21 09:21	11/11/21 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*60*		*52 - 138*	*11/04/21 09:21*	*11/11/21 15:23*	*1*
Tetrachloro-m-xylene	*63*		*56 - 114*	*11/04/21 09:21*	*11/11/21 15:23*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**110**		1.0	0.26	mg/Kg		11/01/21 13:39	11/02/21 16:59	1
Arsenic	**9.2**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 16:59	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S8D-2
Date Collected: 10/27/21 11:50
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-31
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
Aldrin	ND		1.7	0.14	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
Endrin	ND		1.7	0.20	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/04/21 09:18	11/10/21 20:58	1
Toxaphene	ND		67	22	ug/Kg		11/04/21 09:18	11/10/21 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*46 - 109*	*11/04/21 09:18*	*11/10/21 20:58*	*1*
DCB Decachlorobiphenyl	*52*		*46 - 109*	*11/04/21 09:18*	*11/10/21 20:58*	*1*
Tetrachloro-m-xylene	*73*		*47 - 107*	*11/04/21 09:18*	*11/10/21 20:58*	*1*
Tetrachloro-m-xylene	*72*		*47 - 107*	*11/04/21 09:18*	*11/10/21 20:58*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC8-S8C-0.5

Date Collected: 10/27/21 11:55
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-32

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
Aldrin	ND		16	1.4	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
alpha-BHC	ND		16	1.5	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
beta-BHC	ND		16	2.1	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
Chlordane (technical)	ND		190	91	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
delta-BHC	ND		16	3.4	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
Dieldrin	ND		16	1.9	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
Endosulfan I	ND		16	1.7	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
Endosulfan II	ND		16	1.7	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
Endrin	ND		16	1.9	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
Endrin ketone	ND		16	2.6	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
gamma-BHC (Lindane)	ND		16	1.4	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
Heptachlor	ND		16	1.5	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
Methoxychlor	ND		33	5.4	ug/Kg		11/04/21 09:18	11/10/21 21:17	10
Toxaphene	ND		650	220	ug/Kg		11/04/21 09:18	11/10/21 21:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*46 - 109*	*11/04/21 09:18*	*11/10/21 21:17*	*10*
DCB Decachlorobiphenyl	*59*		*46 - 109*	*11/04/21 09:18*	*11/10/21 21:17*	*10*
Tetrachloro-m-xylene	*91*		*47 - 107*	*11/04/21 09:18*	*11/10/21 21:17*	*10*
Tetrachloro-m-xylene	*76*		*47 - 107*	*11/04/21 09:18*	*11/10/21 21:17*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/04/21 09:21	11/11/21 15:44	1
PCB-1221	ND		32	3.5	ug/Kg		11/04/21 09:21	11/11/21 15:44	1
PCB-1232	ND		32	4.6	ug/Kg		11/04/21 09:21	11/11/21 15:44	1
PCB-1242	ND		32	5.7	ug/Kg		11/04/21 09:21	11/11/21 15:44	1
PCB-1248	ND		32	2.4	ug/Kg		11/04/21 09:21	11/11/21 15:44	1
PCB-1254	ND		32	3.7	ug/Kg		11/04/21 09:21	11/11/21 15:44	1
PCB-1260	ND		32	2.6	ug/Kg		11/04/21 09:21	11/11/21 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*64*		*52 - 138*	*11/04/21 09:21*	*11/11/21 15:44*	*1*
Tetrachloro-m-xylene	*65*		*56 - 114*	*11/04/21 09:21*	*11/11/21 15:44*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**180**		1.0	0.26	mg/Kg		11/01/21 13:39	11/02/21 17:02	1
Arsenic	**5.4**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 17:02	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC8-S8C-2
Date Collected: 10/27/21 12:00
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-33
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
Aldrin	ND		1.6	0.14	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
alpha-BHC	ND		1.6	0.16	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
Chlordane (technical)	ND		19	9.1	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
delta-BHC	ND		1.6	0.34	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
Endosulfan sulfate	ND		1.6	0.34	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
Endrin	ND		1.6	0.19	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
Endrin aldehyde	ND		1.6	0.55	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
trans-Chlordane	ND		1.6	0.58	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
gamma-BHC (Lindane)	ND		1.6	0.14	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
Heptachlor	ND		1.6	0.15	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/04/21 09:18	11/10/21 21:35	1
Toxaphene	ND		65	22	ug/Kg		11/04/21 09:18	11/10/21 21:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*46*		*46 - 109*	*11/04/21 09:18*	*11/10/21 21:35*	*1*
DCB Decachlorobiphenyl	*49*		*46 - 109*	*11/04/21 09:18*	*11/10/21 21:35*	*1*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/04/21 09:18*	*11/10/21 21:35*	*1*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/04/21 09:18*	*11/10/21 21:35*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S7C-0.5

Date Collected: 10/27/21 11:59
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-34

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.5	1.1	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
4,4'-DDE	ND		8.5	1.0	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
4,4'-DDT	ND		8.5	1.2	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
Aldrin	ND		8.5	0.70	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
alpha-BHC	ND		8.5	0.80	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
cis-Chlordane	ND		8.5	0.90	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
beta-BHC	ND		8.5	1.1	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
Chlordane (technical)	ND		100	47	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
delta-BHC	ND		8.5	1.7	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
Dieldrin	ND		8.5	1.0	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
Endosulfan I	ND		8.5	0.90	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
Endosulfan II	ND		8.5	0.90	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
Endosulfan sulfate	ND		8.5	1.7	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
Endrin	ND		8.5	1.0	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
Endrin aldehyde	ND		8.5	2.8	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
Endrin ketone	ND		8.5	1.3	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
trans-Chlordane	ND		8.5	3.0	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
gamma-BHC (Lindane)	ND		8.5	0.70	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
Heptachlor	ND		8.5	0.75	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
Heptachlor epoxide	ND		8.5	0.90	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
Methoxychlor	ND		17	2.8	ug/Kg		11/04/21 09:18	11/10/21 21:54	5
Toxaphene	ND		330	110	ug/Kg		11/04/21 09:18	11/10/21 21:54	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*62*		*46 - 109*	*11/04/21 09:18*	*11/10/21 21:54*	*5*
DCB Decachlorobiphenyl	*55*		*46 - 109*	*11/04/21 09:18*	*11/10/21 21:54*	*5*
Tetrachloro-m-xylene	*78*		*47 - 107*	*11/04/21 09:18*	*11/10/21 21:54*	*5*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/04/21 09:18*	*11/10/21 21:54*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/04/21 09:21	11/11/21 16:04	1
PCB-1221	ND		33	3.6	ug/Kg		11/04/21 09:21	11/11/21 16:04	1
PCB-1232	ND		33	4.8	ug/Kg		11/04/21 09:21	11/11/21 16:04	1
PCB-1242	ND		33	5.9	ug/Kg		11/04/21 09:21	11/11/21 16:04	1
PCB-1248	ND		33	2.4	ug/Kg		11/04/21 09:21	11/11/21 16:04	1
PCB-1254	ND		33	3.8	ug/Kg		11/04/21 09:21	11/11/21 16:04	1
PCB-1260	ND		33	2.7	ug/Kg		11/04/21 09:21	11/11/21 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*52 - 138*	*11/04/21 09:21*	*11/11/21 16:04*	*1*
Tetrachloro-m-xylene	*59*		*56 - 114*	*11/04/21 09:21*	*11/11/21 16:04*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**200**		0.99	0.26	mg/Kg		11/01/21 13:39	11/02/21 17:06	1
Arsenic	**3.6**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 17:06	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S7C-2
Date Collected: 10/27/21 12:01
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-35
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
Aldrin	ND		1.7	0.14	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
Endrin	ND		1.7	0.20	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/04/21 09:18	11/10/21 22:13	1
Toxaphene	ND		67	22	ug/Kg		11/04/21 09:18	11/10/21 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*48*		*46 - 109*	*11/04/21 09:18*	*11/10/21 22:13*	*1*
DCB Decachlorobiphenyl	*49*		*46 - 109*	*11/04/21 09:18*	*11/10/21 22:13*	*1*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/04/21 09:18*	*11/10/21 22:13*	*1*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/04/21 09:18*	*11/10/21 22:13*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S6C-0.5

Date Collected: 10/27/21 12:05
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-36

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
Aldrin	ND		16	1.3	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
alpha-BHC	ND		16	1.5	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
beta-BHC	ND		16	2.1	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
Chlordane (technical)	ND		190	90	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
delta-BHC	ND		16	3.4	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
Dieldrin	ND		16	1.9	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
Endosulfan I	ND		16	1.7	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
Endosulfan II	ND		16	1.7	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
Endrin	ND		16	1.9	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
Endrin ketone	ND		16	2.6	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
Heptachlor	ND		16	1.4	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
Methoxychlor	ND		33	5.4	ug/Kg		11/04/21 09:18	11/10/21 22:32	10
Toxaphene	ND		640	220	ug/Kg		11/04/21 09:18	11/10/21 22:32	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*46 - 109*	*11/04/21 09:18*	*11/10/21 22:32*	*10*
DCB Decachlorobiphenyl	*51*		*46 - 109*	*11/04/21 09:18*	*11/10/21 22:32*	*10*
Tetrachloro-m-xylene	*82*		*47 - 107*	*11/04/21 09:18*	*11/10/21 22:32*	*10*
Tetrachloro-m-xylene	*70*		*47 - 107*	*11/04/21 09:18*	*11/10/21 22:32*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/04/21 09:21	11/11/21 16:25	1
PCB-1221	ND		32	3.5	ug/Kg		11/04/21 09:21	11/11/21 16:25	1
PCB-1232	ND		32	4.6	ug/Kg		11/04/21 09:21	11/11/21 16:25	1
PCB-1242	ND		32	5.7	ug/Kg		11/04/21 09:21	11/11/21 16:25	1
PCB-1248	ND		32	2.3	ug/Kg		11/04/21 09:21	11/11/21 16:25	1
PCB-1254	ND		32	3.7	ug/Kg		11/04/21 09:21	11/11/21 16:25	1
PCB-1260	ND		32	2.6	ug/Kg		11/04/21 09:21	11/11/21 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*52 - 138*	*11/04/21 09:21*	*11/11/21 16:25*	*1*
Tetrachloro-m-xylene	*59*		*56 - 114*	*11/04/21 09:21*	*11/11/21 16:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**150**		0.96	0.25	mg/Kg		11/01/21 13:39	11/02/21 17:10	1
Arsenic	**6.2**		1.9	1.3	mg/Kg		11/01/21 13:39	11/02/21 17:10	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S6C-2
Date Collected: 10/27/21 12:07
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-37
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
4,4'-DDT	ND		1.7	0.24	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
Aldrin	ND		1.7	0.14	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
Chlordane (technical)	ND		20	9.2	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
Endrin	ND		1.7	0.20	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
Endrin ketone	ND		1.7	0.26	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
Methoxychlor	ND		3.3	0.55	ug/Kg		11/04/21 09:18	11/10/21 22:51	1
Toxaphene	ND		66	22	ug/Kg		11/04/21 09:18	11/10/21 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*53*		*46 - 109*	*11/04/21 09:18*	*11/10/21 22:51*	*1*
DCB Decachlorobiphenyl	*42*	*S1-*	*46 - 109*	*11/04/21 09:18*	*11/10/21 22:51*	*1*
Tetrachloro-m-xylene	*60*		*47 - 107*	*11/04/21 09:18*	*11/10/21 22:51*	*1*
Tetrachloro-m-xylene	*60*		*47 - 107*	*11/04/21 09:18*	*11/10/21 22:51*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S7D-0.5

Date Collected: 10/27/21 12:25
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-38

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.1	1.1	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
4,4'-DDE	ND		8.1	1.0	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
4,4'-DDT	ND		8.1	1.2	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
Aldrin	ND		8.1	0.67	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
alpha-BHC	ND		8.1	0.77	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
cis-Chlordane	ND		8.1	0.86	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
beta-BHC	ND		8.1	1.1	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
Chlordane (technical)	ND		96	45	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
delta-BHC	ND		8.1	1.7	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
Dieldrin	ND		8.1	0.96	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
Endosulfan I	ND		8.1	0.86	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
Endosulfan II	ND		8.1	0.86	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
Endosulfan sulfate	ND		8.1	1.7	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
Endrin	ND		8.1	0.96	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
Endrin aldehyde	ND		8.1	2.7	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
Endrin ketone	ND		8.1	1.3	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
trans-Chlordane	ND		8.1	2.9	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
gamma-BHC (Lindane)	ND		8.1	0.67	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
Heptachlor	ND		8.1	0.72	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
Heptachlor epoxide	ND		8.1	0.86	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
Methoxychlor	ND		16	2.7	ug/Kg		11/04/21 09:18	11/10/21 23:10	5
Toxaphene	ND		320	110	ug/Kg		11/04/21 09:18	11/10/21 23:10	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*90*		*46 - 109*	*11/04/21 09:18*	*11/10/21 23:10*	*5*
DCB Decachlorobiphenyl	*59*		*46 - 109*	*11/04/21 09:18*	*11/10/21 23:10*	*5*
Tetrachloro-m-xylene	*99*		*47 - 107*	*11/04/21 09:18*	*11/10/21 23:10*	*5*
Tetrachloro-m-xylene	*89*		*47 - 107*	*11/04/21 09:18*	*11/10/21 23:10*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.4	ug/Kg		11/04/21 09:21	11/11/21 16:45	1
PCB-1221	ND		32	3.5	ug/Kg		11/04/21 09:21	11/11/21 16:45	1
PCB-1232	ND		32	4.6	ug/Kg		11/04/21 09:21	11/11/21 16:45	1
PCB-1242	ND		32	5.7	ug/Kg		11/04/21 09:21	11/11/21 16:45	1
PCB-1248	ND		32	2.3	ug/Kg		11/04/21 09:21	11/11/21 16:45	1
PCB-1254	ND		32	3.7	ug/Kg		11/04/21 09:21	11/11/21 16:45	1
PCB-1260	ND		32	2.6	ug/Kg		11/04/21 09:21	11/11/21 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*52 - 138*	*11/04/21 09:21*	*11/11/21 16:45*	*1*
Tetrachloro-m-xylene	*59*		*56 - 114*	*11/04/21 09:21*	*11/11/21 16:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 18:25	1
Arsenic	ND		2.5	2.3	mg/Kg		11/09/21 08:59	11/10/21 18:25	1
Barium	**140**		0.50	0.22	mg/Kg		11/09/21 08:59	11/10/21 18:25	1
Beryllium	**0.24**	**J**	0.25	0.17	mg/Kg		11/09/21 08:59	11/10/21 18:25	1
Cadmium	**0.58**		0.50	0.20	mg/Kg		11/09/21 08:59	11/10/21 18:25	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S7D-0.5
Date Collected: 10/27/21 12:25
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-38
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	5.5		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 18:25	1
Chromium	12		1.0	0.18	mg/Kg		11/09/21 08:59	11/10/21 18:25	1
Copper	15		1.0	0.51	mg/Kg		11/09/21 08:59	11/10/21 18:25	1
Molybdenum	ND		0.50	0.45	mg/Kg		11/09/21 08:59	11/10/21 18:25	1
Nickel	15		0.50	0.43	mg/Kg		11/09/21 08:59	11/10/21 18:25	1
Antimony	ND		3.0	1.4	mg/Kg		11/09/21 08:59	11/10/21 18:25	1
Selenium	ND		5.0	1.9	mg/Kg		11/09/21 08:59	11/10/21 18:25	1
Thallium	ND		5.0	1.5	mg/Kg		11/09/21 08:59	11/10/21 18:25	1
Vanadium	14		1.0	0.17	mg/Kg		11/09/21 08:59	11/10/21 18:25	1
Zinc	58		10	5.1	mg/Kg		11/09/21 08:59	11/10/21 18:25	1
Lead	55		5.0	0.97	mg/Kg		11/09/21 08:59	11/10/21 18:25	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.086	0.014	mg/Kg		11/09/21 08:55	11/09/21 12:48	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S7D-2

Date Collected: 10/27/21 12:30
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-39

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
Aldrin	ND		1.6	0.13	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
Chlordane (technical)	ND		19	8.9	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
Endrin	ND		1.6	0.19	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
Endrin aldehyde	ND		1.6	0.54	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
trans-Chlordane	ND		1.6	0.57	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
Methoxychlor	ND		3.2	0.53	ug/Kg		11/04/21 09:18	11/12/21 21:13	1
Toxaphene	ND		64	21	ug/Kg		11/04/21 09:18	11/12/21 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*47*		*46 - 109*	*11/04/21 09:18*	*11/12/21 21:13*	*1*
DCB Decachlorobiphenyl	*53*		*46 - 109*	*11/04/21 09:18*	*11/12/21 21:13*	*1*
Tetrachloro-m-xylene	*66*		*47 - 107*	*11/04/21 09:18*	*11/12/21 21:13*	*1*
Tetrachloro-m-xylene	*66*		*47 - 107*	*11/04/21 09:18*	*11/12/21 21:13*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Arsenic	ND		2.6	2.3	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Barium	**49**		0.52	0.23	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Beryllium	**0.18**	**J**	0.26	0.18	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Cadmium	**0.26**	**J**	0.52	0.21	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Cobalt	**3.9**		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Chromium	**20**		1.0	0.18	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Copper	**4.2**		1.0	0.52	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Molybdenum	ND		0.52	0.46	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Nickel	**14**		0.52	0.44	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Antimony	ND		3.1	1.4	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Selenium	ND		5.2	1.9	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Thallium	ND		5.2	1.5	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Vanadium	**14**		1.0	0.18	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Zinc	**14**		10	5.3	mg/Kg		11/09/21 08:59	11/10/21 18:27	1
Lead	**3.0**	**J**	5.2	1.0	mg/Kg		11/09/21 08:59	11/10/21 18:27	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S7D-2

Date Collected: 10/27/21 12:30
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-39

Matrix: Solid

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.093		0.082	0.013	mg/Kg		11/09/21 08:55	11/09/21 12:50	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S5C-0.5

Date Collected: 10/27/21 12:30
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-40

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
Aldrin	ND		16	1.3	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
alpha-BHC	ND		16	1.5	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
beta-BHC	ND		16	2.1	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
Chlordane (technical)	ND		190	90	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
delta-BHC	ND		16	3.3	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
Dieldrin	ND		16	1.9	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
Endosulfan I	ND		16	1.7	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
Endosulfan II	ND		16	1.7	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
Endosulfan sulfate	ND		16	3.3	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
Endrin	ND		16	1.9	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
Endrin ketone	ND		16	2.6	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
trans-Chlordane	ND		16	5.7	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
Heptachlor	ND		16	1.4	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
Methoxychlor	ND		33	5.4	ug/Kg		11/04/21 09:18	11/12/21 21:32	10
Toxaphene	ND		640	210	ug/Kg		11/04/21 09:18	11/12/21 21:32	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*103*		*46 - 109*	*11/04/21 09:18*	*11/12/21 21:32*	*10*
DCB Decachlorobiphenyl	*42*	*S1-*	*46 - 109*	*11/04/21 09:18*	*11/12/21 21:32*	*10*
Tetrachloro-m-xylene	*85*		*47 - 107*	*11/04/21 09:18*	*11/12/21 21:32*	*10*
Tetrachloro-m-xylene	*71*		*47 - 107*	*11/04/21 09:18*	*11/12/21 21:32*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	F1 F2	32	2.4	ug/Kg		11/04/21 09:21	11/11/21 17:06	1
PCB-1221	ND		32	3.5	ug/Kg		11/04/21 09:21	11/11/21 17:06	1
PCB-1232	ND		32	4.6	ug/Kg		11/04/21 09:21	11/11/21 17:06	1
PCB-1242	ND		32	5.6	ug/Kg		11/04/21 09:21	11/11/21 17:06	1
PCB-1248	ND		32	2.3	ug/Kg		11/04/21 09:21	11/11/21 17:06	1
PCB-1254	ND		32	3.6	ug/Kg		11/04/21 09:21	11/11/21 17:06	1
PCB-1260	ND	F1 F2	32	2.6	ug/Kg		11/04/21 09:21	11/11/21 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*49*	*S1-*	*52 - 138*	*11/04/21 09:21*	*11/11/21 17:06*	*1*
Tetrachloro-m-xylene	*52*	*S1-*	*56 - 114*	*11/04/21 09:21*	*11/11/21 17:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**140**		0.95	0.25	mg/Kg		11/01/21 13:39	11/02/21 17:14	1
Arsenic	**7.6**		1.9	1.2	mg/Kg		11/01/21 13:39	11/02/21 17:14	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S5C-2
Date Collected: 10/27/21 12:35
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-41
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
4,4'-DDE	ND	F1	1.6	0.20	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
Aldrin	ND		1.6	0.13	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
Chlordane (technical)	ND		19	9.0	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
delta-BHC	ND		1.6	0.34	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
Dieldrin	ND	F1	1.6	0.19	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
Endosulfan sulfate	ND		1.6	0.34	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
Endrin	ND	F1	1.6	0.19	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
Endrin aldehyde	ND		1.6	0.55	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
Endrin ketone	ND	F1	1.6	0.26	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
trans-Chlordane	ND	F1	1.6	0.58	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/04/21 09:18	11/12/21 21:51	1
Toxaphene	ND		64	22	ug/Kg		11/04/21 09:18	11/12/21 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*42*	*S1-*	*46 - 109*	*11/04/21 09:18*	*11/12/21 21:51*	*1*
DCB Decachlorobiphenyl	*47*		*46 - 109*	*11/04/21 09:18*	*11/12/21 21:51*	*1*
Tetrachloro-m-xylene	*60*		*47 - 107*	*11/04/21 09:18*	*11/12/21 21:51*	*1*
Tetrachloro-m-xylene	*58*		*47 - 107*	*11/04/21 09:18*	*11/12/21 21:51*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S4C-0.5

Date Collected: 10/27/21 12:35
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-42

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	F2	17	2.2	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
4,4'-DDE	ND		17	2.0	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
4,4'-DDT	ND		17	2.4	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
Aldrin	ND		17	1.4	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
alpha-BHC	ND		17	1.6	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
cis-Chlordane	ND		17	1.7	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
beta-BHC	ND		17	2.1	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
Chlordane (technical)	ND		190	91	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
delta-BHC	ND		17	3.4	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
Dieldrin	ND		17	1.9	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
Endosulfan I	ND		17	1.7	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
Endosulfan II	ND		17	1.7	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
Endosulfan sulfate	ND	F1	17	3.4	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
Endrin	ND		17	1.9	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
Endrin aldehyde	ND		17	5.5	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
Endrin ketone	ND	F1	17	2.6	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
trans-Chlordane	ND	F2	17	5.8	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
Heptachlor	ND		17	1.5	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
Heptachlor epoxide	ND		17	1.7	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
Methoxychlor	ND	F2	33	5.4	ug/Kg		11/06/21 10:08	11/21/21 18:04	10
Toxaphene	ND		650	220	ug/Kg		11/06/21 10:08	11/21/21 18:04	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*110*	*S1+*	*46 - 109*	*11/06/21 10:08*	*11/21/21 18:04*	*10*
DCB Decachlorobiphenyl	*37*	*S1-*	*46 - 109*	*11/06/21 10:08*	*11/21/21 18:04*	*10*
Tetrachloro-m-xylene	*85*		*47 - 107*	*11/06/21 10:08*	*11/21/21 18:04*	*10*
Tetrachloro-m-xylene	*83*		*47 - 107*	*11/06/21 10:08*	*11/21/21 18:04*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/06/21 10:17	11/17/21 19:28	1
PCB-1221	ND		32	3.5	ug/Kg		11/06/21 10:17	11/17/21 19:28	1
PCB-1232	ND		32	4.7	ug/Kg		11/06/21 10:17	11/17/21 19:28	1
PCB-1242	ND		32	5.7	ug/Kg		11/06/21 10:17	11/17/21 19:28	1
PCB-1248	ND		32	2.4	ug/Kg		11/06/21 10:17	11/17/21 19:28	1
PCB-1254	ND		32	3.7	ug/Kg		11/06/21 10:17	11/17/21 19:28	1
PCB-1260	ND		32	2.6	ug/Kg		11/06/21 10:17	11/17/21 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*48*	*S1-*	*52 - 138*	*11/06/21 10:17*	*11/17/21 19:28*	*1*
Tetrachloro-m-xylene	*57*		*56 - 114*	*11/06/21 10:17*	*11/17/21 19:28*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**65**		0.96	0.25	mg/Kg		11/01/21 13:39	11/02/21 17:18	1
Arsenic	**12**		1.9	1.3	mg/Kg		11/01/21 13:39	11/02/21 17:18	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S4C-2
Date Collected: 10/27/21 12:40
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-43
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
Aldrin	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
Endrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
Methoxychlor	ND		3.4	0.55	ug/Kg		11/06/21 10:08	11/21/21 19:01	1
Toxaphene	ND		66	22	ug/Kg		11/06/21 10:08	11/21/21 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*60*		*46 - 109*	*11/06/21 10:08*	*11/21/21 19:01*	*1*
DCB Decachlorobiphenyl	*66*		*46 - 109*	*11/06/21 10:08*	*11/21/21 19:01*	*1*
Tetrachloro-m-xylene	*59*		*47 - 107*	*11/06/21 10:08*	*11/21/21 19:01*	*1*
Tetrachloro-m-xylene	*59*		*47 - 107*	*11/06/21 10:08*	*11/21/21 19:01*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S3C-0.5

Date Collected: 10/27/21 12:50
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-44

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
Aldrin	ND		16	1.3	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
alpha-BHC	ND		16	1.5	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
beta-BHC	ND		16	2.1	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
Chlordane (technical)	ND		190	90	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
delta-BHC	ND		16	3.4	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
Dieldrin	ND		16	1.9	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
Endosulfan I	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
Endosulfan II	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
Endrin	ND		16	1.9	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
Endrin ketone	ND		16	2.6	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
Heptachlor	ND		16	1.4	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
Methoxychlor	ND		33	5.4	ug/Kg		11/06/21 10:08	11/21/21 19:20	10
Toxaphene	ND		640	220	ug/Kg		11/06/21 10:08	11/21/21 19:20	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*211*	*S1+*	*46 - 109*	*11/06/21 10:08*	*11/21/21 19:20*	*10*
DCB Decachlorobiphenyl	*89*		*46 - 109*	*11/06/21 10:08*	*11/21/21 19:20*	*10*
Tetrachloro-m-xylene	*84*		*47 - 107*	*11/06/21 10:08*	*11/21/21 19:20*	*10*
Tetrachloro-m-xylene	*74*		*47 - 107*	*11/06/21 10:08*	*11/21/21 19:20*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.4	ug/Kg		11/06/21 10:17	11/17/21 19:48	1
PCB-1221	ND		32	3.5	ug/Kg		11/06/21 10:17	11/17/21 19:48	1
PCB-1232	ND		32	4.6	ug/Kg		11/06/21 10:17	11/17/21 19:48	1
PCB-1242	ND		32	5.7	ug/Kg		11/06/21 10:17	11/17/21 19:48	1
PCB-1248	ND		32	2.3	ug/Kg		11/06/21 10:17	11/17/21 19:48	1
PCB-1254	ND		32	3.7	ug/Kg		11/06/21 10:17	11/17/21 19:48	1
PCB-1260	ND		32	2.6	ug/Kg		11/06/21 10:17	11/17/21 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*53*		*52 - 138*	*11/06/21 10:17*	*11/17/21 19:48*	*1*
Tetrachloro-m-xylene	*57*		*56 - 114*	*11/06/21 10:17*	*11/17/21 19:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**54**		0.98	0.25	mg/Kg		11/01/21 13:39	11/02/21 17:29	1
Arsenic	**15**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 17:29	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S3C-2

Date Collected: 10/27/21 12:55
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-45

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.5	1.1	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
4,4'-DDE	ND		8.5	1.0	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
4,4'-DDT	ND		8.5	1.2	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
Aldrin	ND		8.5	0.70	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
alpha-BHC	ND		8.5	0.80	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
cis-Chlordane	ND		8.5	0.90	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
beta-BHC	ND		8.5	1.1	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
Chlordane (technical)	ND		100	47	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
delta-BHC	ND		8.5	1.7	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
Dieldrin	ND		8.5	1.0	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
Endosulfan I	ND		8.5	0.90	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
Endosulfan II	ND		8.5	0.90	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
Endosulfan sulfate	ND		8.5	1.7	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
Endrin	ND		8.5	1.0	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
Endrin aldehyde	ND		8.5	2.8	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
Endrin ketone	ND		8.5	1.3	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
trans-Chlordane	ND		8.5	3.0	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
gamma-BHC (Lindane)	ND		8.5	0.70	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
Heptachlor	ND		8.5	0.75	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
Heptachlor epoxide	ND		8.5	0.90	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
Methoxychlor	ND		17	2.8	ug/Kg		11/06/21 10:08	11/21/21 19:39	5
Toxaphene	ND		330	110	ug/Kg		11/06/21 10:08	11/21/21 19:39	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*92*		*46 - 109*	*11/06/21 10:08*	*11/21/21 19:39*	*5*
DCB Decachlorobiphenyl	*89*		*46 - 109*	*11/06/21 10:08*	*11/21/21 19:39*	*5*
Tetrachloro-m-xylene	*90*		*47 - 107*	*11/06/21 10:08*	*11/21/21 19:39*	*5*
Tetrachloro-m-xylene	*86*		*47 - 107*	*11/06/21 10:08*	*11/21/21 19:39*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**230**		1.0	0.26	mg/Kg		11/01/21 13:39	11/02/21 17:33	1
Arsenic	**3.7**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 17:33	1

Client Sample ID: AOC3-S1D-0.5

Date Collected: 10/27/21 13:14
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-46

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.4	1.1	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
4,4'-DDE	ND		8.4	1.0	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
4,4'-DDT	ND		8.4	1.2	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
Aldrin	ND		8.4	0.69	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
alpha-BHC	ND		8.4	0.79	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
cis-Chlordane	ND		8.4	0.89	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
beta-BHC	ND		8.4	1.1	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
Chlordane (technical)	ND		99	46	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
delta-BHC	ND		8.4	1.7	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
Dieldrin	ND		8.4	0.99	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
Endosulfan I	ND		8.4	0.89	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
Endosulfan II	ND		8.4	0.89	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
Endosulfan sulfate	ND		8.4	1.7	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
Endrin	ND		8.4	0.99	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
Endrin aldehyde	ND		8.4	2.8	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
Endrin ketone	ND		8.4	1.3	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
trans-Chlordane	ND		8.4	3.0	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
gamma-BHC (Lindane)	ND		8.4	0.69	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
Heptachlor	ND		8.4	0.74	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
Heptachlor epoxide	ND		8.4	0.89	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
Methoxychlor	ND		17	2.8	ug/Kg		11/06/21 10:08	11/21/21 19:57	5
Toxaphene	ND		330	110	ug/Kg		11/06/21 10:08	11/21/21 19:57	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*46 - 109*	*11/06/21 10:08*	*11/21/21 19:57*	*5*
DCB Decachlorobiphenyl	*75*		*46 - 109*	*11/06/21 10:08*	*11/21/21 19:57*	*5*
Tetrachloro-m-xylene	*92*		*47 - 107*	*11/06/21 10:08*	*11/21/21 19:57*	*5*
Tetrachloro-m-xylene	*88*		*47 - 107*	*11/06/21 10:08*	*11/21/21 19:57*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/06/21 10:17	11/17/21 20:29	1
PCB-1221	ND		33	3.6	ug/Kg		11/06/21 10:17	11/17/21 20:29	1
PCB-1232	ND		33	4.7	ug/Kg		11/06/21 10:17	11/17/21 20:29	1
PCB-1242	ND		33	5.8	ug/Kg		11/06/21 10:17	11/17/21 20:29	1
PCB-1248	ND		33	2.4	ug/Kg		11/06/21 10:17	11/17/21 20:29	1
PCB-1254	ND		33	3.8	ug/Kg		11/06/21 10:17	11/17/21 20:29	1
PCB-1260	ND		33	2.7	ug/Kg		11/06/21 10:17	11/17/21 20:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*52 - 138*	*11/06/21 10:17*	*11/17/21 20:29*	*1*
Tetrachloro-m-xylene	*71*		*56 - 114*	*11/06/21 10:17*	*11/17/21 20:29*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 18:29	1
Arsenic	ND	L	2.5	2.3	mg/Kg		11/09/21 08:59	11/10/21 18:29	1
Barium	**150**		0.51	0.23	mg/Kg		11/09/21 08:59	11/10/21 18:29	1
Beryllium	**0.33**		0.25	0.17	mg/Kg		11/09/21 08:59	11/10/21 18:29	1
Cadmium	**0.81**		0.51	0.20	mg/Kg		11/09/21 08:59	11/10/21 18:29	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S1D-0.5
Date Collected: 10/27/21 13:14
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-46
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	9.9		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 18:29	1
Chromium	7.1		1.0	0.18	mg/Kg		11/09/21 08:59	11/10/21 18:29	1
Copper	18		1.0	0.51	mg/Kg		11/09/21 08:59	11/10/21 18:29	1
Molybdenum	ND	L	0.51	0.46	mg/Kg		11/09/21 08:59	11/10/21 18:29	1
Nickel	13		0.51	0.44	mg/Kg		11/09/21 08:59	11/10/21 18:29	1
Antimony	1.9	J	3.0	1.4	mg/Kg		11/09/21 08:59	11/10/21 18:29	1
Selenium	ND		5.1	1.9	mg/Kg		11/09/21 08:59	11/10/21 18:29	1
Thallium	ND		5.1	1.5	mg/Kg		11/09/21 08:59	11/10/21 18:29	1
Vanadium	19		1.0	0.17	mg/Kg		11/09/21 08:59	11/10/21 18:29	1
Zinc	67		10	5.2	mg/Kg		11/09/21 08:59	11/10/21 18:29	1
Lead	6.2		5.1	0.98	mg/Kg		11/09/21 08:59	11/10/21 18:29	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13		0.083	0.014	mg/Kg		11/09/21 08:55	11/09/21 12:52	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S1D-2
Date Collected: 10/27/21 13:15
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-47
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
Aldrin	ND		1.6	0.13	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
Chlordane (technical)	ND		19	9.0	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
Endrin	ND		1.6	0.19	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
Endrin aldehyde	ND		1.6	0.54	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
trans-Chlordane	ND		1.6	0.57	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
Methoxychlor	ND		3.2	0.53	ug/Kg		11/06/21 10:08	11/21/21 20:16	1
Toxaphene	ND		64	21	ug/Kg		11/06/21 10:08	11/21/21 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*46 - 109*	*11/06/21 10:08*	*11/21/21 20:16*	*1*
DCB Decachlorobiphenyl	*74*		*46 - 109*	*11/06/21 10:08*	*11/21/21 20:16*	*1*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/06/21 10:08*	*11/21/21 20:16*	*1*
Tetrachloro-m-xylene	*67*		*47 - 107*	*11/06/21 10:08*	*11/21/21 20:16*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC8-S2D-0.5

Date Collected: 10/27/21 13:16
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-48

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.5	1.1	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
4,4'-DDE	ND		8.5	1.0	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
4,4'-DDT	ND		8.5	1.2	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
Aldrin	ND		8.5	0.70	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
alpha-BHC	ND		8.5	0.80	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
cis-Chlordane	ND		8.5	0.90	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
beta-BHC	ND		8.5	1.1	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
Chlordane (technical)	ND		100	47	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
delta-BHC	ND		8.5	1.7	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
Dieldrin	ND		8.5	1.0	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
Endosulfan I	ND		8.5	0.90	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
Endosulfan II	ND		8.5	0.90	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
Endosulfan sulfate	ND		8.5	1.7	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
Endrin	ND		8.5	1.0	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
Endrin aldehyde	ND		8.5	2.8	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
Endrin ketone	ND		8.5	1.3	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
trans-Chlordane	ND		8.5	3.0	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
gamma-BHC (Lindane)	ND		8.5	0.70	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
Heptachlor	ND		8.5	0.75	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
Heptachlor epoxide	ND		8.5	0.90	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
Methoxychlor	ND		17	2.8	ug/Kg		11/06/21 10:08	11/21/21 20:35	5
Toxaphene	ND		330	110	ug/Kg		11/06/21 10:08	11/21/21 20:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*100*		*46 - 109*	*11/06/21 10:08*	*11/21/21 20:35*	*5*
DCB Decachlorobiphenyl	*57*		*46 - 109*	*11/06/21 10:08*	*11/21/21 20:35*	*5*
Tetrachloro-m-xylene	*89*		*47 - 107*	*11/06/21 10:08*	*11/21/21 20:35*	*5*
Tetrachloro-m-xylene	*83*		*47 - 107*	*11/06/21 10:08*	*11/21/21 20:35*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/06/21 10:17	11/17/21 20:50	1
PCB-1221	ND		33	3.6	ug/Kg		11/06/21 10:17	11/17/21 20:50	1
PCB-1232	ND		33	4.8	ug/Kg		11/06/21 10:17	11/17/21 20:50	1
PCB-1242	ND		33	5.9	ug/Kg		11/06/21 10:17	11/17/21 20:50	1
PCB-1248	ND		33	2.4	ug/Kg		11/06/21 10:17	11/17/21 20:50	1
PCB-1254	ND		33	3.8	ug/Kg		11/06/21 10:17	11/17/21 20:50	1
PCB-1260	ND		33	2.7	ug/Kg		11/06/21 10:17	11/17/21 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*52 - 138*	*11/06/21 10:17*	*11/17/21 20:50*	*1*
Tetrachloro-m-xylene	*71*		*56 - 114*	*11/06/21 10:17*	*11/17/21 20:50*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**100**		0.98	0.25	mg/Kg		11/01/21 13:39	11/02/21 17:37	1
Arsenic	**9.0**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 17:37	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC8-S2D-2
Date Collected: 10/27/21 13:18
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-49
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
Aldrin	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
Endrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/06/21 10:08	11/21/21 20:54	1
Toxaphene	ND		67	22	ug/Kg		11/06/21 10:08	11/21/21 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*65*		*46 - 109*	*11/06/21 10:08*	*11/21/21 20:54*	*1*
DCB Decachlorobiphenyl	*67*		*46 - 109*	*11/06/21 10:08*	*11/21/21 20:54*	*1*
Tetrachloro-m-xylene	*57*		*47 - 107*	*11/06/21 10:08*	*11/21/21 20:54*	*1*
Tetrachloro-m-xylene	*56*		*47 - 107*	*11/06/21 10:08*	*11/21/21 20:54*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC8-S1E-0.5

Date Collected: 10/27/21 13:27
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-50

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
Aldrin	ND		16	1.4	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
alpha-BHC	ND		16	1.5	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
beta-BHC	ND		16	2.1	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
Chlordane (technical)	ND		190	91	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
delta-BHC	ND		16	3.4	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
Dieldrin	ND		16	1.9	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
Endosulfan I	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
Endosulfan II	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
Endrin	ND		16	1.9	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
Endrin ketone	ND		16	2.6	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
gamma-BHC (Lindane)	ND		16	1.4	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
Heptachlor	ND		16	1.5	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
Methoxychlor	ND		33	5.4	ug/Kg		11/06/21 10:08	11/21/21 21:13	10
Toxaphene	ND		650	220	ug/Kg		11/06/21 10:08	11/21/21 21:13	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*156*	*S1+*	*46 - 109*	*11/06/21 10:08*	*11/21/21 21:13*	*10*
DCB Decachlorobiphenyl	*49*		*46 - 109*	*11/06/21 10:08*	*11/21/21 21:13*	*10*
Tetrachloro-m-xylene	*98*		*47 - 107*	*11/06/21 10:08*	*11/21/21 21:13*	*10*
Tetrachloro-m-xylene	*81*		*47 - 107*	*11/06/21 10:08*	*11/21/21 21:13*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/06/21 10:17	11/17/21 21:10	1
PCB-1221	ND		32	3.5	ug/Kg		11/06/21 10:17	11/17/21 21:10	1
PCB-1232	ND		32	4.6	ug/Kg		11/06/21 10:17	11/17/21 21:10	1
PCB-1242	ND		32	5.7	ug/Kg		11/06/21 10:17	11/17/21 21:10	1
PCB-1248	ND		32	2.4	ug/Kg		11/06/21 10:17	11/17/21 21:10	1
PCB-1254	ND		32	3.7	ug/Kg		11/06/21 10:17	11/17/21 21:10	1
PCB-1260	ND		32	2.6	ug/Kg		11/06/21 10:17	11/17/21 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*52 - 138*	*11/06/21 10:17*	*11/17/21 21:10*	*1*
Tetrachloro-m-xylene	*58*		*56 - 114*	*11/06/21 10:17*	*11/17/21 21:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**7.8**		0.95	0.25	mg/Kg		11/01/21 13:39	11/02/21 17:41	1
Arsenic	**6.8**		1.9	1.2	mg/Kg		11/01/21 13:39	11/02/21 17:41	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC8-S1E-2
Date Collected: 10/27/21 13:29
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-51
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
Aldrin	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
Endrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
Methoxychlor	ND		3.4	0.55	ug/Kg		11/06/21 10:08	11/21/21 21:32	1
Toxaphene	ND		66	22	ug/Kg		11/06/21 10:08	11/21/21 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*58*		*46 - 109*	*11/06/21 10:08*	*11/21/21 21:32*	*1*
DCB Decachlorobiphenyl	*64*		*46 - 109*	*11/06/21 10:08*	*11/21/21 21:32*	*1*
Tetrachloro-m-xylene	*70*		*47 - 107*	*11/06/21 10:08*	*11/21/21 21:32*	*1*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/06/21 10:08*	*11/21/21 21:32*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S2E-0.5

Date Collected: 10/27/21 13:30
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-52

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
Aldrin	ND		16	1.4	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
alpha-BHC	ND		16	1.5	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
beta-BHC	ND		16	2.1	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
Chlordane (technical)	ND		190	91	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
delta-BHC	ND		16	3.4	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
Dieldrin	ND		16	1.9	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
Endosulfan I	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
Endosulfan II	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
Endrin	ND		16	1.9	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
Endrin ketone	ND		16	2.6	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
gamma-BHC (Lindane)	ND		16	1.4	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
Heptachlor	ND		16	1.4	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
Methoxychlor	ND		33	5.4	ug/Kg		11/06/21 10:08	11/21/21 21:51	10
Toxaphene	ND		650	220	ug/Kg		11/06/21 10:08	11/21/21 21:51	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*146*	*S1+*	*46 - 109*	*11/06/21 10:08*	*11/21/21 21:51*	*10*
DCB Decachlorobiphenyl	*44*	*S1-*	*46 - 109*	*11/06/21 10:08*	*11/21/21 21:51*	*10*
Tetrachloro-m-xylene	*105*		*47 - 107*	*11/06/21 10:08*	*11/21/21 21:51*	*10*
Tetrachloro-m-xylene	*91*		*47 - 107*	*11/06/21 10:08*	*11/21/21 21:51*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/06/21 10:17	11/17/21 21:31	1
PCB-1221	ND		32	3.5	ug/Kg		11/06/21 10:17	11/17/21 21:31	1
PCB-1232	ND		32	4.6	ug/Kg		11/06/21 10:17	11/17/21 21:31	1
PCB-1242	ND		32	5.7	ug/Kg		11/06/21 10:17	11/17/21 21:31	1
PCB-1248	ND		32	2.4	ug/Kg		11/06/21 10:17	11/17/21 21:31	1
PCB-1254	ND		32	3.7	ug/Kg		11/06/21 10:17	11/17/21 21:31	1
PCB-1260	ND		32	2.6	ug/Kg		11/06/21 10:17	11/17/21 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*52 - 138*	*11/06/21 10:17*	*11/17/21 21:31*	*1*
Tetrachloro-m-xylene	*70*		*56 - 114*	*11/06/21 10:17*	*11/17/21 21:31*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**100**	**B**	1.0	0.26	mg/Kg		11/01/21 13:39	11/02/21 13:17	1
Arsenic	**10**		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 13:17	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S2E-2
Date Collected: 10/27/21 13:32
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-53
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
Aldrin	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
Endrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/06/21 10:08	11/21/21 22:10	1
Toxaphene	ND		67	22	ug/Kg		11/06/21 10:08	11/21/21 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*61*		*46 - 109*	*11/06/21 10:08*	*11/21/21 22:10*	*1*
DCB Decachlorobiphenyl	*62*		*46 - 109*	*11/06/21 10:08*	*11/21/21 22:10*	*1*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/06/21 10:08*	*11/21/21 22:10*	*1*
Tetrachloro-m-xylene	*59*		*47 - 107*	*11/06/21 10:08*	*11/21/21 22:10*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S3E-0.5

Date Collected: 10/27/21 13:50
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-54

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
Aldrin	ND		16	1.3	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
alpha-BHC	ND		16	1.5	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
beta-BHC	ND		16	2.1	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
Chlordane (technical)	ND		190	91	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
delta-BHC	ND		16	3.4	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
Dieldrin	ND		16	1.9	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
Endosulfan I	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
Endosulfan II	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
Endrin	ND		16	1.9	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
Endrin ketone	ND		16	2.6	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
Heptachlor	**2.6**	**J**	16	1.4	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
Methoxychlor	ND		33	5.4	ug/Kg		11/06/21 10:08	11/21/21 22:29	10
Toxaphene	ND		650	220	ug/Kg		11/06/21 10:08	11/21/21 22:29	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*188*	*S1+*	*46 - 109*	*11/06/21 10:08*	*11/21/21 22:29*	*10*
DCB Decachlorobiphenyl	*28*	*S1-*	*46 - 109*	*11/06/21 10:08*	*11/21/21 22:29*	*10*
Tetrachloro-m-xylene	*97*		*47 - 107*	*11/06/21 10:08*	*11/21/21 22:29*	*10*
Tetrachloro-m-xylene	*82*		*47 - 107*	*11/06/21 10:08*	*11/21/21 22:29*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/06/21 10:17	11/17/21 21:52	1
PCB-1221	ND		32	3.5	ug/Kg		11/06/21 10:17	11/17/21 21:52	1
PCB-1232	ND		32	4.6	ug/Kg		11/06/21 10:17	11/17/21 21:52	1
PCB-1242	ND		32	5.7	ug/Kg		11/06/21 10:17	11/17/21 21:52	1
PCB-1248	ND		32	2.3	ug/Kg		11/06/21 10:17	11/17/21 21:52	1
PCB-1254	ND		32	3.7	ug/Kg		11/06/21 10:17	11/17/21 21:52	1
PCB-1260	ND		32	2.6	ug/Kg		11/06/21 10:17	11/17/21 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*52 - 138*	*11/06/21 10:17*	*11/17/21 21:52*	*1*
Tetrachloro-m-xylene	*63*		*56 - 114*	*11/06/21 10:17*	*11/17/21 21:52*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**65**	**B**	0.95	0.25	mg/Kg		11/01/21 13:39	11/02/21 13:21	1
Arsenic	**16**		1.9	1.2	mg/Kg		11/01/21 13:39	11/02/21 13:21	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S3E-2
Date Collected: 10/27/21 13:52
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-55
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
Aldrin	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
Endrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
Methoxychlor	ND		3.4	0.55	ug/Kg		11/06/21 10:08	11/21/21 22:48	1
Toxaphene	ND		66	22	ug/Kg		11/06/21 10:08	11/21/21 22:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*46 - 109*	*11/06/21 10:08*	*11/21/21 22:48*	*1*
DCB Decachlorobiphenyl	*73*		*46 - 109*	*11/06/21 10:08*	*11/21/21 22:48*	*1*
Tetrachloro-m-xylene	*63*		*47 - 107*	*11/06/21 10:08*	*11/21/21 22:48*	*1*
Tetrachloro-m-xylene	*59*		*47 - 107*	*11/06/21 10:08*	*11/21/21 22:48*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S3D-0.5

Date Collected: 10/27/21 13:52
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-56

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
Aldrin	ND		16	1.3	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
alpha-BHC	ND		16	1.5	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
beta-BHC	ND		16	2.1	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
Chlordane (technical)	ND		190	90	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
delta-BHC	ND		16	3.3	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
Dieldrin	ND		16	1.9	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
Endosulfan I	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
Endosulfan II	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
Endosulfan sulfate	ND		16	3.3	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
Endrin	ND		16	1.9	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
Endrin aldehyde	ND		16	5.4	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
Endrin ketone	ND		16	2.6	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
trans-Chlordane	ND		16	5.7	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
Heptachlor	ND		16	1.4	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
Methoxychlor	ND		33	5.4	ug/Kg		11/06/21 10:08	11/21/21 23:06	10
Toxaphene	ND		640	210	ug/Kg		11/06/21 10:08	11/21/21 23:06	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*143*	*S1+*	*46 - 109*	*11/06/21 10:08*	*11/21/21 23:06*	*10*
DCB Decachlorobiphenyl	*43*	*S1-*	*46 - 109*	*11/06/21 10:08*	*11/21/21 23:06*	*10*
Tetrachloro-m-xylene	*89*		*47 - 107*	*11/06/21 10:08*	*11/21/21 23:06*	*10*
Tetrachloro-m-xylene	*74*		*47 - 107*	*11/06/21 10:08*	*11/21/21 23:06*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.4	ug/Kg		11/06/21 10:17	11/17/21 22:12	1
PCB-1221	ND		32	3.5	ug/Kg		11/06/21 10:17	11/17/21 22:12	1
PCB-1232	ND		32	4.6	ug/Kg		11/06/21 10:17	11/17/21 22:12	1
PCB-1242	ND		32	5.6	ug/Kg		11/06/21 10:17	11/17/21 22:12	1
PCB-1248	ND		32	2.3	ug/Kg		11/06/21 10:17	11/17/21 22:12	1
PCB-1254	ND		32	3.6	ug/Kg		11/06/21 10:17	11/17/21 22:12	1
PCB-1260	ND		32	2.6	ug/Kg		11/06/21 10:17	11/17/21 22:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*52 - 138*	*11/06/21 10:17*	*11/17/21 22:12*	*1*
Tetrachloro-m-xylene	*60*		*56 - 114*	*11/06/21 10:17*	*11/17/21 22:12*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**100**	**B**	0.95	0.25	mg/Kg		11/01/21 13:39	11/02/21 13:25	1
Arsenic	**10**		1.9	1.2	mg/Kg		11/01/21 13:39	11/02/21 13:25	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S3D-2
Date Collected: 10/27/21 13:54
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-57
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
Aldrin	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
Endrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/06/21 10:08	11/21/21 23:25	1
Toxaphene	ND		67	22	ug/Kg		11/06/21 10:08	11/21/21 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*54*		*46 - 109*	*11/06/21 10:08*	*11/21/21 23:25*	*1*
DCB Decachlorobiphenyl	*60*		*46 - 109*	*11/06/21 10:08*	*11/21/21 23:25*	*1*
Tetrachloro-m-xylene	*66*		*47 - 107*	*11/06/21 10:08*	*11/21/21 23:25*	*1*
Tetrachloro-m-xylene	*62*		*47 - 107*	*11/06/21 10:08*	*11/21/21 23:25*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S4D-0.5

Date Collected: 10/27/21 13:58
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-58

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
Aldrin	ND		16	1.4	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
alpha-BHC	ND		16	1.5	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
beta-BHC	ND		16	2.1	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
Chlordane (technical)	ND		190	91	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
delta-BHC	ND		16	3.4	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
Dieldrin	ND		16	1.9	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
Endosulfan I	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
Endosulfan II	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
Endrin	ND		16	1.9	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
Endrin ketone	ND		16	2.6	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
gamma-BHC (Lindane)	ND		16	1.4	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
Heptachlor	ND		16	1.4	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
Methoxychlor	ND		33	5.4	ug/Kg		11/06/21 10:08	11/21/21 23:44	10
Toxaphene	ND		650	220	ug/Kg		11/06/21 10:08	11/21/21 23:44	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*272*	*S1+*	*46 - 109*	*11/06/21 10:08*	*11/21/21 23:44*	*10*
DCB Decachlorobiphenyl	*65*		*46 - 109*	*11/06/21 10:08*	*11/21/21 23:44*	*10*
Tetrachloro-m-xylene	*97*		*47 - 107*	*11/06/21 10:08*	*11/21/21 23:44*	*10*
Tetrachloro-m-xylene	*80*		*47 - 107*	*11/06/21 10:08*	*11/21/21 23:44*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/06/21 10:17	11/17/21 22:33	1
PCB-1221	ND		32	3.5	ug/Kg		11/06/21 10:17	11/17/21 22:33	1
PCB-1232	ND		32	4.6	ug/Kg		11/06/21 10:17	11/17/21 22:33	1
PCB-1242	ND		32	5.7	ug/Kg		11/06/21 10:17	11/17/21 22:33	1
PCB-1248	ND		32	2.4	ug/Kg		11/06/21 10:17	11/17/21 22:33	1
PCB-1254	ND		32	3.7	ug/Kg		11/06/21 10:17	11/17/21 22:33	1
PCB-1260	ND		32	2.6	ug/Kg		11/06/21 10:17	11/17/21 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*52 - 138*	*11/06/21 10:17*	*11/17/21 22:33*	*1*
Tetrachloro-m-xylene	*62*		*56 - 114*	*11/06/21 10:17*	*11/17/21 22:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**140**	**B**	0.95	0.25	mg/Kg		11/01/21 13:39	11/02/21 13:29	1
Arsenic	**6.2**		1.9	1.2	mg/Kg		11/01/21 13:39	11/02/21 13:29	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S4D-2
Date Collected: 10/27/21 14:00
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-59
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
Aldrin	ND		1.6	0.13	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
Chlordane (technical)	ND		19	9.0	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
Endrin	ND		1.6	0.19	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
Endrin aldehyde	ND		1.6	0.54	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
trans-Chlordane	ND		1.6	0.57	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
Methoxychlor	ND		3.2	0.53	ug/Kg		11/06/21 10:08	11/22/21 00:03	1
Toxaphene	ND		64	21	ug/Kg		11/06/21 10:08	11/22/21 00:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*73*		*46 - 109*	*11/06/21 10:08*	*11/22/21 00:03*	*1*
DCB Decachlorobiphenyl	*65*		*46 - 109*	*11/06/21 10:08*	*11/22/21 00:03*	*1*
Tetrachloro-m-xylene	*72*		*47 - 107*	*11/06/21 10:08*	*11/22/21 00:03*	*1*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/06/21 10:08*	*11/22/21 00:03*	*1*

Client Sample ID: AOC3-S4E-0.5

Date Collected: 10/27/21 14:05
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-60

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.2	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
4,4'-DDE	ND		17	2.0	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
4,4'-DDT	ND		17	2.4	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
Aldrin	ND		17	1.4	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
alpha-BHC	ND		17	1.6	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
beta-BHC	ND		17	2.1	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
Chlordane (technical)	ND		190	92	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
delta-BHC	ND		17	3.4	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
Dieldrin	ND		17	1.9	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
Endosulfan I	ND		17	1.8	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
Endosulfan II	ND		17	1.8	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
Endosulfan sulfate	ND		17	3.4	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
Endrin	ND		17	1.9	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
Endrin aldehyde	ND		17	5.6	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
Endrin ketone	ND		17	2.6	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
trans-Chlordane	ND		17	5.8	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
Heptachlor	ND		17	1.5	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
Methoxychlor	ND		33	5.5	ug/Kg		11/06/21 10:08	11/22/21 00:22	10
Toxaphene	ND		650	220	ug/Kg		11/06/21 10:08	11/22/21 00:22	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*101*		*46 - 109*	*11/06/21 10:08*	*11/22/21 00:22*	*10*
DCB Decachlorobiphenyl	*29*	*S1-*	*46 - 109*	*11/06/21 10:08*	*11/22/21 00:22*	*10*
Tetrachloro-m-xylene	*102*		*47 - 107*	*11/06/21 10:08*	*11/22/21 00:22*	*10*
Tetrachloro-m-xylene	*78*		*47 - 107*	*11/06/21 10:08*	*11/22/21 00:22*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/06/21 10:18	11/17/21 22:53	1
PCB-1221	ND		32	3.5	ug/Kg		11/06/21 10:18	11/17/21 22:53	1
PCB-1232	ND		32	4.7	ug/Kg		11/06/21 10:18	11/17/21 22:53	1
PCB-1242	ND		32	5.8	ug/Kg		11/06/21 10:18	11/17/21 22:53	1
PCB-1248	ND		32	2.4	ug/Kg		11/06/21 10:18	11/17/21 22:53	1
PCB-1254	ND		32	3.7	ug/Kg		11/06/21 10:18	11/17/21 22:53	1
PCB-1260	ND		32	2.6	ug/Kg		11/06/21 10:18	11/17/21 22:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*52 - 138*	*11/06/21 10:18*	*11/17/21 22:53*	*1*
Tetrachloro-m-xylene	*61*		*56 - 114*	*11/06/21 10:18*	*11/17/21 22:53*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 18:31	1
Arsenic	ND		2.6	2.4	mg/Kg		11/09/21 08:59	11/10/21 18:31	1
Barium	**36**		0.52	0.23	mg/Kg		11/09/21 08:59	11/10/21 18:31	1
Beryllium	ND		0.26	0.18	mg/Kg		11/09/21 08:59	11/10/21 18:31	1
Cadmium	ND		0.52	0.21	mg/Kg		11/09/21 08:59	11/10/21 18:31	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S4E-0.5

Date Collected: 10/27/21 14:05
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-60

Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	1.4		1.0	0.24	mg/Kg		11/09/21 08:59	11/10/21 18:31	1
Chromium	2.6		1.0	0.18	mg/Kg		11/09/21 08:59	11/10/21 18:31	1
Copper	3.3		1.0	0.53	mg/Kg		11/09/21 08:59	11/10/21 18:31	1
Molybdenum	ND		0.52	0.47	mg/Kg		11/09/21 08:59	11/10/21 18:31	1
Nickel	5.3		0.52	0.45	mg/Kg		11/09/21 08:59	11/10/21 18:31	1
Antimony	ND		3.1	1.4	mg/Kg		11/09/21 08:59	11/10/21 18:31	1
Selenium	ND		5.2	1.9	mg/Kg		11/09/21 08:59	11/10/21 18:31	1
Thallium	ND		5.2	1.5	mg/Kg		11/09/21 08:59	11/10/21 18:31	1
Vanadium	0.96	J	1.0	0.18	mg/Kg		11/09/21 08:59	11/10/21 18:31	1
Zinc	25		10	5.3	mg/Kg		11/09/21 08:59	11/10/21 18:31	1
Lead	78		5.2	1.0	mg/Kg		11/09/21 08:59	11/10/21 18:31	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20		0.086	0.014	mg/Kg		11/09/21 08:55	11/09/21 12:54	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S4E-2
Date Collected: 10/27/21 14:07
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-61
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
Aldrin	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
Endrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/06/21 10:08	11/22/21 00:41	1
Toxaphene	ND		66	22	ug/Kg		11/06/21 10:08	11/22/21 00:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*60*		*46 - 109*	*11/06/21 10:08*	*11/22/21 00:41*	*1*
DCB Decachlorobiphenyl	*68*		*46 - 109*	*11/06/21 10:08*	*11/22/21 00:41*	*1*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/06/21 10:08*	*11/22/21 00:41*	*1*
Tetrachloro-m-xylene	*63*		*47 - 107*	*11/06/21 10:08*	*11/22/21 00:41*	*1*

Surrogate Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		2FP	NBZ	TPHL	TBP	FBP	PHL
Lab Sample ID	Client Sample ID	(53-113)	(54-114)	(66-126)	(60-120)	(47-107)	(54-114)
320-80943-23	AOC3/AOC10-S8A-0.5	54	96	72	0 S1-	50	97
320-80943-24	AOC3/AOC10-S8A-2	61	54	76	77	64	58
320-80943-25	AOC3/AOC10-S8B-0.5	54	90	90	0 S1-	71	48 S1-
320-80943-26	AOC3/AOC10-S8B-2	56	61	74	91	71	60
320-80943-27	AOC3/AOC10-S9C-0.5	37 S1-	64	87	0 S1-	100	67
320-80943-28	AOC3/AOC10-S9C-0.5DUP	42 S1-	55	100	0 S1-	69	50 S1-
320-80943-29	AOC3/AOC10-S9C-2	50 S1-	29 S1-	131 S1+	0 S1-	114 S1+	100
320-80943-29 MS	AOC3/AOC10-S9C-2	0 S1-	0 S1-	0 S1-	0 S1-	98	0 S1-
320-80943-29 MSD	AOC3/AOC10-S9C-2	0 S1-	0 S1-	0 S1-	0 S1-	110 S1+	0 S1-
LCS 320-539206/2-A	Lab Control Sample	86	89	95	90	86	88
MB 320-539206/1-A	Method Blank	84	72	96	78	83	83

Surrogate Legend

2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl (Surr)
PHL = Phenol-d5

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)				
		TPHL	FLN10	2MN	FBP	NBZ
Lab Sample ID	Client Sample ID	(53-121)	(50-150)	(50-150)	(43-109)	(49-114)
320-80943-23	AOC3/AOC10-S8A-0.5	113	94	83	84	99
320-80943-24	AOC3/AOC10-S8A-2	98	95	86	83	91
320-80943-25	AOC3/AOC10-S8B-0.5	115	97	107	89	95
320-80943-26	AOC3/AOC10-S8B-2	93	93	82	80	90
320-80943-27	AOC3/AOC10-S9C-0.5	96	102	103	93	121 S1+
320-80943-28	AOC3/AOC10-S9C-0.5DUP	83	112	90	86	78
320-80943-29	AOC3/AOC10-S9C-2	0 S1-	84	82	71	66
320-80943-29 MS	AOC3/AOC10-S9C-2	100	86	76	85	88
320-80943-29 MSD	AOC3/AOC10-S9C-2	93	100	84	81	69
LCS 320-539143/2-A	Lab Control Sample	94	86	87	92	87
MB 320-539143/1-A	Method Blank	97	86	86	89	85

Surrogate Legend

TPHL = Terphenyl-d14
FLN10 = Fluoranthene-d10 (Surr)
2MN = 2-methylnaphthalene-d10
FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)

Surrogate Summary

Client: Ninyo & Moore
Job ID: 320-80943-1
Project/Site: Cole School PEA

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCBP1 (46-109)	DCBP2 (46-109)	TCX1 (47-107)	TCX2 (47-107)
320-80943-1	AOC3-S3B-0.5	45 S1-	37 S1-	64	62
320-80943-2	AOC3-S3B-2	51	58	75	70
320-80943-3	AOC3-S2A-0.5	74	60	98	90
320-80943-4	AOC3-S2A-2	34 S1-	33 S1-	56	53
320-80943-5	AOC3-S3A-0.5	68	48	69	61
320-80943-6	AOC3-S3A-2	34 S1-	27 S1-	52	51
320-80943-7	AOC3-S4A-0.5	51	55	71	66
320-80943-8	AOC3-S4A-2	6 S1-	53	104	86
320-80943-9	AOC3-S5A-0.5	56	39 S1-	78	64
320-80943-10	AOC3-S5A-2	49	53	73	67
320-80943-11	AOC3-S4B-0.5	109	78	79	68
320-80943-12	AOC3-S4B-2	43 S1-	50	69	65
320-80943-13	AOC3/AOC8-S5B-0.5	63	55	78	69
320-80943-14	AOC3/AOC8-S5B-2	46	60	82	76
320-80943-15	AOC3-S6B-0.5	89	48	77	68
320-80943-16	AOC3-S6B-2	46	50	71	69
320-80943-16 MS	AOC3-S6B-2	43 S1-		64	
320-80943-16 MSD	AOC3-S6B-2	41 S1-		64	
320-80943-17	AOC3-S6A-0.5	76	81	79	64
320-80943-18	AOC3-S6A-2	55	58	78	76
320-80943-19	AOC3-S7A-0.5	68	61	86	77
320-80943-19 MS	AOC3-S7A-0.5	84		68	
320-80943-19 MSD	AOC3-S7A-0.5	93		82	
320-80943-20	AOC3-S7A-2	46	43 S1-	65	60
320-80943-21	AOC3-S7B-0.5	94	72	87	78
320-80943-22	AOC3-S7B-2	27 S1-	33 S1-	47	46 S1-
320-80943-23	AOC3/AOC10-S8A-0.5	61	54	82	63
320-80943-24	AOC3/AOC10-S8A-2	22 S1-	23 S1-	45 S1-	40 S1-
320-80943-25	AOC3/AOC10-S8B-0.5	66	36 S1-	73	59
320-80943-26	AOC3/AOC10-S8B-2	47	45 S1-	69	64
320-80943-27	AOC3/AOC10-S9C-0.5	72	47	76	62
320-80943-28	AOC3/AOC10-S9C-0.5DUP	74	52	62	54
320-80943-29	AOC3/AOC10-S9C-2	88	92	94	80
320-80943-30	AOC3-S8D-0.5	87	54	78	69
320-80943-31	AOC3-S8D-2	55	52	73	72
320-80943-32	AOC3/AOC8-S8C-0.5	96	59	91	76
320-80943-33	AOC3/AOC8-S8C-2	46	49	69	68
320-80943-34	AOC3-S7C-0.5	62	55	78	68
320-80943-35	AOC3-S7C-2	48	49	69	68
320-80943-36	AOC3-S6C-0.5	72	51	82	70
320-80943-37	AOC3-S6C-2	53	42 S1-	60	60
320-80943-38	AOC3-S7D-0.5	90	59	99	89
320-80943-39	AOC3-S7D-2	47	53	66	66
320-80943-40	AOC3-S5C-0.5	103	42 S1-	85	71
320-80943-41	AOC3-S5C-2	42 S1-	47	60	58
320-80943-41 MS	AOC3-S5C-2	50		76	
320-80943-41 MSD	AOC3-S5C-2	47		68	
320-80943-42	AOC3-S4C-0.5	110 S1+	37 S1-	85	83
320-80943-42 MS	AOC3-S4C-0.5	82		93	
320-80943-42 MSD	AOC3-S4C-0.5	133 S1+		94	

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(46-109)	(46-109)	(47-107)	(47-107)
320-80943-43	AOC3-S4C-2	60	66	59	59
320-80943-44	AOC3-S3C-0.5	211 S1+	89	84	74
320-80943-45	AOC3-S3C-2	92	89	90	86
320-80943-46	AOC3-S1D-0.5	86	75	92	88
320-80943-47	AOC3-S1D-2	83	74	64	67
320-80943-48	AOC3/AOC8-S2D-0.5	100	57	89	83
320-80943-49	AOC3/AOC8-S2D-2	65	67	57	56
320-80943-50	AOC3/AOC8-S1E-0.5	156 S1+	49	98	81
320-80943-51	AOC3/AOC8-S1E-2	58	64	70	68
320-80943-52	AOC3-S2E-0.5	146 S1+	44 S1-	105	91
320-80943-53	AOC3-S2E-2	61	62	64	59
320-80943-54	AOC3-S3E-0.5	188 S1+	28 S1-	97	82
320-80943-55	AOC3-S3E-2	66	73	63	59
320-80943-56	AOC3-S3D-0.5	143 S1+	43 S1-	89	74
320-80943-57	AOC3-S3D-2	54	60	66	62
320-80943-58	AOC3-S4D-0.5	272 S1+	65	97	80
320-80943-59	AOC3-S4D-2	73	65	72	68
320-80943-60	AOC3-S4E-0.5	101	29 S1-	102	78
320-80943-61	AOC3-S4E-2	60	68	68	63
LCS 320-539466/2-A	Lab Control Sample	58		63	
LCS 320-539525/2-A	Lab Control Sample	60		76	
LCS 320-539858/2-A	Lab Control Sample	58		71	
LCS 320-540585/2-A	Lab Control Sample	81		82	
MB 320-539466/1-A	Method Blank	58	75	65	61
MB 320-539525/1-A	Method Blank	54	68	67	67
MB 320-539858/1-A	Method Blank	57	82	74	68
MB 320-540585/1-A	Method Blank	83	86	78	78

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX2
Lab Sample ID	Client Sample ID	(52-138)	(56-114)
320-80943-1	AOC3-S3B-0.5	44 S1-	59
320-80943-3	AOC3-S2A-0.5	60	71
320-80943-5	AOC3-S3A-0.5	54	62
320-80943-7	AOC3-S4A-0.5	68	79
320-80943-9	AOC3-S5A-0.5	56	63
320-80943-11	AOC3-S4B-0.5	56	60
320-80943-13	AOC3/AOC8-S5B-0.5	58	62
320-80943-15	AOC3-S6B-0.5	55	64
320-80943-17	AOC3-S6A-0.5	55	62
320-80943-17 MS	AOC3-S6A-0.5	58	62
320-80943-17 MSD	AOC3-S6A-0.5	56	65
320-80943-19	AOC3-S7A-0.5	52	66
320-80943-21	AOC3-S7B-0.5	51 S1-	65

Surrogate Summary

Client: Ninyo & Moore
Job ID: 320-80943-1
Project/Site: Cole School PEA

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP2 (52-138)	TCX2 (56-114)
320-80943-21 MS	AOC3-S7B-0.5	49 S1-	66
320-80943-21 MSD	AOC3-S7B-0.5	52	66
320-80943-23	AOC3/AOC10-S8A-0.5	41 S1-	57
320-80943-25	AOC3/AOC10-S8B-0.5	56	59
320-80943-27	AOC3/AOC10-S9C-0.5	58	58
320-80943-28	AOC3/AOC10-S9C-0.5DUP	51 S1-	55 S1-
320-80943-30	AOC3-S8D-0.5	60	63
320-80943-32	AOC3/AOC8-S8C-0.5	64	65
320-80943-34	AOC3-S7C-0.5	56	59
320-80943-36	AOC3-S6C-0.5	57	59
320-80943-38	AOC3-S7D-0.5	56	59
320-80943-40	AOC3-S5C-0.5	49 S1-	52 S1-
320-80943-40 MS	AOC3-S5C-0.5	47 S1-	51 S1-
320-80943-40 MSD	AOC3-S5C-0.5	61	63
LCS 320-539467/2-A	Lab Control Sample	63	70
LCS 320-539538/2-A	Lab Control Sample	75	70
LCS 320-539860/2-A	Lab Control Sample	83	71
MB 320-539467/1-A	Method Blank	54	60
MB 320-539538/1-A	Method Blank	73	71
MB 320-539860/1-A	Method Blank	80	68

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (52-138)	TCX1 (56-114)
320-80943-42	AOC3-S4C-0.5	48 S1-	57
320-80943-44	AOC3-S3C-0.5	53	57
320-80943-46	AOC3-S1D-0.5	57	71
320-80943-48	AOC3/AOC8-S2D-0.5	56	71
320-80943-50	AOC3/AOC8-S1E-0.5	56	58
320-80943-52	AOC3-S2E-0.5	66	70
320-80943-54	AOC3-S3E-0.5	57	63
320-80943-56	AOC3-S3D-0.5	56	60
320-80943-58	AOC3-S4D-0.5	57	62
320-80943-60	AOC3-S4E-0.5	57	61
LCS 320-540587/2-A	Lab Control Sample	64	64
MB 320-540587/1-A	Method Blank	60	62

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 320-539206/1-A
Matrix: Solid
Analysis Batch: 541624

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539206

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		330	83	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Acenaphthylene	ND		330	85	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Anthracene	ND		330	86	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Benzo[a]anthracene	ND		330	92	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Benzoic acid	ND		1600	290	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Benzo[b]fluoranthene	ND		330	95	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Benzo[k]fluoranthene	ND		330	110	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Benzyl alcohol	ND		330	170	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Bis(2-chloroethoxy)methane	ND		330	88	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Bis(2-chloroethyl)ether	ND		330	81	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
4-Bromophenyl phenyl ether	ND		330	85	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Butyl benzyl phthalate	ND		330	95	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
2,4-Dimethylphenol	ND		330	170	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Dimethyl phthalate	ND		330	87	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
2-Methyl-4,6-dinitrophenol	ND		1600	81	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
2,4-Dinitrophenol	ND		1600	210	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
2,4-Dinitrotoluene	ND		330	89	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
2,6-Dinitrotoluene	ND		330	99	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Fluoranthene	ND		330	95	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Fluorene	ND		330	92	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Hexachlorobenzene	ND		330	89	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Hexachlorobutadiene	ND		330	82	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Hexachlorocyclopentadiene	ND		1600	62	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Hexachloroethane	ND		330	81	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
N-Nitrosodiphenylamine	ND		330	86	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
N-Nitrosodi-n-propylamine	ND		330	84	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
1,4-Dichlorobenzene	ND		330	77	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
2-Chloronaphthalene	ND		330	81	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
2-Chlorophenol	ND		330	88	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
4-Chlorophenyl phenyl ether	ND		330	93	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Chrysene	ND		330	84	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Dibenz(a,h)anthracene	ND		330	100	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Dibenzofuran	ND		330	86	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Benzo[g,h,i]perylene	ND		330	110	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Benzo[a]pyrene	ND		330	94	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Di-n-butyl phthalate	ND		330	97	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
1,2-Dichlorobenzene	ND		330	75	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
1,3-Dichlorobenzene	ND		330	78	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
3,3'-Dichlorobenzidine	ND		1600	94	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
2,4-Dichlorophenol	ND		330	89	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Diethyl phthalate	ND		330	90	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Indeno[1,2,3-cd]pyrene	ND		330	96	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Isophorone	ND		330	93	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
2-Methylnaphthalene	ND		330	85	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
2-Methylphenol	ND		330	58	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Naphthalene	ND		330	82	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
2-Nitroaniline	ND		1600	84	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
3-Nitroaniline	ND		1600	170	ug/Kg		11/02/21 11:54	11/11/21 09:37	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 320-539206/1-A
Matrix: Solid
Analysis Batch: 541624

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539206

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitroaniline	ND		1600	88	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Nitrobenzene	ND		330	76	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
2-Nitrophenol	ND		330	82	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
4-Nitrophenol	ND		1600	280	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Pyrene	ND		330	94	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Pyridine	ND		660	72	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Pentachlorophenol	ND		1600	51	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Phenanthrene	ND		330	94	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
1,2,4-Trichlorobenzene	ND		330	83	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
2,4,5-Trichlorophenol	ND		330	83	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
2,4,6-Trichlorophenol	ND		330	84	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Phenol	ND		330	83	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Azobenzene	ND		330	92	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
4-Chloroaniline	ND		330	58	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Bis(2-ethylhexyl) phthalate	ND		330	98	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
Di-n-octyl phthalate	ND		330	97	ug/Kg		11/02/21 11:54	11/11/21 09:37	1
4-Chloro-3-methylphenol	ND		330	92	ug/Kg		11/02/21 11:54	11/11/21 09:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*84*		*53 - 113*	*11/02/21 11:54*	*11/11/21 09:37*	*1*
Nitrobenzene-d5	*72*		*54 - 114*	*11/02/21 11:54*	*11/11/21 09:37*	*1*
Terphenyl-d14	*96*		*66 - 126*	*11/02/21 11:54*	*11/11/21 09:37*	*1*
2,4,6-Tribromophenol	*78*		*60 - 120*	*11/02/21 11:54*	*11/11/21 09:37*	*1*
2-Fluorobiphenyl (Surr)	*83*		*47 - 107*	*11/02/21 11:54*	*11/11/21 09:37*	*1*
Phenol-d5	*83*		*54 - 114*	*11/02/21 11:54*	*11/11/21 09:37*	*1*

Lab Sample ID: LCS 320-539206/2-A
Matrix: Solid
Analysis Batch: 541624

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539206

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	3330	2970		ug/Kg		89	48 - 108
Acenaphthylene	3330	3020		ug/Kg		91	50 - 110
Anthracene	3330	3110		ug/Kg		93	55 - 115
Benzo[a]anthracene	3330	3130		ug/Kg		94	62 - 122
Benzoic acid	6670	5340		ug/Kg		80	10 - 121
Benzo[b]fluoranthene	3330	3260		ug/Kg		98	64 - 124
Benzo[k]fluoranthene	3330	3130		ug/Kg		94	64 - 124
Benzyl alcohol	3330	3020		ug/Kg		91	53 - 113
Bis(2-chloroethoxy)methane	3330	2910		ug/Kg		87	50 - 110
Bis(2-chloroethyl)ether	3330	2760		ug/Kg		83	47 - 107
4-Bromophenyl phenyl ether	3330	3100		ug/Kg		93	57 - 117
Butyl benzyl phthalate	3330	3310		ug/Kg		99	66 - 126
2,4-Dimethylphenol	3330	3040		ug/Kg		91	53 - 113
Dimethyl phthalate	3330	3010		ug/Kg		90	53 - 113
2-Methyl-4,6-dinitrophenol	6670	5020		ug/Kg		75	33 - 107
2,4-Dinitrophenol	6670	4140		ug/Kg		62	10 - 100
2,4-Dinitrotoluene	3330	3080		ug/Kg		92	61 - 121

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-539206/2-A
Matrix: Solid
Analysis Batch: 541624

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539206

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,6-Dinitrotoluene	3330	3110		ug/Kg		93	60 - 120
Fluoranthene	3330	3020		ug/Kg		90	57 - 117
Fluorene	3330	3000		ug/Kg		90	51 - 111
Hexachlorobenzene	3330	3020		ug/Kg		90	60 - 120
Hexachlorobutadiene	3330	2660		ug/Kg		80	46 - 106
Hexachlorocyclopentadiene	3330	2720		ug/Kg		82	41 - 101
Hexachloroethane	3330	2560		ug/Kg		77	44 - 104
N-Nitrosodiphenylamine	3330	3080		ug/Kg		92	55 - 115
N-Nitrosodi-n-propylamine	3330	2950		ug/Kg		88	50 - 110
1,4-Dichlorobenzene	3330	2600		ug/Kg		78	44 - 104
2-Chloronaphthalene	3330	2950		ug/Kg		88	47 - 107
2-Chlorophenol	3330	2900		ug/Kg		87	50 - 110
4-Chlorophenyl phenyl ether	3330	2960		ug/Kg		89	52 - 112
Chrysene	3330	3060		ug/Kg		92	59 - 119
Dibenz(a,h)anthracene	3330	3050		ug/Kg		91	64 - 124
Dibenzofuran	3330	2990		ug/Kg		90	50 - 110
Benzo[g,h,i]perylene	3330	3060		ug/Kg		92	64 - 124
Benzo[a]pyrene	3330	3170		ug/Kg		95	67 - 127
Di-n-butyl phthalate	3330	3200		ug/Kg		96	61 - 121
1,2-Dichlorobenzene	3330	2620		ug/Kg		79	44 - 104
1,3-Dichlorobenzene	3330	2550		ug/Kg		77	42 - 102
3,3'-Dichlorobenzidine	3330	2410		ug/Kg		72	33 - 93
2,4-Dichlorophenol	3330	3050		ug/Kg		92	56 - 116
Diethyl phthalate	3330	3010		ug/Kg		90	54 - 114
Indeno[1,2,3-cd]pyrene	3330	3160		ug/Kg		95	65 - 125
Isophorone	3330	2880		ug/Kg		86	50 - 110
2-Methylnaphthalene	3330	2910		ug/Kg		87	48 - 108
2-Methylphenol	3330	2980		ug/Kg		90	53 - 113
Naphthalene	3330	2800		ug/Kg		84	44 - 104
2-Nitroaniline	3330	3140		ug/Kg		94	60 - 120
3-Nitroaniline	3330	2580		ug/Kg		77	38 - 98
4-Nitroaniline	3330	3120		ug/Kg		94	57 - 117
Nitrobenzene	3330	2840		ug/Kg		85	50 - 110
2-Nitrophenol	3330	3060		ug/Kg		92	55 - 115
4-Nitrophenol	6670	5740		ug/Kg		86	57 - 117
Pyrene	3330	3170		ug/Kg		95	62 - 122
Pyridine	6670	4000		ug/Kg		60	28 - 88
Pentachlorophenol	6670	5850		ug/Kg		88	57 - 117
Phenanthrene	3330	3030		ug/Kg		91	53 - 113
1,2,4-Trichlorobenzene	3330	2730		ug/Kg		82	45 - 105
2,4,5-Trichlorophenol	3330	3110		ug/Kg		93	58 - 118
2,4,6-Trichlorophenol	3330	3050		ug/Kg		92	57 - 117
Phenol	3330	2970		ug/Kg		89	53 - 113
Azobenzene	3330	3100		ug/Kg		93	54 - 114
4-Chloroaniline	3330	2120		ug/Kg		64	29 - 89
Bis(2-ethylhexyl) phthalate	3330	3380		ug/Kg		102	66 - 126
Di-n-octyl phthalate	3330	3310		ug/Kg		99	66 - 126
4-Chloro-3-methylphenol	3330	3060		ug/Kg		92	61 - 121

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-539206/2-A
Matrix: Solid
Analysis Batch: 541624

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539206

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	86		53 - 113
Nitrobenzene-d5	89		54 - 114
Terphenyl-d14	95		66 - 126
2,4,6-Tribromophenol	90		60 - 120
2-Fluorobiphenyl (Surr)	86		47 - 107
Phenol-d5	88		54 - 114

Lab Sample ID: 320-80943-29 MS
Matrix: Solid
Analysis Batch: 542113

Client Sample ID: AOC3/AOC10-S9C-2
Prep Type: Total/NA
Prep Batch: 539206

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		3290	ND		ug/Kg		NC	48 - 108
Acenaphthylene	ND		3290	ND		ug/Kg		NC	50 - 110
Anthracene	ND		3290	ND		ug/Kg		NC	55 - 115
Benzo[a]anthracene	ND		3290	ND		ug/Kg		NC	62 - 122
Benzoic acid	ND		6580	ND		ug/Kg		NC	10 - 121
Benzo[b]fluoranthene	ND		3290	ND		ug/Kg		NC	64 - 124
Benzo[k]fluoranthene	ND		3290	ND		ug/Kg		NC	64 - 124
Benzyl alcohol	ND		3290	ND		ug/Kg		NC	53 - 113
Bis(2-chloroethoxy)methane	ND		3290	ND		ug/Kg		NC	50 - 110
Bis(2-chloroethyl)ether	ND		3290	ND		ug/Kg		NC	47 - 107
4-Bromophenyl phenyl ether	ND		3290	ND		ug/Kg		NC	57 - 117
Butyl benzyl phthalate	ND		3290	ND		ug/Kg		NC	66 - 126
2,4-Dimethylphenol	ND		3290	ND		ug/Kg		NC	53 - 113
Dimethyl phthalate	ND		3290	ND		ug/Kg		NC	53 - 113
2-Methyl-4,6-dinitrophenol	ND		6580	ND		ug/Kg		NC	33 - 107
2,4-Dinitrophenol	ND		6580	ND		ug/Kg		NC	10 - 100
2,4-Dinitrotoluene	ND		3290	ND		ug/Kg		NC	61 - 121
2,6-Dinitrotoluene	ND		3290	ND		ug/Kg		NC	60 - 120
Fluoranthene	ND		3290	ND		ug/Kg		NC	57 - 117
Fluorene	ND		3290	ND		ug/Kg		NC	51 - 111
Hexachlorobenzene	ND		3290	ND		ug/Kg		NC	60 - 120
Hexachlorobutadiene	ND		3290	ND		ug/Kg		NC	46 - 106
Hexachlorocyclopentadiene	ND		3290	ND		ug/Kg		NC	41 - 101
Hexachloroethane	ND		3290	ND		ug/Kg		NC	44 - 104
N-Nitrosodiphenylamine	ND		3290	ND		ug/Kg		NC	55 - 115
N-Nitrosodi-n-propylamine	ND		3290	ND		ug/Kg		NC	50 - 110
1,4-Dichlorobenzene	ND		3290	ND		ug/Kg		NC	44 - 104
2-Chloronaphthalene	ND		3290	ND		ug/Kg		NC	47 - 107
2-Chlorophenol	ND		3290	ND		ug/Kg		NC	50 - 110
4-Chlorophenyl phenyl ether	ND		3290	ND		ug/Kg		NC	52 - 112
Chrysene	ND		3290	ND		ug/Kg		NC	59 - 119
Dibenz(a,h)anthracene	ND		3290	ND		ug/Kg		NC	64 - 124
Dibenzofuran	ND		3290	ND		ug/Kg		NC	50 - 110
Benzo[g,h,i]perylene	ND		3290	ND		ug/Kg		NC	64 - 124
Benzo[a]pyrene	ND		3290	ND		ug/Kg		NC	67 - 127
Di-n-butyl phthalate	ND		3290	ND		ug/Kg		NC	61 - 121

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 320-80943-29 MS
Matrix: Solid
Analysis Batch: 542113

Client Sample ID: AOC3/AOC10-S9C-2
Prep Type: Total/NA
Prep Batch: 539206

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		3290	ND		ug/Kg		NC	44 - 104
1,3-Dichlorobenzene	ND		3290	ND		ug/Kg		NC	42 - 102
3,3'-Dichlorobenzidine	ND		3290	ND		ug/Kg		NC	33 - 93
2,4-Dichlorophenol	ND		3290	ND		ug/Kg		NC	56 - 116
Diethyl phthalate	ND		3290	ND		ug/Kg		NC	54 - 114
Indeno[1,2,3-cd]pyrene	ND		3290	ND		ug/Kg		NC	65 - 125
Isophorone	ND		3290	ND		ug/Kg		NC	50 - 110
2-Methylnaphthalene	ND		3290	ND		ug/Kg		NC	48 - 108
2-Methylphenol	ND		3290	ND		ug/Kg		NC	53 - 113
Naphthalene	ND		3290	ND		ug/Kg		NC	44 - 104
2-Nitroaniline	ND		3290	ND		ug/Kg		NC	60 - 120
3-Nitroaniline	ND		3290	ND		ug/Kg		NC	38 - 98
4-Nitroaniline	ND		3290	ND		ug/Kg		NC	57 - 117
Nitrobenzene	ND		3290	ND		ug/Kg		NC	50 - 110
2-Nitrophenol	ND		3290	ND		ug/Kg		NC	55 - 115
4-Nitrophenol	ND		6580	ND		ug/Kg		NC	57 - 117
Pyrene	ND		3290	ND		ug/Kg		NC	62 - 122
Pyridine	ND		6580	ND		ug/Kg		NC	28 - 88
Pentachlorophenol	ND		6580	ND		ug/Kg		NC	57 - 117
Phenanthrene	ND		3290	ND		ug/Kg		NC	53 - 113
1,2,4-Trichlorobenzene	ND		3290	ND		ug/Kg		NC	45 - 105
2,4,5-Trichlorophenol	ND		3290	ND		ug/Kg		NC	58 - 118
2,4,6-Trichlorophenol	ND		3290	ND		ug/Kg		NC	57 - 117
Phenol	ND		3290	ND		ug/Kg		NC	53 - 113
Azobenzene	ND		3290	ND		ug/Kg		NC	54 - 114
4-Chloroaniline	ND		3290	ND		ug/Kg		NC	29 - 89
Bis(2-ethylhexyl) phthalate	ND		3290	ND		ug/Kg		NC	66 - 126
Di-n-octyl phthalate	ND		3290	ND		ug/Kg		NC	66 - 126
4-Chloro-3-methylphenol	ND		3290	ND		ug/Kg		NC	61 - 121

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorophenol	*0*	*S1-*	*53 - 113*
Nitrobenzene-d5	*0*	*S1-*	*54 - 114*
Terphenyl-d14	*0*	*S1-*	*66 - 126*
2,4,6-Tribromophenol	*0*	*S1-*	*60 - 120*
2-Fluorobiphenyl (Surr)	*98*		*47 - 107*
Phenol-d5	*0*	*S1-*	*54 - 114*

Lab Sample ID: 320-80943-29 MSD
Matrix: Solid
Analysis Batch: 542113

Client Sample ID: AOC3/AOC10-S9C-2
Prep Type: Total/NA
Prep Batch: 539206

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		3270	ND		ug/Kg		NC	48 - 108	NC	30
Acenaphthylene	ND		3270	ND		ug/Kg		NC	50 - 110	NC	30
Anthracene	ND		3270	ND		ug/Kg		NC	55 - 115	NC	30
Benzo[a]anthracene	ND		3270	ND		ug/Kg		NC	62 - 122	NC	30
Benzoic acid	ND		6540	ND		ug/Kg		NC	10 - 121	NC	30

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 320-80943-29 MSD
Matrix: Solid
Analysis Batch: 542113

Client Sample ID: AOC3/AOC10-S9C-2
Prep Type: Total/NA
Prep Batch: 539206

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[b]fluoranthene	ND		3270	ND		ug/Kg		NC	64 - 124	NC	30
Benzo[k]fluoranthene	ND		3270	ND		ug/Kg		NC	64 - 124	NC	30
Benzyl alcohol	ND		3270	ND		ug/Kg		NC	53 - 113	NC	30
Bis(2-chloroethoxy)methane	ND		3270	ND		ug/Kg		NC	50 - 110	NC	30
Bis(2-chloroethyl)ether	ND		3270	ND		ug/Kg		NC	47 - 107	NC	30
4-Bromophenyl phenyl ether	ND		3270	ND		ug/Kg		NC	57 - 117	NC	30
Butyl benzyl phthalate	ND		3270	ND		ug/Kg		NC	66 - 126	NC	30
2,4-Dimethylphenol	ND		3270	ND		ug/Kg		NC	53 - 113	NC	30
Dimethyl phthalate	ND		3270	ND		ug/Kg		NC	53 - 113	NC	30
2-Methyl-4,6-dinitrophenol	ND		6540	ND		ug/Kg		NC	33 - 107	NC	30
2,4-Dinitrophenol	ND		6540	ND		ug/Kg		NC	10 - 100	NC	30
2,4-Dinitrotoluene	ND		3270	ND		ug/Kg		NC	61 - 121	NC	30
2,6-Dinitrotoluene	ND		3270	ND		ug/Kg		NC	60 - 120	NC	30
Fluoranthene	ND		3270	ND		ug/Kg		NC	57 - 117	NC	30
Fluorene	ND		3270	ND		ug/Kg		NC	51 - 111	NC	30
Hexachlorobenzene	ND		3270	ND		ug/Kg		NC	60 - 120	NC	30
Hexachlorobutadiene	ND		3270	ND		ug/Kg		NC	46 - 106	NC	30
Hexachlorocyclopentadiene	ND		3270	ND		ug/Kg		NC	41 - 101	NC	30
Hexachloroethane	ND		3270	ND		ug/Kg		NC	44 - 104	NC	30
N-Nitrosodiphenylamine	ND		3270	ND		ug/Kg		NC	55 - 115	NC	30
N-Nitrosodi-n-propylamine	ND		3270	ND		ug/Kg		NC	50 - 110	NC	30
1,4-Dichlorobenzene	ND		3270	ND		ug/Kg		NC	44 - 104	NC	30
2-Chloronaphthalene	ND		3270	ND		ug/Kg		NC	47 - 107	NC	30
2-Chlorophenol	ND		3270	ND		ug/Kg		NC	50 - 110	NC	30
4-Chlorophenyl phenyl ether	ND		3270	ND		ug/Kg		NC	52 - 112	NC	30
Chrysene	ND		3270	ND		ug/Kg		NC	59 - 119	NC	30
Dibenz(a,h)anthracene	ND		3270	ND		ug/Kg		NC	64 - 124	NC	30
Dibenzofuran	ND		3270	ND		ug/Kg		NC	50 - 110	NC	30
Benzo[g,h,i]perylene	ND		3270	ND		ug/Kg		NC	64 - 124	NC	30
Benzo[a]pyrene	ND		3270	ND		ug/Kg		NC	67 - 127	NC	30
Di-n-butyl phthalate	ND		3270	ND		ug/Kg		NC	61 - 121	NC	30
1,2-Dichlorobenzene	ND		3270	ND		ug/Kg		NC	44 - 104	NC	30
1,3-Dichlorobenzene	ND		3270	ND		ug/Kg		NC	42 - 102	NC	30
3,3'-Dichlorobenzidine	ND		3270	ND		ug/Kg		NC	33 - 93	NC	30
2,4-Dichlorophenol	ND		3270	ND		ug/Kg		NC	56 - 116	NC	30
Diethyl phthalate	ND		3270	ND		ug/Kg		NC	54 - 114	NC	30
Indeno[1,2,3-cd]pyrene	ND		3270	ND		ug/Kg		NC	65 - 125	NC	30
Isophorone	ND		3270	ND		ug/Kg		NC	50 - 110	NC	30
2-Methylnaphthalene	ND		3270	ND		ug/Kg		NC	48 - 108	NC	30
2-Methylphenol	ND		3270	ND		ug/Kg		NC	53 - 113	NC	30
Naphthalene	ND		3270	ND		ug/Kg		NC	44 - 104	NC	30
2-Nitroaniline	ND		3270	ND		ug/Kg		NC	60 - 120	NC	30
3-Nitroaniline	ND		3270	ND		ug/Kg		NC	38 - 98	NC	30
4-Nitroaniline	ND		3270	ND		ug/Kg		NC	57 - 117	NC	30
Nitrobenzene	ND		3270	ND		ug/Kg		NC	50 - 110	NC	30
2-Nitrophenol	ND		3270	ND		ug/Kg		NC	55 - 115	NC	30
4-Nitrophenol	ND		6540	ND		ug/Kg		NC	57 - 117	NC	30
Pyrene	ND		3270	ND		ug/Kg		NC	62 - 122	NC	30
Pyridine	ND		6540	ND		ug/Kg		NC	28 - 88	NC	30

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 320-80943-29 MSD
Matrix: Solid
Analysis Batch: 542113

Client Sample ID: AOC3/AOC10-S9C-2
Prep Type: Total/NA
Prep Batch: 539206

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol	ND		6540	ND		ug/Kg		NC	57 - 117	NC	30
Phenanthrene	ND		3270	ND		ug/Kg		NC	53 - 113	NC	30
1,2,4-Trichlorobenzene	ND		3270	ND		ug/Kg		NC	45 - 105	NC	30
2,4,5-Trichlorophenol	ND		3270	ND		ug/Kg		NC	58 - 118	NC	30
2,4,6-Trichlorophenol	ND		3270	ND		ug/Kg		NC	57 - 117	NC	30
Phenol	ND		3270	ND		ug/Kg		NC	53 - 113	NC	30
Azobenzene	ND		3270	ND		ug/Kg		NC	54 - 114	NC	30
4-Chloroaniline	ND		3270	ND		ug/Kg		NC	29 - 89	NC	30
Bis(2-ethylhexyl) phthalate	ND		3270	ND		ug/Kg		NC	66 - 126	NC	30
Di-n-octyl phthalate	ND		3270	ND		ug/Kg		NC	66 - 126	NC	30
4-Chloro-3-methylphenol	ND		3270	ND		ug/Kg		NC	61 - 121	NC	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorophenol	*0*	*S1-*	*53 - 113*
Nitrobenzene-d5	*0*	*S1-*	*54 - 114*
Terphenyl-d14	*0*	*S1-*	*66 - 126*
2,4,6-Tribromophenol	*0*	*S1-*	*60 - 120*
2-Fluorobiphenyl (Surr)	*110*	*S1+*	*47 - 107*
Phenol-d5	*0*	*S1-*	*54 - 114*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 320-539143/1-A
Matrix: Solid
Analysis Batch: 540863

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539143

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.63	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Acenaphthylene	ND		5.0	0.66	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Anthracene	ND		5.0	0.67	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Benzo[a]anthracene	ND		5.0	0.71	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Benzo[a]pyrene	ND		5.0	0.70	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Benzo[b]fluoranthene	ND		5.0	0.77	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Benzo[g,h,i]perylene	ND		5.0	0.72	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Benzo[k]fluoranthene	ND		5.0	0.72	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Chrysene	ND		5.0	0.72	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Dibenz(a,h)anthracene	ND		5.0	0.77	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Fluoranthene	ND		5.0	0.81	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Fluorene	ND		5.0	0.64	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.77	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Naphthalene	ND		5.0	0.67	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Phenanthrene	ND		5.0	0.72	ug/Kg		11/02/21 09:36	11/08/21 10:05	1
Pyrene	ND		5.0	0.75	ug/Kg		11/02/21 09:36	11/08/21 10:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*97*		*53 - 121*	*11/02/21 09:36*	*11/08/21 10:05*	*1*
Fluoranthene-d10 (Surr)	*86*		*50 - 150*	*11/02/21 09:36*	*11/08/21 10:05*	*1*
2-methylnaphthalene-d10	*86*		*50 - 150*	*11/02/21 09:36*	*11/08/21 10:05*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 320-539143/1-A
Matrix: Solid
Analysis Batch: 540863

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539143

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	89		43 - 109	11/02/21 09:36	11/08/21 10:05	1
Nitrobenzene-d5 (Surr)	85		49 - 114	11/02/21 09:36	11/08/21 10:05	1

Lab Sample ID: LCS 320-539143/2-A
Matrix: Solid
Analysis Batch: 540863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539143

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	25.0	19.1		ug/Kg		76	54 - 97
Acenaphthylene	25.0	18.3		ug/Kg		73	52 - 99
Anthracene	25.0	19.5		ug/Kg		78	52 - 102
Benzo[a]anthracene	25.0	20.6		ug/Kg		82	55 - 109
Benzo[a]pyrene	25.0	22.1		ug/Kg		88	54 - 110
Benzo[b]fluoranthene	25.0	20.9		ug/Kg		83	52 - 112
Benzo[g,h,i]perylene	25.0	19.7		ug/Kg		79	51 - 119
Benzo[k]fluoranthene	25.0	22.2		ug/Kg		89	56 - 106
Chrysene	25.0	22.2		ug/Kg		89	54 - 110
Dibenz(a,h)anthracene	25.0	20.1		ug/Kg		80	55 - 119
Fluoranthene	25.0	19.9		ug/Kg		80	53 - 110
Fluorene	25.0	19.9		ug/Kg		79	53 - 100
Indeno[1,2,3-cd]pyrene	25.0	18.2		ug/Kg		73	52 - 120
Naphthalene	25.0	19.7		ug/Kg		79	55 - 100
Phenanthrene	25.0	20.2		ug/Kg		81	54 - 98
Pyrene	25.0	19.4		ug/Kg		77	53 - 108

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	94		53 - 121
Fluoranthene-d10 (Surr)	86		50 - 150
2-methylnaphthalene-d10	87		50 - 150
2-Fluorobiphenyl (Surr)	92		43 - 109
Nitrobenzene-d5 (Surr)	87		49 - 114

Lab Sample ID: 320-80943-29 MS
Matrix: Solid
Analysis Batch: 540863

Client Sample ID: AOC3/AOC10-S9C-2
Prep Type: Total/NA
Prep Batch: 539143

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		23.5	ND		ug/Kg		NC	54 - 97
Acenaphthylene	ND		23.5	ND		ug/Kg		NC	52 - 99
Anthracene	ND		23.5	ND		ug/Kg		NC	52 - 102
Benzo[a]anthracene	ND	F2	23.5	40.0	J	ug/Kg		NC	55 - 109
Benzo[a]pyrene	ND	F2	23.5	58.8	J	ug/Kg		NC	54 - 110
Benzo[b]fluoranthene	ND	F2	23.5	69.3	J	ug/Kg		NC	52 - 112
Benzo[g,h,i]perylene	45	J F2 F1	23.5	62.8	J	ug/Kg		75	51 - 119
Benzo[k]fluoranthene	ND		23.5	ND		ug/Kg		NC	56 - 106
Chrysene	ND	F2	23.5	75.7	J	ug/Kg		NC	54 - 110
Dibenz(a,h)anthracene	ND		23.5	ND		ug/Kg		NC	55 - 119
Fluoranthene	ND		23.5	ND		ug/Kg		NC	53 - 110

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 320-80943-29 MS
Matrix: Solid
Analysis Batch: 540863

Client Sample ID: AOC3/AOC10-S9C-2
Prep Type: Total/NA
Prep Batch: 539143

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	ND		23.5	ND		ug/Kg		NC	53 - 100
Indeno[1,2,3-cd]pyrene	ND	F2	23.5	42.3	J	ug/Kg		NC	52 - 120
Naphthalene	ND		23.5	ND		ug/Kg		NC	55 - 100
Phenanthrene	ND		23.5	ND		ug/Kg		NC	54 - 98
Pyrene	ND	F2	23.5	47.9	J	ug/Kg		NC	53 - 108

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*100*		*53 - 121*
Fluoranthene-d10 (Surr)	*86*		*50 - 150*
2-methylnaphthalene-d10	*76*		*50 - 150*
2-Fluorobiphenyl (Surr)	*85*		*43 - 109*
Nitrobenzene-d5 (Surr)	*88*		*49 - 114*

Lab Sample ID: 320-80943-29 MSD
Matrix: Solid
Analysis Batch: 540863

Client Sample ID: AOC3/AOC10-S9C-2
Prep Type: Total/NA
Prep Batch: 539143

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		23.5	ND		ug/Kg		NC	54 - 97	NC	30
Acenaphthylene	ND		23.5	31.5	J	ug/Kg		NC	52 - 99	NC	30
Anthracene	ND		23.5	55.0	J	ug/Kg		NC	52 - 102	NC	30
Benzo[a]anthracene	ND	F2	23.5	173	J F2	ug/Kg		NC	55 - 109	125	30
Benzo[a]pyrene	ND	F2	23.5	216	J F2	ug/Kg		NC	54 - 110	114	30
Benzo[b]fluoranthene	ND	F2	23.5	207	J F2	ug/Kg		NC	52 - 112	100	30
Benzo[g,h,i]perylene	45	J F2 F1	23.5	116	J F1 F2	ug/Kg		301	51 - 119	59	30
Benzo[k]fluoranthene	ND		23.5	100	J	ug/Kg		NC	56 - 106	NC	30
Chrysene	ND	F2	23.5	205	J F2	ug/Kg		NC	54 - 110	92	30
Dibenz(a,h)anthracene	ND		23.5	47.6	J	ug/Kg		NC	55 - 119	NC	30
Fluoranthene	ND		23.5	252		ug/Kg		NC	53 - 110	NC	30
Fluorene	ND		23.5	ND		ug/Kg		NC	53 - 100	NC	30
Indeno[1,2,3-cd]pyrene	ND	F2	23.5	100	J F2	ug/Kg		NC	52 - 120	81	30
Naphthalene	ND		23.5	ND		ug/Kg		NC	55 - 100	NC	30
Phenanthrene	ND		23.5	132	J	ug/Kg		NC	54 - 98	NC	30
Pyrene	ND	F2	23.5	377	F2	ug/Kg		NC	53 - 108	155	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*93*		*53 - 121*
Fluoranthene-d10 (Surr)	*100*		*50 - 150*
2-methylnaphthalene-d10	*84*		*50 - 150*
2-Fluorobiphenyl (Surr)	*81*		*43 - 109*
Nitrobenzene-d5 (Surr)	*69*		*49 - 114*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 320-539466/1-A
Matrix: Solid
Analysis Batch: 542519

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539466

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
Aldrin	ND		1.7	0.14	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
Endrin	ND		1.7	0.20	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/03/21 07:57	11/13/21 14:40	1
Toxaphene	ND		67	22	ug/Kg		11/03/21 07:57	11/13/21 14:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*58*		*46 - 109*	*11/03/21 07:57*	*11/13/21 14:40*	*1*
DCB Decachlorobiphenyl	*75*		*46 - 109*	*11/03/21 07:57*	*11/13/21 14:40*	*1*
Tetrachloro-m-xylene	*65*		*47 - 107*	*11/03/21 07:57*	*11/13/21 14:40*	*1*
Tetrachloro-m-xylene	*61*		*47 - 107*	*11/03/21 07:57*	*11/13/21 14:40*	*1*

Lab Sample ID: LCS 320-539466/2-A
Matrix: Solid
Analysis Batch: 542519

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539466

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	14.1		ug/Kg		85	53 - 117
4,4'-DDE	16.7	13.6		ug/Kg		82	58 - 115
4,4'-DDT	16.7	15.2		ug/Kg		91	53 - 128
Aldrin	16.7	13.4		ug/Kg		81	55 - 109
alpha-BHC	16.7	13.0		ug/Kg		78	54 - 111
cis-Chlordane	16.7	13.5		ug/Kg		81	54 - 113
beta-BHC	16.7	13.0		ug/Kg		78	53 - 115
delta-BHC	16.7	13.5		ug/Kg		81	39 - 124
Dieldrin	16.7	14.2		ug/Kg		85	54 - 117
Endosulfan I	16.7	11.4		ug/Kg		69	42 - 118
Endosulfan II	16.7	13.5		ug/Kg		81	48 - 118
Endosulfan sulfate	16.7	14.8		ug/Kg		89	51 - 113
Endrin	16.7	14.1		ug/Kg		85	58 - 115
Endrin aldehyde	16.7	12.7		ug/Kg		76	40 - 100

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 320-539466/2-A
Matrix: Solid
Analysis Batch: 542519

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539466

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Endrin ketone	16.7	14.4		ug/Kg		86	51 - 118
trans-Chlordane	16.7	12.8		ug/Kg		77	55 - 114
gamma-BHC (Lindane)	16.7	13.3		ug/Kg		80	54 - 112
Heptachlor	16.7	13.3		ug/Kg		80	50 - 118
Heptachlor epoxide	16.7	13.2		ug/Kg		79	56 - 113
Methoxychlor	16.7	15.1		ug/Kg		90	52 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*58*		*46 - 109*
Tetrachloro-m-xylene	*63*		*47 - 107*

Lab Sample ID: 320-80943-16 MS
Matrix: Solid
Analysis Batch: 542519

Client Sample ID: AOC3-S6B-2
Prep Type: Total/NA
Prep Batch: 539466

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		15.7	11.6		ug/Kg		74	53 - 117
4,4'-DDE	ND		15.7	10.2		ug/Kg		65	58 - 115
4,4'-DDT	ND		15.7	9.65		ug/Kg		61	53 - 128
Aldrin	ND		15.7	11.8		ug/Kg		75	55 - 109
alpha-BHC	ND		15.7	11.5		ug/Kg		73	54 - 111
cis-Chlordane	ND		15.7	10.2		ug/Kg		65	54 - 113
beta-BHC	ND		15.7	12.0		ug/Kg		77	53 - 115
delta-BHC	ND		15.7	11.8		ug/Kg		75	39 - 124
Dieldrin	ND		15.7	10.6		ug/Kg		67	54 - 117
Endosulfan I	ND		15.7	8.40		ug/Kg		53	42 - 118
Endosulfan II	ND		15.7	9.98		ug/Kg		63	48 - 118
Endosulfan sulfate	ND		15.7	10.4		ug/Kg		66	51 - 113
Endrin	ND		15.7	10.7		ug/Kg		68	58 - 115
Endrin aldehyde	ND		15.7	8.38		ug/Kg		53	40 - 100
Endrin ketone	ND		15.7	10.2		ug/Kg		65	51 - 118
trans-Chlordane	ND		15.7	10.0		ug/Kg		64	55 - 114
gamma-BHC (Lindane)	ND		15.7	11.8		ug/Kg		75	54 - 112
Heptachlor	ND		15.7	11.5		ug/Kg		73	50 - 118
Heptachlor epoxide	ND		15.7	10.6		ug/Kg		67	56 - 113
Methoxychlor	ND		15.7	10.1		ug/Kg		65	52 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*43*	*S1-*	*46 - 109*
Tetrachloro-m-xylene	*64*		*47 - 107*

Lab Sample ID: 320-80943-16 MSD
Matrix: Solid
Analysis Batch: 542519

Client Sample ID: AOC3-S6B-2
Prep Type: Total/NA
Prep Batch: 539466

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.2	10.9		ug/Kg		67	53 - 117	6	30
4,4'-DDE	ND		16.2	10.4		ug/Kg		64	58 - 115	3	30

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-80943-16 MSD
Matrix: Solid
Analysis Batch: 542519

Client Sample ID: AOC3-S6B-2
Prep Type: Total/NA
Prep Batch: 539466

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDT	ND		16.2	9.05		ug/Kg		56	53 - 128	6	30
Aldrin	ND		16.2	11.4		ug/Kg		71	55 - 109	3	30
alpha-BHC	ND		16.2	11.2		ug/Kg		69	54 - 111	3	30
cis-Chlordane	ND		16.2	10.4		ug/Kg		65	54 - 113	2	30
beta-BHC	ND		16.2	11.4		ug/Kg		71	53 - 115	5	30
delta-BHC	ND		16.2	11.2		ug/Kg		69	39 - 124	5	30
Dieldrin	ND		16.2	10.2		ug/Kg		63	54 - 117	4	30
Endosulfan I	ND		16.2	8.58		ug/Kg		53	42 - 118	2	30
Endosulfan II	ND		16.2	9.38		ug/Kg		58	48 - 118	6	30
Endosulfan sulfate	ND		16.2	10.1		ug/Kg		63	51 - 113	2	30
Endrin	ND		16.2	10.3		ug/Kg		63	58 - 115	5	30
Endrin aldehyde	ND		16.2	7.86		ug/Kg		49	40 - 100	6	30
Endrin ketone	ND		16.2	10.0		ug/Kg		62	51 - 118	1	30
trans-Chlordane	ND		16.2	10.1		ug/Kg		62	55 - 114	1	30
gamma-BHC (Lindane)	ND		16.2	11.4		ug/Kg		70	54 - 112	4	30
Heptachlor	ND		16.2	11.2		ug/Kg		69	50 - 118	3	30
Heptachlor epoxide	ND		16.2	10.5		ug/Kg		65	56 - 113	0	30
Methoxychlor	ND		16.2	9.74		ug/Kg		60	52 - 123	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*41*	*S1-*	*46 - 109*
Tetrachloro-m-xylene	*64*		*47 - 107*

Lab Sample ID: MB 320-539525/1-A
Matrix: Solid
Analysis Batch: 541896

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539525

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
4,4'-DDE	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
4,4'-DDT	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
Aldrin	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
alpha-BHC	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
cis-Chlordane	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
beta-BHC	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
Chlordane (technical)	ND		20		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
delta-BHC	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
Dieldrin	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
Endosulfan I	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
Endosulfan II	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
Endosulfan sulfate	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
Endrin	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
Endrin aldehyde	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
Endrin ketone	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
trans-Chlordane	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
gamma-BHC (Lindane)	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
Heptachlor	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
Heptachlor epoxide	ND		1.7		ug/Kg		11/03/21 10:14	11/11/21 21:46	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 320-539525/1-A
Matrix: Solid
Analysis Batch: 541896

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539525

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxychlor	ND		3.4		ug/Kg		11/03/21 10:14	11/11/21 21:46	1
Toxaphene	ND		67		ug/Kg		11/03/21 10:14	11/11/21 21:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*54*		*46 - 109*	*11/03/21 10:14*	*11/11/21 21:46*	*1*
DCB Decachlorobiphenyl	*68*		*46 - 109*	*11/03/21 10:14*	*11/11/21 21:46*	*1*
Tetrachloro-m-xylene	*67*		*47 - 107*	*11/03/21 10:14*	*11/11/21 21:46*	*1*
Tetrachloro-m-xylene	*67*		*47 - 107*	*11/03/21 10:14*	*11/11/21 21:46*	*1*

Lab Sample ID: LCS 320-539525/2-A
Matrix: Solid
Analysis Batch: 541896

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539525

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	12.4		ug/Kg		75	53 - 117
4,4'-DDE	16.7	12.3		ug/Kg		74	58 - 115
4,4'-DDT	16.7	13.0		ug/Kg		78	53 - 128
Aldrin	16.7	12.3		ug/Kg		74	55 - 109
alpha-BHC	16.7	11.7		ug/Kg		70	54 - 111
cis-Chlordane	16.7	12.0		ug/Kg		72	54 - 113
beta-BHC	16.7	12.2		ug/Kg		73	53 - 115
delta-BHC	16.7	11.9		ug/Kg		71	39 - 124
Dieldrin	16.7	12.4		ug/Kg		74	54 - 117
Endosulfan I	16.7	10.0		ug/Kg		60	42 - 118
Endosulfan II	16.7	11.6		ug/Kg		70	48 - 118
Endosulfan sulfate	16.7	12.6		ug/Kg		76	51 - 113
Endrin	16.7	12.3		ug/Kg		74	58 - 115
Endrin aldehyde	16.7	10.0		ug/Kg		60	40 - 100
Endrin ketone	16.7	12.3		ug/Kg		74	51 - 118
trans-Chlordane	16.7	11.4		ug/Kg		68	55 - 114
gamma-BHC (Lindane)	16.7	12.1		ug/Kg		72	54 - 112
Heptachlor	16.7	12.1		ug/Kg		73	50 - 118
Heptachlor epoxide	16.7	11.8		ug/Kg		71	56 - 113
Methoxychlor	16.7	13.0		ug/Kg		78	52 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*60*		*46 - 109*
Tetrachloro-m-xylene	*76*		*47 - 107*

Lab Sample ID: 320-80943-19 MS
Matrix: Solid
Analysis Batch: 542188

Client Sample ID: AOC3-S7A-0.5
Prep Type: Total/NA
Prep Batch: 539525

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.5	7.36	J F1	ug/Kg		44	53 - 117
4,4'-DDE	ND		16.5	10.6	J	ug/Kg		64	58 - 115
4,4'-DDT	ND	F2	16.5	12.4	J	ug/Kg		75	53 - 128
Aldrin	ND		16.5	10.1	J	ug/Kg		61	55 - 109

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-80943-19 MS
Matrix: Solid
Analysis Batch: 542188

Client Sample ID: AOC3-S7A-0.5
Prep Type: Total/NA
Prep Batch: 539525

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
alpha-BHC	ND		16.5	11.5	J	ug/Kg		70	54 - 111
cis-Chlordane	ND		16.5	9.26	J	ug/Kg		56	54 - 113
beta-BHC	ND		16.5	9.76	J	ug/Kg		59	53 - 115
delta-BHC	ND		16.5	9.56	J	ug/Kg		58	39 - 124
Dieldrin	ND		16.5	8.31	J F1	ug/Kg		50	54 - 117
Endosulfan I	ND		16.5	7.57	J	ug/Kg		46	42 - 118
Endosulfan II	ND	F1	16.5	6.47	J F1	ug/Kg		39	48 - 118
Endosulfan sulfate	ND	F1	16.5	5.69	J F1	ug/Kg		34	51 - 113
Endrin	ND	F1	16.5	7.94	J F1	ug/Kg		48	58 - 115
Endrin aldehyde	ND	F1	16.5	6.02	J F1	ug/Kg		36	40 - 100
Endrin ketone	ND	F1	16.5	7.62	J F1	ug/Kg		46	51 - 118
trans-Chlordane	ND		16.5	8.07	J F1	ug/Kg		49	55 - 114
gamma-BHC (Lindane)	ND		16.5	11.0	J	ug/Kg		66	54 - 112
Heptachlor	ND		16.5	12.1	J	ug/Kg		73	50 - 118
Heptachlor epoxide	ND		16.5	9.04	J F1	ug/Kg		55	56 - 113
Methoxychlor	ND		16.5	9.60	J	ug/Kg		58	52 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*84*		*46 - 109*
Tetrachloro-m-xylene	*68*		*47 - 107*

Lab Sample ID: 320-80943-19 MSD
Matrix: Solid
Analysis Batch: 542188

Client Sample ID: AOC3-S7A-0.5
Prep Type: Total/NA
Prep Batch: 539525

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.7	6.98	J F1	ug/Kg		42	53 - 117	5	30
4,4'-DDE	ND		16.7	9.38	J F1	ug/Kg		56	58 - 115	12	30
4,4'-DDT	ND	F2	16.7	9.25	J	ug/Kg		56	53 - 128	29	30
Aldrin	ND		16.7	8.87	J F1	ug/Kg		53	55 - 109	13	30
alpha-BHC	ND		16.7	10.3	J	ug/Kg		62	54 - 111	12	30
cis-Chlordane	ND		16.7	8.91	J F1	ug/Kg		53	54 - 113	4	30
beta-BHC	ND		16.7	10.6	J	ug/Kg		64	53 - 115	9	30
delta-BHC	ND		16.7	9.30	J	ug/Kg		56	39 - 124	3	30
Dieldrin	ND		16.7	7.93	J F1	ug/Kg		48	54 - 117	5	30
Endosulfan I	ND		16.7	7.62	J	ug/Kg		46	42 - 118	1	30
Endosulfan II	ND	F1	16.7	6.22	J F1	ug/Kg		37	48 - 118	4	30
Endosulfan sulfate	ND	F1	16.7	5.65	J F1	ug/Kg		34	51 - 113	1	30
Endrin	ND	F1	16.7	7.77	J F1	ug/Kg		47	58 - 115	11	30
Endrin aldehyde	ND	F1	16.7	5.81	J F1	ug/Kg		35	40 - 100	4	30
Endrin ketone	ND	F1	16.7	8.01	J F1	ug/Kg		48	51 - 118	5	30
trans-Chlordane	ND		16.7	7.75	J F1	ug/Kg		47	55 - 114	4	30
gamma-BHC (Lindane)	ND		16.7	10.1	J	ug/Kg		60	54 - 112	11	30
Heptachlor	ND		16.7	11.1	J	ug/Kg		67	50 - 118	9	30
Heptachlor epoxide	ND		16.7	8.31	J F1	ug/Kg		50	56 - 113	8	30
Methoxychlor	ND		16.7	9.99	J	ug/Kg		60	52 - 123	4	30

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-80943-19 MSD
Matrix: Solid
Analysis Batch: 542188

Client Sample ID: AOC3-S7A-0.5
Prep Type: Total/NA
Prep Batch: 539525

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	93		46 - 109
Tetrachloro-m-xylene	82		47 - 107

Lab Sample ID: MB 320-539858/1-A
Matrix: Solid
Analysis Batch: 541611

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539858

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
Aldrin	ND		1.7	0.14	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
Endrin	ND		1.7	0.20	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/04/21 09:18	11/10/21 18:21	1
Toxaphene	ND		67	22	ug/Kg		11/04/21 09:18	11/10/21 18:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	57		46 - 109	11/04/21 09:18	11/10/21 18:21	1
DCB Decachlorobiphenyl	82		46 - 109	11/04/21 09:18	11/10/21 18:21	1
Tetrachloro-m-xylene	74		47 - 107	11/04/21 09:18	11/10/21 18:21	1
Tetrachloro-m-xylene	68		47 - 107	11/04/21 09:18	11/10/21 18:21	1

Lab Sample ID: LCS 320-539858/2-A
Matrix: Solid
Analysis Batch: 541611

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539858

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	10.8		ug/Kg		65	53 - 117
4,4'-DDE	16.7	10.6		ug/Kg		64	58 - 115
4,4'-DDT	16.7	11.2		ug/Kg		67	53 - 128
Aldrin	16.7	10.5		ug/Kg		63	55 - 109
alpha-BHC	16.7	9.95		ug/Kg		60	54 - 111
cis-Chlordane	16.7	10.2		ug/Kg		61	54 - 113

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 320-539858/2-A
Matrix: Solid
Analysis Batch: 541611

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539858

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
beta-BHC	16.7	10.2		ug/Kg		61	53 - 115
delta-BHC	16.7	10.2		ug/Kg		61	39 - 124
Dieldrin	16.7	10.7		ug/Kg		64	54 - 117
Endosulfan I	16.7	8.65		ug/Kg		52	42 - 118
Endosulfan II	16.7	10.1		ug/Kg		60	48 - 118
Endosulfan sulfate	16.7	11.1		ug/Kg		67	51 - 113
Endrin	16.7	10.7		ug/Kg		64	58 - 115
Endrin aldehyde	16.7	10.0		ug/Kg		60	40 - 100
Endrin ketone	16.7	10.8		ug/Kg		65	51 - 118
trans-Chlordane	16.7	9.70		ug/Kg		58	55 - 114
gamma-BHC (Lindane)	16.7	10.2		ug/Kg		61	54 - 112
Heptachlor	16.7	10.3		ug/Kg		62	50 - 118
Heptachlor epoxide	16.7	10.2		ug/Kg		61	56 - 113
Methoxychlor	16.7	11.3		ug/Kg		68	52 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*58*		*46 - 109*
Tetrachloro-m-xylene	*71*		*47 - 107*

Lab Sample ID: 320-80943-41 MS
Matrix: Solid
Analysis Batch: 542188

Client Sample ID: AOC3-S5C-2
Prep Type: Total/NA
Prep Batch: 539858

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.4	9.03		ug/Kg		55	53 - 117
4,4'-DDE	ND	F1	16.4	8.95	F1	ug/Kg		54	58 - 115
4,4'-DDT	ND		16.4	8.94		ug/Kg		54	53 - 128
Aldrin	ND		16.4	10.6		ug/Kg		65	55 - 109
alpha-BHC	ND		16.4	11.1		ug/Kg		67	54 - 111
cis-Chlordane	ND		16.4	9.06		ug/Kg		55	54 - 113
beta-BHC	ND		16.4	10.8		ug/Kg		66	53 - 115
delta-BHC	ND		16.4	10.6		ug/Kg		64	39 - 124
Dieldrin	ND	F1	16.4	9.03		ug/Kg		55	54 - 117
Endosulfan I	ND		16.4	7.35		ug/Kg		45	42 - 118
Endosulfan II	ND		16.4	8.19		ug/Kg		50	48 - 118
Endosulfan sulfate	ND		16.4	8.43		ug/Kg		51	51 - 113
Endrin	ND	F1	16.4	9.15	F1	ug/Kg		56	58 - 115
Endrin aldehyde	ND		16.4	6.59		ug/Kg		40	40 - 100
Endrin ketone	ND	F1	16.4	8.01	F1	ug/Kg		49	51 - 118
trans-Chlordane	ND	F1	16.4	8.87	F1	ug/Kg		54	55 - 114
gamma-BHC (Lindane)	ND		16.4	11.1		ug/Kg		68	54 - 112
Heptachlor	ND		16.4	11.1		ug/Kg		67	50 - 118
Heptachlor epoxide	ND		16.4	9.33		ug/Kg		57	56 - 113
Methoxychlor	ND		16.4	9.05		ug/Kg		55	52 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*50*		*46 - 109*
Tetrachloro-m-xylene	*76*		*47 - 107*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: 320-80943-41 MSD
Matrix: Solid
Analysis Batch: 542188

Client Sample ID: AOC3-S5C-2
Prep Type: Total/NA
Prep Batch: 539858

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.1	8.71		ug/Kg		54	53 - 117	4	30
4,4'-DDE	ND	F1	16.1	8.70	F1	ug/Kg		54	58 - 115	3	30
4,4'-DDT	ND		16.1	8.59		ug/Kg		53	53 - 128	4	30
Aldrin	ND		16.1	9.70		ug/Kg		60	55 - 109	9	30
alpha-BHC	ND		16.1	10.3		ug/Kg		64	54 - 111	7	30
cis-Chlordane	ND		16.1	8.83		ug/Kg		55	54 - 113	3	30
beta-BHC	ND		16.1	10.3		ug/Kg		64	53 - 115	4	30
delta-BHC	ND		16.1	9.81		ug/Kg		61	39 - 124	7	30
Dieldrin	ND	F1	16.1	8.62	F1	ug/Kg		53	54 - 117	5	30
Endosulfan I	ND		16.1	7.16		ug/Kg		44	42 - 118	3	30
Endosulfan II	ND		16.1	7.95		ug/Kg		49	48 - 118	3	30
Endosulfan sulfate	ND		16.1	8.37		ug/Kg		52	51 - 113	1	30
Endrin	ND	F1	16.1	8.71	F1	ug/Kg		54	58 - 115	5	30
Endrin aldehyde	ND		16.1	6.39		ug/Kg		40	40 - 100	3	30
Endrin ketone	ND	F1	16.1	7.78	F1	ug/Kg		48	51 - 118	3	30
trans-Chlordane	ND	F1	16.1	8.50	F1	ug/Kg		53	55 - 114	4	30
gamma-BHC (Lindane)	ND		16.1	10.3		ug/Kg		64	54 - 112	7	30
Heptachlor	ND		16.1	10.1		ug/Kg		63	50 - 118	9	30
Heptachlor epoxide	ND		16.1	9.00		ug/Kg		56	56 - 113	4	30
Methoxychlor	ND		16.1	8.88		ug/Kg		55	52 - 123	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*47*		*46 - 109*
Tetrachloro-m-xylene	*68*		*47 - 107*

Lab Sample ID: MB 320-540585/1-A
Matrix: Solid
Analysis Batch: 544755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
Aldrin	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
Endrin	ND		1.7	0.20	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/06/21 10:08	11/21/21 17:26	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 320-540585/1-A
Matrix: Solid
Analysis Batch: 544755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		1.7	0.15	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/06/21 10:08	11/21/21 17:26	1
Toxaphene	ND		67	22	ug/Kg		11/06/21 10:08	11/21/21 17:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*46 - 109*	*11/06/21 10:08*	*11/21/21 17:26*	*1*
DCB Decachlorobiphenyl	*86*		*46 - 109*	*11/06/21 10:08*	*11/21/21 17:26*	*1*
Tetrachloro-m-xylene	*78*		*47 - 107*	*11/06/21 10:08*	*11/21/21 17:26*	*1*
Tetrachloro-m-xylene	*78*		*47 - 107*	*11/06/21 10:08*	*11/21/21 17:26*	*1*

Lab Sample ID: LCS 320-540585/2-A
Matrix: Solid
Analysis Batch: 544755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	14.8		ug/Kg		89	53 - 117
4,4'-DDE	16.7	14.9		ug/Kg		90	58 - 115
4,4'-DDT	16.7	15.0		ug/Kg		90	53 - 128
Aldrin	16.7	13.6		ug/Kg		81	55 - 109
alpha-BHC	16.7	14.7		ug/Kg		88	54 - 111
cis-Chlordane	16.7	13.8		ug/Kg		83	54 - 113
beta-BHC	16.7	14.1		ug/Kg		85	53 - 115
delta-BHC	16.7	14.3		ug/Kg		86	39 - 124
Dieldrin	16.7	14.4		ug/Kg		86	54 - 117
Endosulfan I	16.7	12.2		ug/Kg		73	42 - 118
Endosulfan II	16.7	13.7		ug/Kg		82	48 - 118
Endosulfan sulfate	16.7	14.8		ug/Kg		89	51 - 113
Endrin	16.7	14.7		ug/Kg		88	58 - 115
Endrin aldehyde	16.7	13.7		ug/Kg		82	40 - 100
Endrin ketone	16.7	14.4		ug/Kg		86	51 - 118
trans-Chlordane	16.7	13.4		ug/Kg		81	55 - 114
gamma-BHC (Lindane)	16.7	14.4		ug/Kg		86	54 - 112
Heptachlor	16.7	13.9		ug/Kg		83	50 - 118
Heptachlor epoxide	16.7	13.7		ug/Kg		82	56 - 113
Methoxychlor	16.7	15.5		ug/Kg		93	52 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*81*		*46 - 109*
Tetrachloro-m-xylene	*82*		*47 - 107*

Lab Sample ID: 320-80943-42 MS
Matrix: Solid
Analysis Batch: 544755

Client Sample ID: AOC3-S4C-0.5
Prep Type: Total/NA
Prep Batch: 540585

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND	F2	16.5	8.82	J p	ug/Kg		53	53 - 117
4,4'-DDE	ND		16.5	9.60	J p	ug/Kg		58	58 - 115

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-80943-42 MS
Matrix: Solid
Analysis Batch: 544755

Client Sample ID: AOC3-S4C-0.5
Prep Type: Total/NA
Prep Batch: 540585

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDT	ND		16.5	13.4	J	ug/Kg		81	53 - 128
Aldrin	ND		16.5	10.8	J	ug/Kg		65	55 - 109
alpha-BHC	ND		16.5	13.6	J	ug/Kg		82	54 - 111
cis-Chlordane	ND		16.5	9.51	J	ug/Kg		58	54 - 113
beta-BHC	ND		16.5	13.0	J	ug/Kg		79	53 - 115
delta-BHC	ND		16.5	9.93	J	ug/Kg		60	39 - 124
Dieldrin	ND		16.5	9.59	J	ug/Kg		58	54 - 117
Endosulfan I	ND		16.5	7.45	J	ug/Kg		45	42 - 118
Endosulfan II	ND		16.5	8.98	J	ug/Kg		54	48 - 118
Endosulfan sulfate	ND	F2 F1	16.5	6.62	J F1	ug/Kg		40	51 - 113
Endrin	ND		16.5	10.4	J	ug/Kg		63	58 - 115
Endrin aldehyde	ND		16.5	10.1	J	ug/Kg		61	40 - 100
Endrin ketone	ND	F1	16.5	5.38	J p F1	ug/Kg		33	51 - 118
trans-Chlordane	ND	F2	16.5	9.44	J p	ug/Kg		57	55 - 114
gamma-BHC (Lindane)	ND		16.5	12.4	J	ug/Kg		75	54 - 112
Heptachlor	ND		16.5	13.8	J	ug/Kg		84	50 - 118
Heptachlor epoxide	ND		16.5	9.96	J	ug/Kg		60	56 - 113
Methoxychlor	ND	F1 F2	16.5	14.6	J P	ug/Kg		88	52 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*82*		*46 - 109*
Tetrachloro-m-xylene	*93*		*47 - 107*

Lab Sample ID: 320-80943-42 MSD
Matrix: Solid
Analysis Batch: 544755

Client Sample ID: AOC3-S4C-0.5
Prep Type: Total/NA
Prep Batch: 540585

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND	F2	16.4	9.68	J F2	ug/Kg		59	53 - 117	52	30
4,4'-DDE	ND	F2	16.4	10.8	J	ug/Kg		66	58 - 115	30	30
4,4'-DDT	ND		16.4	12.8	J	ug/Kg		78	53 - 128	5	30
Aldrin	ND		16.4	11.7	J	ug/Kg		72	55 - 109	11	30
alpha-BHC	ND		16.4	14.8	J	ug/Kg		91	54 - 111	4	30
cis-Chlordane	ND		16.4	10.2	J	ug/Kg		62	54 - 113	7	30
beta-BHC	ND		16.4	12.3	J	ug/Kg		75	53 - 115	6	30
delta-BHC	ND		16.4	8.65	J	ug/Kg		53	39 - 124	14	30
Dieldrin	ND		16.4	10.5	J	ug/Kg		64	54 - 117	9	30
Endosulfan I	ND		16.4	8.80	J	ug/Kg		54	42 - 118	17	30
Endosulfan II	ND		16.4	9.18	J	ug/Kg		56	48 - 118	4	30
Endosulfan sulfate	ND	F2 F1	16.4	6.04	J F1	ug/Kg		37	51 - 113	9	30
Endrin	ND		16.4	11.0	J	ug/Kg		67	58 - 115	6	30
Endrin aldehyde	ND		16.4	7.55	J	ug/Kg		46	40 - 100	29	30
Endrin ketone	ND	F1	16.4	5.56	J p F1	ug/Kg		34	51 - 118	3	30
trans-Chlordane	ND	F2	16.4	9.86	J F2	ug/Kg		60	55 - 114	42	30
gamma-BHC (Lindane)	ND		16.4	13.2	J	ug/Kg		81	54 - 112	6	30
Heptachlor	ND		16.4	13.5	J	ug/Kg		82	50 - 118	6	30
Heptachlor epoxide	ND		16.4	11.2	J	ug/Kg		68	56 - 113	11	30
Methoxychlor	ND	F2	16.4	8.74	J p	ug/Kg		53	52 - 123	20	30

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-80943-42 MSD
Matrix: Solid
Analysis Batch: 544755

Client Sample ID: AOC3-S4C-0.5
Prep Type: Total/NA
Prep Batch: 540585

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*133*	*S1+*	*46 - 109*
Tetrachloro-m-xylene	*94*		*47 - 107*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 320-539467/1-A
Matrix: Solid
Analysis Batch: 543265

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539467

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.6	ug/Kg		11/03/21 07:59	11/16/21 21:24	1
PCB-1221	ND		33	3.6	ug/Kg		11/03/21 07:59	11/16/21 21:24	1
PCB-1232	ND		33	4.8	ug/Kg		11/03/21 07:59	11/16/21 21:24	1
PCB-1242	ND		33	5.9	ug/Kg		11/03/21 07:59	11/16/21 21:24	1
PCB-1248	ND		33	2.4	ug/Kg		11/03/21 07:59	11/16/21 21:24	1
PCB-1254	ND		33	3.8	ug/Kg		11/03/21 07:59	11/16/21 21:24	1
PCB-1260	ND		33	2.7	ug/Kg		11/03/21 07:59	11/16/21 21:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*54*		*52 - 138*	*11/03/21 07:59*	*11/16/21 21:24*	*1*
Tetrachloro-m-xylene	*60*		*56 - 114*	*11/03/21 07:59*	*11/16/21 21:24*	*1*

Lab Sample ID: LCS 320-539467/2-A
Matrix: Solid
Analysis Batch: 543265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539467

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			66.7	51.7		ug/Kg		77	58 - 124		
PCB-1260			66.7	42.2		ug/Kg		63	55 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*63*		*52 - 138*
Tetrachloro-m-xylene	*70*		*56 - 114*

Lab Sample ID: 320-80943-17 MS
Matrix: Solid
Analysis Batch: 543265

Client Sample ID: AOC3-S6A-0.5
Prep Type: Total/NA
Prep Batch: 539467

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND		65.0	39.1		ug/Kg		60	58 - 124		
PCB-1260	3.2	J	65.0	50.4		ug/Kg		73	55 - 138		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*58*		*52 - 138*
Tetrachloro-m-xylene	*62*		*56 - 114*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 320-80943-17 MSD
Matrix: Solid
Analysis Batch: 543265

Client Sample ID: AOC3-S6A-0.5
Prep Type: Total/NA
Prep Batch: 539467

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		65.8	41.2		ug/Kg		63	58 - 124	5	20
PCB-1260	3.2	J	65.8	52.0		ug/Kg		74	55 - 138	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*56*		*52 - 138*
Tetrachloro-m-xylene	*65*		*56 - 114*

Lab Sample ID: MB 320-539538/1-A
Matrix: Solid
Analysis Batch: 543943

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539538

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.6	ug/Kg		11/03/21 10:18	11/18/21 15:38	1
PCB-1221	ND		33	3.6	ug/Kg		11/03/21 10:18	11/18/21 15:38	1
PCB-1232	ND		33	4.8	ug/Kg		11/03/21 10:18	11/18/21 15:38	1
PCB-1242	ND		33	5.9	ug/Kg		11/03/21 10:18	11/18/21 15:38	1
PCB-1248	ND		33	2.4	ug/Kg		11/03/21 10:18	11/18/21 15:38	1
PCB-1254	ND		33	3.8	ug/Kg		11/03/21 10:18	11/18/21 15:38	1
PCB-1260	ND		33	2.7	ug/Kg		11/03/21 10:18	11/18/21 15:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*73*		*52 - 138*	*11/03/21 10:18*	*11/18/21 15:38*	*1*
Tetrachloro-m-xylene	*71*		*56 - 114*	*11/03/21 10:18*	*11/18/21 15:38*	*1*

Lab Sample ID: LCS 320-539538/2-A
Matrix: Solid
Analysis Batch: 543943

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539538

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			66.7	55.6		ug/Kg		83	58 - 124		
PCB-1260			66.7	54.3		ug/Kg		81	55 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*75*		*52 - 138*
Tetrachloro-m-xylene	*70*		*56 - 114*

Lab Sample ID: 320-80943-21 MS
Matrix: Solid
Analysis Batch: 543943

Client Sample ID: AOC3-S7B-0.5
Prep Type: Total/NA
Prep Batch: 539538

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND		66.3	41.7		ug/Kg		63	58 - 124		
PCB-1260	ND		66.3	45.4		ug/Kg		68	55 - 138		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*49*	*S1-*	*52 - 138*
Tetrachloro-m-xylene	*66*		*56 - 114*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 320-80943-21 MSD
Matrix: Solid
Analysis Batch: 543943

Client Sample ID: AOC3-S7B-0.5
Prep Type: Total/NA
Prep Batch: 539538

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		65.9	39.5		ug/Kg		60	58 - 124	5	20
PCB-1260	ND		65.9	40.1		ug/Kg		61	55 - 138	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*52*		*52 - 138*
Tetrachloro-m-xylene	*66*		*56 - 114*

Lab Sample ID: MB 320-539860/1-A
Matrix: Solid
Analysis Batch: 541881

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539860

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.6	ug/Kg		11/04/21 09:21	11/11/21 13:40	1
PCB-1221	ND		33	3.6	ug/Kg		11/04/21 09:21	11/11/21 13:40	1
PCB-1232	ND		33	4.8	ug/Kg		11/04/21 09:21	11/11/21 13:40	1
PCB-1242	ND		33	5.9	ug/Kg		11/04/21 09:21	11/11/21 13:40	1
PCB-1248	ND		33	2.4	ug/Kg		11/04/21 09:21	11/11/21 13:40	1
PCB-1254	ND		33	3.8	ug/Kg		11/04/21 09:21	11/11/21 13:40	1
PCB-1260	ND		33	2.7	ug/Kg		11/04/21 09:21	11/11/21 13:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*52 - 138*	*11/04/21 09:21*	*11/11/21 13:40*	*1*
Tetrachloro-m-xylene	*68*		*56 - 114*	*11/04/21 09:21*	*11/11/21 13:40*	*1*

Lab Sample ID: LCS 320-539860/2-A
Matrix: Solid
Analysis Batch: 541881

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539860

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			66.7	50.2		ug/Kg		75	58 - 124		
PCB-1260			66.7	51.5		ug/Kg		77	55 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*83*		*52 - 138*
Tetrachloro-m-xylene	*71*		*56 - 114*

Lab Sample ID: 320-80943-40 MS
Matrix: Solid
Analysis Batch: 541881

Client Sample ID: AOC3-S5C-0.5
Prep Type: Total/NA
Prep Batch: 539860

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND	F1 F2	65.0	34.1	F1	ug/Kg		52	58 - 124		
PCB-1260	ND	F1 F2	65.0	31.4	J F1	ug/Kg		48	55 - 138		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*47*	*S1-*	*52 - 138*
Tetrachloro-m-xylene	*51*	*S1-*	*56 - 114*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 320-80943-40 MSD
Matrix: Solid
Analysis Batch: 541881

Client Sample ID: AOC3-S5C-0.5
Prep Type: Total/NA
Prep Batch: 539860

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND	F1 F2	66.7	44.0	F2	ug/Kg		66	58 - 124	25	20
PCB-1260	ND	F1 F2	66.7	40.2	F2	ug/Kg		60	55 - 138	24	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*61*		*52 - 138*
Tetrachloro-m-xylene	*63*		*56 - 114*

Lab Sample ID: MB 320-540587/1-A
Matrix: Solid
Analysis Batch: 543551

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540587

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.6	ug/Kg		11/06/21 10:17	11/17/21 18:47	1
PCB-1221	ND		33	3.6	ug/Kg		11/06/21 10:17	11/17/21 18:47	1
PCB-1232	ND		33	4.8	ug/Kg		11/06/21 10:17	11/17/21 18:47	1
PCB-1242	ND		33	5.9	ug/Kg		11/06/21 10:17	11/17/21 18:47	1
PCB-1248	ND		33	2.4	ug/Kg		11/06/21 10:17	11/17/21 18:47	1
PCB-1254	ND		33	3.8	ug/Kg		11/06/21 10:17	11/17/21 18:47	1
PCB-1260	ND		33	2.7	ug/Kg		11/06/21 10:17	11/17/21 18:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*60*		*52 - 138*	*11/06/21 10:17*	*11/17/21 18:47*	*1*
Tetrachloro-m-xylene	*62*		*56 - 114*	*11/06/21 10:17*	*11/17/21 18:47*	*1*

Lab Sample ID: LCS 320-540587/2-A
Matrix: Solid
Analysis Batch: 543551

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540587

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			66.7	50.5		ug/Kg		76	58 - 124		
PCB-1260			66.7	47.5		ug/Kg		71	55 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*64*		*52 - 138*
Tetrachloro-m-xylene	*64*		*56 - 114*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 570-192816/1-A
Matrix: Solid
Analysis Batch: 193505

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 192816

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.22	mg/Kg		11/09/21 08:59	11/10/21 18:23	1
Arsenic	ND		2.5	2.3	mg/Kg		11/09/21 08:59	11/10/21 18:23	1
Barium	ND		0.50	0.22	mg/Kg		11/09/21 08:59	11/10/21 18:23	1
Beryllium	ND		0.25	0.17	mg/Kg		11/09/21 08:59	11/10/21 18:23	1
Cadmium	ND		0.50	0.20	mg/Kg		11/09/21 08:59	11/10/21 18:23	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 570-192816/1-A
Matrix: Solid
Analysis Batch: 193505

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 192816

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		1.0	0.23	mg/Kg		11/09/21 08:59	11/10/21 18:23	1
Chromium	ND		1.0	0.17	mg/Kg		11/09/21 08:59	11/10/21 18:23	1
Copper	ND		1.0	0.50	mg/Kg		11/09/21 08:59	11/10/21 18:23	1
Molybdenum	ND		0.50	0.45	mg/Kg		11/09/21 08:59	11/10/21 18:23	1
Nickel	ND		0.50	0.43	mg/Kg		11/09/21 08:59	11/10/21 18:23	1
Antimony	ND		3.0	1.3	mg/Kg		11/09/21 08:59	11/10/21 18:23	1
Selenium	ND		5.0	1.8	mg/Kg		11/09/21 08:59	11/10/21 18:23	1
Thallium	ND		5.0	1.5	mg/Kg		11/09/21 08:59	11/10/21 18:23	1
Vanadium	ND		1.0	0.17	mg/Kg		11/09/21 08:59	11/10/21 18:23	1
Zinc	ND		10	5.1	mg/Kg		11/09/21 08:59	11/10/21 18:23	1
Lead	ND		5.0	0.96	mg/Kg		11/09/21 08:59	11/10/21 18:23	1

Lab Sample ID: LCS 570-192816/2-A
Matrix: Solid
Analysis Batch: 193505

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 192816

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	12.6	11.0		mg/Kg		87	80 - 120
Arsenic	25.1	21.4		mg/Kg		85	80 - 120
Barium	25.1	27.3		mg/Kg		108	80 - 120
Beryllium	25.1	24.9		mg/Kg		99	80 - 120
Cadmium	25.1	25.8		mg/Kg		103	80 - 120
Cobalt	25.1	25.4		mg/Kg		101	80 - 120
Chromium	25.1	25.4		mg/Kg		101	80 - 120
Copper	25.1	27.3		mg/Kg		109	80 - 120
Molybdenum	25.2	23.7		mg/Kg		94	80 - 120
Nickel	25.1	26.2		mg/Kg		104	80 - 120
Antimony	25.1	26.8		mg/Kg		107	80 - 120
Selenium	25.1	25.6		mg/Kg		102	80 - 120
Thallium	25.1	25.3		mg/Kg		101	80 - 120
Vanadium	25.1	25.4		mg/Kg		101	80 - 120
Zinc	25.1	25.7		mg/Kg		102	80 - 120
Lead	25.1	26.0		mg/Kg		104	80 - 120

Lab Sample ID: LCSD 570-192816/3-A
Matrix: Solid
Analysis Batch: 193505

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 192816

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	12.4	11.0		mg/Kg		89	80 - 120	0	20
Arsenic	24.8	21.3		mg/Kg		86	80 - 120	0	20
Barium	24.8	27.0		mg/Kg		109	80 - 120	1	20
Beryllium	24.8	24.7		mg/Kg		100	80 - 120	1	20
Cadmium	24.8	25.2		mg/Kg		102	80 - 120	2	20
Cobalt	24.8	24.9		mg/Kg		100	80 - 120	2	20
Chromium	24.8	25.2		mg/Kg		102	80 - 120	1	20
Copper	24.8	27.0		mg/Kg		109	80 - 120	1	20
Molybdenum	24.8	23.8		mg/Kg		96	80 - 120	1	20
Nickel	24.8	25.6		mg/Kg		103	80 - 120	2	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCSD 570-192816/3-A
Matrix: Solid
Analysis Batch: 193505

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 192816

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony			24.8	26.3		mg/Kg		106	80 - 120	2	20
Selenium			24.8	25.3		mg/Kg		102	80 - 120	1	20
Thallium			24.8	25.3		mg/Kg		102	80 - 120	0	20
Vanadium			24.8	25.1		mg/Kg		101	80 - 120	1	20
Zinc			24.8	25.1		mg/Kg		102	80 - 120	2	20
Lead			24.8	25.7		mg/Kg		104	80 - 120	2	20

Lab Sample ID: 320-80943-9 MS
Matrix: Solid
Analysis Batch: 193608

Client Sample ID: AOC3-S5A-0.5
Prep Type: Total/NA
Prep Batch: 192816

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		12.7	11.6		mg/Kg		91	75 - 125
Arsenic	ND		25.4	23.2		mg/Kg		91	75 - 125
Barium	84	F1	25.4	135	F1	mg/Kg		200	75 - 125
Beryllium	ND		25.4	27.1		mg/Kg		107	75 - 125
Cadmium	0.30	J	25.4	26.3		mg/Kg		103	75 - 125
Cobalt	2.9		25.4	29.9		mg/Kg		106	75 - 125
Chromium	10		25.4	38.8		mg/Kg		112	75 - 125
Copper	15		25.4	45.7		mg/Kg		120	75 - 125
Molybdenum	ND		25.4	23.7		mg/Kg		93	75 - 125
Nickel	14		25.4	42.8		mg/Kg		115	75 - 125
Antimony	ND		25.4	29.8		mg/Kg		117	75 - 125
Selenium	ND		25.4	24.5		mg/Kg		97	75 - 125
Thallium	ND		25.4	25.7		mg/Kg		101	75 - 125
Vanadium	8.6		25.4	37.6		mg/Kg		114	75 - 125
Zinc	98	F1	25.4	144	F1	mg/Kg		181	75 - 125
Lead	160		25.4	214	4	mg/Kg		215	75 - 125

Lab Sample ID: 320-80943-9 MSD
Matrix: Solid
Analysis Batch: 193608

Client Sample ID: AOC3-S5A-0.5
Prep Type: Total/NA
Prep Batch: 192816

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		12.6	9.80		mg/Kg		78	75 - 125	16	20
Arsenic	ND		25.1	23.3		mg/Kg		93	75 - 125	0	20
Barium	84	F1	25.1	132	F1	mg/Kg		190	75 - 125	2	20
Beryllium	ND		25.1	26.2		mg/Kg		104	75 - 125	4	20
Cadmium	0.30	J	25.1	26.0		mg/Kg		102	75 - 125	1	20
Cobalt	2.9		25.1	28.7		mg/Kg		103	75 - 125	4	20
Chromium	10		25.1	37.6		mg/Kg		108	75 - 125	3	20
Copper	15		25.1	45.2		mg/Kg		119	75 - 125	1	20
Molybdenum	ND		25.2	24.2		mg/Kg		96	75 - 125	2	20
Nickel	14		25.1	41.6		mg/Kg		112	75 - 125	3	20
Antimony	ND		25.1	29.0		mg/Kg		115	75 - 125	3	20
Selenium	ND		25.1	24.8		mg/Kg		99	75 - 125	1	20
Thallium	ND		25.1	24.9		mg/Kg		99	75 - 125	3	20
Vanadium	8.6		25.1	36.6		mg/Kg		111	75 - 125	3	20
Zinc	98	F1	25.1	139	F1	mg/Kg		163	75 - 125	3	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 320-80943-9 MSD
Matrix: Solid
Analysis Batch: 193608

Client Sample ID: AOC3-S5A-0.5
Prep Type: Total/NA
Prep Batch: 192816

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	160		25.1	209	4	mg/Kg		197	75 - 125	2	20

Lab Sample ID: MB 320-538884/1-A
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538884

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.260	J	1.0	0.26	mg/Kg		11/01/21 13:39	11/02/21 12:13	1
Arsenic	ND		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 12:13	1

Lab Sample ID: LCS 320-538884/2-A
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538884

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	25.0	23.7		mg/Kg		95	80 - 120
Arsenic	50.0	44.7		mg/Kg		89	80 - 120

Lab Sample ID: MB 320-538889/1-A
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.26	mg/Kg		11/01/21 13:39	11/02/21 15:43	1
Arsenic	ND		2.0	1.3	mg/Kg		11/01/21 13:39	11/02/21 15:43	1

Lab Sample ID: LCS 320-538889/2-A
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538889

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	25.0	24.1		mg/Kg		96	80 - 120
Arsenic	50.0	45.6		mg/Kg		91	80 - 120

Lab Sample ID: 320-80943-1 MS
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: AOC3-S3B-0.5
Prep Type: Total/NA
Prep Batch: 538889

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	130		16.4	144	4	mg/Kg		101	80 - 120
Arsenic	7.3	F1	32.9	32.4	F1	mg/Kg		76	80 - 120

Lab Sample ID: 320-80943-1 MSD
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: AOC3-S3B-0.5
Prep Type: Total/NA
Prep Batch: 538889

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	130		16.9	163	4	mg/Kg		215	80 - 120	13	35
Arsenic	7.3	F1	33.8	35.3		mg/Kg		83	80 - 120	9	35

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 570-192815/1-A
Matrix: Solid
Analysis Batch: 192900

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 192815

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.085	0.014	mg/Kg		11/09/21 08:55	11/09/21 12:20	1

Lab Sample ID: LCS 570-192815/2-A
Matrix: Solid
Analysis Batch: 192900

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 192815

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.816		mg/Kg		98	85 - 121		

Lab Sample ID: LCSD 570-192815/3-A
Matrix: Solid
Analysis Batch: 192900

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 192815

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.862	0.855		mg/Kg		99	85 - 121	5	10

Lab Sample ID: 320-80943-9 MS
Matrix: Solid
Analysis Batch: 192900

Client Sample ID: AOC3-S5A-0.5
Prep Type: Total/NA
Prep Batch: 192815

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.16		0.833	0.982		mg/Kg		99	71 - 137		

Lab Sample ID: 320-80943-9 MSD
Matrix: Solid
Analysis Batch: 192900

Client Sample ID: AOC3-S5A-0.5
Prep Type: Total/NA
Prep Batch: 192815

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.16		0.877	1.03		mg/Kg		100	71 - 137	5	14

QC Association Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

GC/MS Semi VOA

Prep Batch: 539143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-23	AOC3/AOC10-S8A-0.5	Total/NA	Solid	3546	
320-80943-24	AOC3/AOC10-S8A-2	Total/NA	Solid	3546	
320-80943-25	AOC3/AOC10-S8B-0.5	Total/NA	Solid	3546	
320-80943-26	AOC3/AOC10-S8B-2	Total/NA	Solid	3546	
320-80943-27	AOC3/AOC10-S9C-0.5	Total/NA	Solid	3546	
320-80943-28	AOC3/AOC10-S9C-0.5DUP	Total/NA	Solid	3546	
320-80943-29	AOC3/AOC10-S9C-2	Total/NA	Solid	3546	
MB 320-539143/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-539143/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-80943-29 MS	AOC3/AOC10-S9C-2	Total/NA	Solid	3546	
320-80943-29 MSD	AOC3/AOC10-S9C-2	Total/NA	Solid	3546	

Prep Batch: 539206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-23	AOC3/AOC10-S8A-0.5	Total/NA	Solid	3550B	
320-80943-24	AOC3/AOC10-S8A-2	Total/NA	Solid	3550B	
320-80943-25	AOC3/AOC10-S8B-0.5	Total/NA	Solid	3550B	
320-80943-26	AOC3/AOC10-S8B-2	Total/NA	Solid	3550B	
320-80943-27	AOC3/AOC10-S9C-0.5	Total/NA	Solid	3550B	
320-80943-28	AOC3/AOC10-S9C-0.5DUP	Total/NA	Solid	3550B	
320-80943-29	AOC3/AOC10-S9C-2	Total/NA	Solid	3550B	
MB 320-539206/1-A	Method Blank	Total/NA	Solid	3550B	
LCS 320-539206/2-A	Lab Control Sample	Total/NA	Solid	3550B	
320-80943-29 MS	AOC3/AOC10-S9C-2	Total/NA	Solid	3550B	
320-80943-29 MSD	AOC3/AOC10-S9C-2	Total/NA	Solid	3550B	

Analysis Batch: 540863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-23	AOC3/AOC10-S8A-0.5	Total/NA	Solid	8270C SIM	539143
320-80943-25	AOC3/AOC10-S8B-0.5	Total/NA	Solid	8270C SIM	539143
320-80943-27	AOC3/AOC10-S9C-0.5	Total/NA	Solid	8270C SIM	539143
320-80943-28	AOC3/AOC10-S9C-0.5DUP	Total/NA	Solid	8270C SIM	539143
320-80943-29	AOC3/AOC10-S9C-2	Total/NA	Solid	8270C SIM	539143
MB 320-539143/1-A	Method Blank	Total/NA	Solid	8270C SIM	539143
LCS 320-539143/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	539143
320-80943-29 MS	AOC3/AOC10-S9C-2	Total/NA	Solid	8270C SIM	539143
320-80943-29 MSD	AOC3/AOC10-S9C-2	Total/NA	Solid	8270C SIM	539143

Analysis Batch: 541624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-23	AOC3/AOC10-S8A-0.5	Total/NA	Solid	8270C	539206
320-80943-24	AOC3/AOC10-S8A-2	Total/NA	Solid	8270C	539206
320-80943-25	AOC3/AOC10-S8B-0.5	Total/NA	Solid	8270C	539206
320-80943-26	AOC3/AOC10-S8B-2	Total/NA	Solid	8270C	539206
320-80943-27	AOC3/AOC10-S9C-0.5	Total/NA	Solid	8270C	539206
320-80943-28	AOC3/AOC10-S9C-0.5DUP	Total/NA	Solid	8270C	539206
320-80943-29	AOC3/AOC10-S9C-2	Total/NA	Solid	8270C	539206
MB 320-539206/1-A	Method Blank	Total/NA	Solid	8270C	539206
LCS 320-539206/2-A	Lab Control Sample	Total/NA	Solid	8270C	539206

QC Association Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

GC/MS Semi VOA

Analysis Batch: 542113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-29 MS	AOC3/AOC10-S9C-2	Total/NA	Solid	8270C	539206
320-80943-29 MSD	AOC3/AOC10-S9C-2	Total/NA	Solid	8270C	539206

Analysis Batch: 547670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-24	AOC3/AOC10-S8A-2	Total/NA	Solid	8270C SIM	539143
320-80943-26	AOC3/AOC10-S8B-2	Total/NA	Solid	8270C SIM	539143

GC Semi VOA

Prep Batch: 539466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-1	AOC3-S3B-0.5	Total/NA	Solid	3546	
320-80943-2	AOC3-S3B-2	Total/NA	Solid	3546	
320-80943-3	AOC3-S2A-0.5	Total/NA	Solid	3546	
320-80943-4	AOC3-S2A-2	Total/NA	Solid	3546	
320-80943-5	AOC3-S3A-0.5	Total/NA	Solid	3546	
320-80943-6	AOC3-S3A-2	Total/NA	Solid	3546	
320-80943-7	AOC3-S4A-0.5	Total/NA	Solid	3546	
320-80943-8	AOC3-S4A-2	Total/NA	Solid	3546	
320-80943-9	AOC3-S5A-0.5	Total/NA	Solid	3546	
320-80943-10	AOC3-S5A-2	Total/NA	Solid	3546	
320-80943-11	AOC3-S4B-0.5	Total/NA	Solid	3546	
320-80943-12	AOC3-S4B-2	Total/NA	Solid	3546	
320-80943-13	AOC3/AOC8-S5B-0.5	Total/NA	Solid	3546	
320-80943-14	AOC3/AOC8-S5B-2	Total/NA	Solid	3546	
320-80943-15	AOC3-S6B-0.5	Total/NA	Solid	3546	
320-80943-16	AOC3-S6B-2	Total/NA	Solid	3546	
320-80943-17	AOC3-S6A-0.5	Total/NA	Solid	3546	
MB 320-539466/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-539466/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-80943-16 MS	AOC3-S6B-2	Total/NA	Solid	3546	
320-80943-16 MSD	AOC3-S6B-2	Total/NA	Solid	3546	

Prep Batch: 539467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-1	AOC3-S3B-0.5	Total/NA	Solid	3546	
320-80943-3	AOC3-S2A-0.5	Total/NA	Solid	3546	
320-80943-5	AOC3-S3A-0.5	Total/NA	Solid	3546	
320-80943-7	AOC3-S4A-0.5	Total/NA	Solid	3546	
320-80943-9	AOC3-S5A-0.5	Total/NA	Solid	3546	
320-80943-11	AOC3-S4B-0.5	Total/NA	Solid	3546	
320-80943-13	AOC3/AOC8-S5B-0.5	Total/NA	Solid	3546	
320-80943-15	AOC3-S6B-0.5	Total/NA	Solid	3546	
320-80943-17	AOC3-S6A-0.5	Total/NA	Solid	3546	
MB 320-539467/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-539467/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-80943-17 MS	AOC3-S6A-0.5	Total/NA	Solid	3546	
320-80943-17 MSD	AOC3-S6A-0.5	Total/NA	Solid	3546	

GC Semi VOA

Prep Batch: 539525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-18	AOC3-S6A-2	Total/NA	Solid	3546	
320-80943-19	AOC3-S7A-0.5	Total/NA	Solid	3546	
320-80943-20	AOC3-S7A-2	Total/NA	Solid	3546	
320-80943-21	AOC3-S7B-0.5	Total/NA	Solid	3546	
320-80943-22	AOC3-S7B-2	Total/NA	Solid	3546	
320-80943-23	AOC3/AOC10-S8A-0.5	Total/NA	Solid	3546	
320-80943-24	AOC3/AOC10-S8A-2	Total/NA	Solid	3546	
MB 320-539525/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-539525/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-80943-19 MS	AOC3-S7A-0.5	Total/NA	Solid	3546	
320-80943-19 MSD	AOC3-S7A-0.5	Total/NA	Solid	3546	

Prep Batch: 539538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-19	AOC3-S7A-0.5	Total/NA	Solid	3546	
320-80943-21	AOC3-S7B-0.5	Total/NA	Solid	3546	
320-80943-23	AOC3/AOC10-S8A-0.5	Total/NA	Solid	3546	
MB 320-539538/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-539538/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-80943-21 MS	AOC3-S7B-0.5	Total/NA	Solid	3546	
320-80943-21 MSD	AOC3-S7B-0.5	Total/NA	Solid	3546	

Prep Batch: 539858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-25	AOC3/AOC10-S8B-0.5	Total/NA	Solid	3546	
320-80943-26	AOC3/AOC10-S8B-2	Total/NA	Solid	3546	
320-80943-27	AOC3/AOC10-S9C-0.5	Total/NA	Solid	3546	
320-80943-28	AOC3/AOC10-S9C-0.5DUP	Total/NA	Solid	3546	
320-80943-29	AOC3/AOC10-S9C-2	Total/NA	Solid	3546	
320-80943-30	AOC3-S8D-0.5	Total/NA	Solid	3546	
320-80943-31	AOC3-S8D-2	Total/NA	Solid	3546	
320-80943-32	AOC3/AOC8-S8C-0.5	Total/NA	Solid	3546	
320-80943-33	AOC3/AOC8-S8C-2	Total/NA	Solid	3546	
320-80943-34	AOC3-S7C-0.5	Total/NA	Solid	3546	
320-80943-35	AOC3-S7C-2	Total/NA	Solid	3546	
320-80943-36	AOC3-S6C-0.5	Total/NA	Solid	3546	
320-80943-37	AOC3-S6C-2	Total/NA	Solid	3546	
320-80943-38	AOC3-S7D-0.5	Total/NA	Solid	3546	
320-80943-39	AOC3-S7D-2	Total/NA	Solid	3546	
320-80943-40	AOC3-S5C-0.5	Total/NA	Solid	3546	
320-80943-41	AOC3-S5C-2	Total/NA	Solid	3546	
MB 320-539858/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-539858/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-80943-41 MS	AOC3-S5C-2	Total/NA	Solid	3546	
320-80943-41 MSD	AOC3-S5C-2	Total/NA	Solid	3546	

Prep Batch: 539860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-25	AOC3/AOC10-S8B-0.5	Total/NA	Solid	3546	
320-80943-27	AOC3/AOC10-S9C-0.5	Total/NA	Solid	3546	
320-80943-28	AOC3/AOC10-S9C-0.5DUP	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 539860 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-30	AOC3-S8D-0.5	Total/NA	Solid	3546	
320-80943-32	AOC3/AOC8-S8C-0.5	Total/NA	Solid	3546	
320-80943-34	AOC3-S7C-0.5	Total/NA	Solid	3546	
320-80943-36	AOC3-S6C-0.5	Total/NA	Solid	3546	
320-80943-38	AOC3-S7D-0.5	Total/NA	Solid	3546	
320-80943-40	AOC3-S5C-0.5	Total/NA	Solid	3546	
MB 320-539860/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-539860/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-80943-40 MS	AOC3-S5C-0.5	Total/NA	Solid	3546	
320-80943-40 MSD	AOC3-S5C-0.5	Total/NA	Solid	3546	

Prep Batch: 540585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-42	AOC3-S4C-0.5	Total/NA	Solid	3546	
320-80943-43	AOC3-S4C-2	Total/NA	Solid	3546	
320-80943-44	AOC3-S3C-0.5	Total/NA	Solid	3546	
320-80943-45	AOC3-S3C-2	Total/NA	Solid	3546	
320-80943-46	AOC3-S1D-0.5	Total/NA	Solid	3546	
320-80943-47	AOC3-S1D-2	Total/NA	Solid	3546	
320-80943-48	AOC3/AOC8-S2D-0.5	Total/NA	Solid	3546	
320-80943-49	AOC3/AOC8-S2D-2	Total/NA	Solid	3546	
320-80943-50	AOC3/AOC8-S1E-0.5	Total/NA	Solid	3546	
320-80943-51	AOC3/AOC8-S1E-2	Total/NA	Solid	3546	
320-80943-52	AOC3-S2E-0.5	Total/NA	Solid	3546	
320-80943-53	AOC3-S2E-2	Total/NA	Solid	3546	
320-80943-54	AOC3-S3E-0.5	Total/NA	Solid	3546	
320-80943-55	AOC3-S3E-2	Total/NA	Solid	3546	
320-80943-56	AOC3-S3D-0.5	Total/NA	Solid	3546	
320-80943-57	AOC3-S3D-2	Total/NA	Solid	3546	
320-80943-58	AOC3-S4D-0.5	Total/NA	Solid	3546	
320-80943-59	AOC3-S4D-2	Total/NA	Solid	3546	
320-80943-60	AOC3-S4E-0.5	Total/NA	Solid	3546	
320-80943-61	AOC3-S4E-2	Total/NA	Solid	3546	
MB 320-540585/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-540585/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-80943-42 MS	AOC3-S4C-0.5	Total/NA	Solid	3546	
320-80943-42 MSD	AOC3-S4C-0.5	Total/NA	Solid	3546	

Prep Batch: 540587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-42	AOC3-S4C-0.5	Total/NA	Solid	3546	
320-80943-44	AOC3-S3C-0.5	Total/NA	Solid	3546	
320-80943-46	AOC3-S1D-0.5	Total/NA	Solid	3546	
320-80943-48	AOC3/AOC8-S2D-0.5	Total/NA	Solid	3546	
320-80943-50	AOC3/AOC8-S1E-0.5	Total/NA	Solid	3546	
320-80943-52	AOC3-S2E-0.5	Total/NA	Solid	3546	
320-80943-54	AOC3-S3E-0.5	Total/NA	Solid	3546	
320-80943-56	AOC3-S3D-0.5	Total/NA	Solid	3546	
320-80943-58	AOC3-S4D-0.5	Total/NA	Solid	3546	
320-80943-60	AOC3-S4E-0.5	Total/NA	Solid	3546	
MB 320-540587/1-A	Method Blank	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 540587 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-540587/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 541611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-25	AOC3/AOC10-S8B-0.5	Total/NA	Solid	8081A	539858
320-80943-26	AOC3/AOC10-S8B-2	Total/NA	Solid	8081A	539858
320-80943-27	AOC3/AOC10-S9C-0.5	Total/NA	Solid	8081A	539858
320-80943-28	AOC3/AOC10-S9C-0.5DUP	Total/NA	Solid	8081A	539858
320-80943-29	AOC3/AOC10-S9C-2	Total/NA	Solid	8081A	539858
320-80943-30	AOC3-S8D-0.5	Total/NA	Solid	8081A	539858
320-80943-31	AOC3-S8D-2	Total/NA	Solid	8081A	539858
320-80943-32	AOC3/AOC8-S8C-0.5	Total/NA	Solid	8081A	539858
320-80943-33	AOC3/AOC8-S8C-2	Total/NA	Solid	8081A	539858
320-80943-34	AOC3-S7C-0.5	Total/NA	Solid	8081A	539858
320-80943-35	AOC3-S7C-2	Total/NA	Solid	8081A	539858
320-80943-36	AOC3-S6C-0.5	Total/NA	Solid	8081A	539858
320-80943-37	AOC3-S6C-2	Total/NA	Solid	8081A	539858
320-80943-38	AOC3-S7D-0.5	Total/NA	Solid	8081A	539858
MB 320-539858/1-A	Method Blank	Total/NA	Solid	8081A	539858
LCS 320-539858/2-A	Lab Control Sample	Total/NA	Solid	8081A	539858

Analysis Batch: 541881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-25	AOC3/AOC10-S8B-0.5	Total/NA	Solid	8082	539860
320-80943-27	AOC3/AOC10-S9C-0.5	Total/NA	Solid	8082	539860
320-80943-28	AOC3/AOC10-S9C-0.5DUP	Total/NA	Solid	8082	539860
320-80943-30	AOC3-S8D-0.5	Total/NA	Solid	8082	539860
320-80943-32	AOC3/AOC8-S8C-0.5	Total/NA	Solid	8082	539860
320-80943-34	AOC3-S7C-0.5	Total/NA	Solid	8082	539860
320-80943-36	AOC3-S6C-0.5	Total/NA	Solid	8082	539860
320-80943-38	AOC3-S7D-0.5	Total/NA	Solid	8082	539860
320-80943-40	AOC3-S5C-0.5	Total/NA	Solid	8082	539860
MB 320-539860/1-A	Method Blank	Total/NA	Solid	8082	539860
LCS 320-539860/2-A	Lab Control Sample	Total/NA	Solid	8082	539860
320-80943-40 MS	AOC3-S5C-0.5	Total/NA	Solid	8082	539860
320-80943-40 MSD	AOC3-S5C-0.5	Total/NA	Solid	8082	539860

Analysis Batch: 541896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-539525/1-A	Method Blank	Total/NA	Solid	8081A	539525
LCS 320-539525/2-A	Lab Control Sample	Total/NA	Solid	8081A	539525

Analysis Batch: 542188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-18	AOC3-S6A-2	Total/NA	Solid	8081A	539525
320-80943-19	AOC3-S7A-0.5	Total/NA	Solid	8081A	539525
320-80943-20	AOC3-S7A-2	Total/NA	Solid	8081A	539525
320-80943-21	AOC3-S7B-0.5	Total/NA	Solid	8081A	539525
320-80943-22	AOC3-S7B-2	Total/NA	Solid	8081A	539525
320-80943-23	AOC3/AOC10-S8A-0.5	Total/NA	Solid	8081A	539525
320-80943-24	AOC3/AOC10-S8A-2	Total/NA	Solid	8081A	539525

GC Semi VOA (Continued)

Analysis Batch: 542188 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-39	AOC3-S7D-2	Total/NA	Solid	8081A	539858
320-80943-40	AOC3-S5C-0.5	Total/NA	Solid	8081A	539858
320-80943-41	AOC3-S5C-2	Total/NA	Solid	8081A	539858
320-80943-19 MS	AOC3-S7A-0.5	Total/NA	Solid	8081A	539525
320-80943-19 MSD	AOC3-S7A-0.5	Total/NA	Solid	8081A	539525
320-80943-41 MS	AOC3-S5C-2	Total/NA	Solid	8081A	539858
320-80943-41 MSD	AOC3-S5C-2	Total/NA	Solid	8081A	539858

Analysis Batch: 542519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-1	AOC3-S3B-0.5	Total/NA	Solid	8081A	539466
320-80943-2	AOC3-S3B-2	Total/NA	Solid	8081A	539466
320-80943-3	AOC3-S2A-0.5	Total/NA	Solid	8081A	539466
320-80943-4	AOC3-S2A-2	Total/NA	Solid	8081A	539466
320-80943-5	AOC3-S3A-0.5	Total/NA	Solid	8081A	539466
320-80943-6	AOC3-S3A-2	Total/NA	Solid	8081A	539466
320-80943-7	AOC3-S4A-0.5	Total/NA	Solid	8081A	539466
320-80943-8	AOC3-S4A-2	Total/NA	Solid	8081A	539466
320-80943-9	AOC3-S5A-0.5	Total/NA	Solid	8081A	539466
320-80943-10	AOC3-S5A-2	Total/NA	Solid	8081A	539466
320-80943-11	AOC3-S4B-0.5	Total/NA	Solid	8081A	539466
320-80943-12	AOC3-S4B-2	Total/NA	Solid	8081A	539466
320-80943-13	AOC3/AOC8-S5B-0.5	Total/NA	Solid	8081A	539466
320-80943-14	AOC3/AOC8-S5B-2	Total/NA	Solid	8081A	539466
320-80943-15	AOC3-S6B-0.5	Total/NA	Solid	8081A	539466
320-80943-16	AOC3-S6B-2	Total/NA	Solid	8081A	539466
320-80943-17	AOC3-S6A-0.5	Total/NA	Solid	8081A	539466
MB 320-539466/1-A	Method Blank	Total/NA	Solid	8081A	539466
LCS 320-539466/2-A	Lab Control Sample	Total/NA	Solid	8081A	539466
320-80943-16 MS	AOC3-S6B-2	Total/NA	Solid	8081A	539466
320-80943-16 MSD	AOC3-S6B-2	Total/NA	Solid	8081A	539466

Analysis Batch: 543265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-1	AOC3-S3B-0.5	Total/NA	Solid	8082	539467
320-80943-3	AOC3-S2A-0.5	Total/NA	Solid	8082	539467
320-80943-5	AOC3-S3A-0.5	Total/NA	Solid	8082	539467
320-80943-7	AOC3-S4A-0.5	Total/NA	Solid	8082	539467
320-80943-9	AOC3-S5A-0.5	Total/NA	Solid	8082	539467
320-80943-11	AOC3-S4B-0.5	Total/NA	Solid	8082	539467
320-80943-13	AOC3/AOC8-S5B-0.5	Total/NA	Solid	8082	539467
320-80943-15	AOC3-S6B-0.5	Total/NA	Solid	8082	539467
320-80943-17	AOC3-S6A-0.5	Total/NA	Solid	8082	539467
MB 320-539467/1-A	Method Blank	Total/NA	Solid	8082	539467
LCS 320-539467/2-A	Lab Control Sample	Total/NA	Solid	8082	539467
320-80943-17 MS	AOC3-S6A-0.5	Total/NA	Solid	8082	539467
320-80943-17 MSD	AOC3-S6A-0.5	Total/NA	Solid	8082	539467

Analysis Batch: 543551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-42	AOC3-S4C-0.5	Total/NA	Solid	8082	540587

GC Semi VOA (Continued)

Analysis Batch: 543551 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-44	AOC3-S3C-0.5	Total/NA	Solid	8082	540587
320-80943-46	AOC3-S1D-0.5	Total/NA	Solid	8082	540587
320-80943-48	AOC3/AOC8-S2D-0.5	Total/NA	Solid	8082	540587
320-80943-50	AOC3/AOC8-S1E-0.5	Total/NA	Solid	8082	540587
320-80943-52	AOC3-S2E-0.5	Total/NA	Solid	8082	540587
320-80943-54	AOC3-S3E-0.5	Total/NA	Solid	8082	540587
320-80943-56	AOC3-S3D-0.5	Total/NA	Solid	8082	540587
320-80943-58	AOC3-S4D-0.5	Total/NA	Solid	8082	540587
320-80943-60	AOC3-S4E-0.5	Total/NA	Solid	8082	540587
MB 320-540587/1-A	Method Blank	Total/NA	Solid	8082	540587
LCS 320-540587/2-A	Lab Control Sample	Total/NA	Solid	8082	540587

Analysis Batch: 543943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-19	AOC3-S7A-0.5	Total/NA	Solid	8082	539538
320-80943-21	AOC3-S7B-0.5	Total/NA	Solid	8082	539538
320-80943-23	AOC3/AOC10-S8A-0.5	Total/NA	Solid	8082	539538
MB 320-539538/1-A	Method Blank	Total/NA	Solid	8082	539538
LCS 320-539538/2-A	Lab Control Sample	Total/NA	Solid	8082	539538
320-80943-21 MS	AOC3-S7B-0.5	Total/NA	Solid	8082	539538
320-80943-21 MSD	AOC3-S7B-0.5	Total/NA	Solid	8082	539538

Analysis Batch: 544755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-42	AOC3-S4C-0.5	Total/NA	Solid	8081A	540585
320-80943-43	AOC3-S4C-2	Total/NA	Solid	8081A	540585
320-80943-44	AOC3-S3C-0.5	Total/NA	Solid	8081A	540585
320-80943-45	AOC3-S3C-2	Total/NA	Solid	8081A	540585
320-80943-46	AOC3-S1D-0.5	Total/NA	Solid	8081A	540585
320-80943-47	AOC3-S1D-2	Total/NA	Solid	8081A	540585
320-80943-48	AOC3/AOC8-S2D-0.5	Total/NA	Solid	8081A	540585
320-80943-49	AOC3/AOC8-S2D-2	Total/NA	Solid	8081A	540585
320-80943-50	AOC3/AOC8-S1E-0.5	Total/NA	Solid	8081A	540585
320-80943-51	AOC3/AOC8-S1E-2	Total/NA	Solid	8081A	540585
320-80943-52	AOC3-S2E-0.5	Total/NA	Solid	8081A	540585
320-80943-53	AOC3-S2E-2	Total/NA	Solid	8081A	540585
320-80943-54	AOC3-S3E-0.5	Total/NA	Solid	8081A	540585
320-80943-55	AOC3-S3E-2	Total/NA	Solid	8081A	540585
320-80943-56	AOC3-S3D-0.5	Total/NA	Solid	8081A	540585
320-80943-57	AOC3-S3D-2	Total/NA	Solid	8081A	540585
320-80943-58	AOC3-S4D-0.5	Total/NA	Solid	8081A	540585
320-80943-59	AOC3-S4D-2	Total/NA	Solid	8081A	540585
320-80943-60	AOC3-S4E-0.5	Total/NA	Solid	8081A	540585
320-80943-61	AOC3-S4E-2	Total/NA	Solid	8081A	540585
MB 320-540585/1-A	Method Blank	Total/NA	Solid	8081A	540585
LCS 320-540585/2-A	Lab Control Sample	Total/NA	Solid	8081A	540585
320-80943-42 MS	AOC3-S4C-0.5	Total/NA	Solid	8081A	540585
320-80943-42 MSD	AOC3-S4C-0.5	Total/NA	Solid	8081A	540585

Metals

Prep Batch: 192815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-9	AOC3-S5A-0.5	Total/NA	Solid	7471A	
320-80943-23	AOC3/AOC10-S8A-0.5	Total/NA	Solid	7471A	
320-80943-24	AOC3/AOC10-S8A-2	Total/NA	Solid	7471A	
320-80943-25	AOC3/AOC10-S8B-0.5	Total/NA	Solid	7471A	
320-80943-26	AOC3/AOC10-S8B-2	Total/NA	Solid	7471A	
320-80943-27	AOC3/AOC10-S9C-0.5	Total/NA	Solid	7471A	
320-80943-28	AOC3/AOC10-S9C-0.5DUP	Total/NA	Solid	7471A	
320-80943-29	AOC3/AOC10-S9C-2	Total/NA	Solid	7471A	
320-80943-38	AOC3-S7D-0.5	Total/NA	Solid	7471A	
320-80943-39	AOC3-S7D-2	Total/NA	Solid	7471A	
320-80943-46	AOC3-S1D-0.5	Total/NA	Solid	7471A	
320-80943-60	AOC3-S4E-0.5	Total/NA	Solid	7471A	
MB 570-192815/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 570-192815/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 570-192815/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
320-80943-9 MS	AOC3-S5A-0.5	Total/NA	Solid	7471A	
320-80943-9 MSD	AOC3-S5A-0.5	Total/NA	Solid	7471A	

Prep Batch: 192816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-9	AOC3-S5A-0.5	Total/NA	Solid	3050B	
320-80943-23	AOC3/AOC10-S8A-0.5	Total/NA	Solid	3050B	
320-80943-24	AOC3/AOC10-S8A-2	Total/NA	Solid	3050B	
320-80943-25	AOC3/AOC10-S8B-0.5	Total/NA	Solid	3050B	
320-80943-26	AOC3/AOC10-S8B-2	Total/NA	Solid	3050B	
320-80943-27	AOC3/AOC10-S9C-0.5	Total/NA	Solid	3050B	
320-80943-28	AOC3/AOC10-S9C-0.5DUP	Total/NA	Solid	3050B	
320-80943-29	AOC3/AOC10-S9C-2	Total/NA	Solid	3050B	
320-80943-38	AOC3-S7D-0.5	Total/NA	Solid	3050B	
320-80943-39	AOC3-S7D-2	Total/NA	Solid	3050B	
320-80943-46	AOC3-S1D-0.5	Total/NA	Solid	3050B	
320-80943-60	AOC3-S4E-0.5	Total/NA	Solid	3050B	
MB 570-192816/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 570-192816/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 570-192816/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
320-80943-9 MS	AOC3-S5A-0.5	Total/NA	Solid	3050B	
320-80943-9 MSD	AOC3-S5A-0.5	Total/NA	Solid	3050B	

Analysis Batch: 192900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-9	AOC3-S5A-0.5	Total/NA	Solid	7471A	192815
320-80943-23	AOC3/AOC10-S8A-0.5	Total/NA	Solid	7471A	192815
320-80943-24	AOC3/AOC10-S8A-2	Total/NA	Solid	7471A	192815
320-80943-25	AOC3/AOC10-S8B-0.5	Total/NA	Solid	7471A	192815
320-80943-26	AOC3/AOC10-S8B-2	Total/NA	Solid	7471A	192815
320-80943-27	AOC3/AOC10-S9C-0.5	Total/NA	Solid	7471A	192815
320-80943-28	AOC3/AOC10-S9C-0.5DUP	Total/NA	Solid	7471A	192815
320-80943-29	AOC3/AOC10-S9C-2	Total/NA	Solid	7471A	192815
320-80943-38	AOC3-S7D-0.5	Total/NA	Solid	7471A	192815
320-80943-39	AOC3-S7D-2	Total/NA	Solid	7471A	192815
320-80943-46	AOC3-S1D-0.5	Total/NA	Solid	7471A	192815

Metals (Continued)

Analysis Batch: 192900 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-60	AOC3-S4E-0.5	Total/NA	Solid	7471A	192815
MB 570-192815/1-A	Method Blank	Total/NA	Solid	7471A	192815
LCS 570-192815/2-A	Lab Control Sample	Total/NA	Solid	7471A	192815
LCSD 570-192815/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	192815
320-80943-9 MS	AOC3-S5A-0.5	Total/NA	Solid	7471A	192815
320-80943-9 MSD	AOC3-S5A-0.5	Total/NA	Solid	7471A	192815

Analysis Batch: 193505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-9	AOC3-S5A-0.5	Total/NA	Solid	6010B	192816
320-80943-23	AOC3/AOC10-S8A-0.5	Total/NA	Solid	6010B	192816
320-80943-24	AOC3/AOC10-S8A-2	Total/NA	Solid	6010B	192816
320-80943-25	AOC3/AOC10-S8B-0.5	Total/NA	Solid	6010B	192816
320-80943-26	AOC3/AOC10-S8B-2	Total/NA	Solid	6010B	192816
320-80943-27	AOC3/AOC10-S9C-0.5	Total/NA	Solid	6010B	192816
320-80943-28	AOC3/AOC10-S9C-0.5DUP	Total/NA	Solid	6010B	192816
320-80943-29	AOC3/AOC10-S9C-2	Total/NA	Solid	6010B	192816
320-80943-38	AOC3-S7D-0.5	Total/NA	Solid	6010B	192816
320-80943-39	AOC3-S7D-2	Total/NA	Solid	6010B	192816
320-80943-46	AOC3-S1D-0.5	Total/NA	Solid	6010B	192816
320-80943-60	AOC3-S4E-0.5	Total/NA	Solid	6010B	192816
MB 570-192816/1-A	Method Blank	Total/NA	Solid	6010B	192816
LCS 570-192816/2-A	Lab Control Sample	Total/NA	Solid	6010B	192816
LCSD 570-192816/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	192816

Analysis Batch: 193608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-9 MS	AOC3-S5A-0.5	Total/NA	Solid	6010B	192816
320-80943-9 MSD	AOC3-S5A-0.5	Total/NA	Solid	6010B	192816

Prep Batch: 538884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-52	AOC3-S2E-0.5	Total/NA	Solid	3050B	
320-80943-54	AOC3-S3E-0.5	Total/NA	Solid	3050B	
320-80943-56	AOC3-S3D-0.5	Total/NA	Solid	3050B	
320-80943-58	AOC3-S4D-0.5	Total/NA	Solid	3050B	
MB 320-538884/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-538884/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 538889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-1	AOC3-S3B-0.5	Total/NA	Solid	3050B	
320-80943-3	AOC3-S2A-0.5	Total/NA	Solid	3050B	
320-80943-5	AOC3-S3A-0.5	Total/NA	Solid	3050B	
320-80943-7	AOC3-S4A-0.5	Total/NA	Solid	3050B	
320-80943-11	AOC3-S4B-0.5	Total/NA	Solid	3050B	
320-80943-13	AOC3/AOC8-S5B-0.5	Total/NA	Solid	3050B	
320-80943-15	AOC3-S6B-0.5	Total/NA	Solid	3050B	
320-80943-17	AOC3-S6A-0.5	Total/NA	Solid	3050B	
320-80943-19	AOC3-S7A-0.5	Total/NA	Solid	3050B	
320-80943-21	AOC3-S7B-0.5	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 538889 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-30	AOC3-S8D-0.5	Total/NA	Solid	3050B	
320-80943-32	AOC3/AOC8-S8C-0.5	Total/NA	Solid	3050B	
320-80943-34	AOC3-S7C-0.5	Total/NA	Solid	3050B	
320-80943-36	AOC3-S6C-0.5	Total/NA	Solid	3050B	
320-80943-40	AOC3-S5C-0.5	Total/NA	Solid	3050B	
320-80943-42	AOC3-S4C-0.5	Total/NA	Solid	3050B	
320-80943-44	AOC3-S3C-0.5	Total/NA	Solid	3050B	
320-80943-45	AOC3-S3C-2	Total/NA	Solid	3050B	
320-80943-48	AOC3/AOC8-S2D-0.5	Total/NA	Solid	3050B	
320-80943-50	AOC3/AOC8-S1E-0.5	Total/NA	Solid	3050B	
MB 320-538889/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-538889/2-A	Lab Control Sample	Total/NA	Solid	3050B	
320-80943-1 MS	AOC3-S3B-0.5	Total/NA	Solid	3050B	
320-80943-1 MSD	AOC3-S3B-0.5	Total/NA	Solid	3050B	

Analysis Batch: 539464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-1	AOC3-S3B-0.5	Total/NA	Solid	6010B	538889
320-80943-3	AOC3-S2A-0.5	Total/NA	Solid	6010B	538889
320-80943-5	AOC3-S3A-0.5	Total/NA	Solid	6010B	538889
320-80943-7	AOC3-S4A-0.5	Total/NA	Solid	6010B	538889
320-80943-11	AOC3-S4B-0.5	Total/NA	Solid	6010B	538889
320-80943-13	AOC3/AOC8-S5B-0.5	Total/NA	Solid	6010B	538889
320-80943-15	AOC3-S6B-0.5	Total/NA	Solid	6010B	538889
320-80943-17	AOC3-S6A-0.5	Total/NA	Solid	6010B	538889
320-80943-19	AOC3-S7A-0.5	Total/NA	Solid	6010B	538889
320-80943-21	AOC3-S7B-0.5	Total/NA	Solid	6010B	538889
320-80943-30	AOC3-S8D-0.5	Total/NA	Solid	6010B	538889
320-80943-32	AOC3/AOC8-S8C-0.5	Total/NA	Solid	6010B	538889
320-80943-34	AOC3-S7C-0.5	Total/NA	Solid	6010B	538889
320-80943-36	AOC3-S6C-0.5	Total/NA	Solid	6010B	538889
320-80943-40	AOC3-S5C-0.5	Total/NA	Solid	6010B	538889
320-80943-42	AOC3-S4C-0.5	Total/NA	Solid	6010B	538889
320-80943-44	AOC3-S3C-0.5	Total/NA	Solid	6010B	538889
320-80943-45	AOC3-S3C-2	Total/NA	Solid	6010B	538889
320-80943-48	AOC3/AOC8-S2D-0.5	Total/NA	Solid	6010B	538889
320-80943-50	AOC3/AOC8-S1E-0.5	Total/NA	Solid	6010B	538889
320-80943-52	AOC3-S2E-0.5	Total/NA	Solid	6010B	538884
320-80943-54	AOC3-S3E-0.5	Total/NA	Solid	6010B	538884
320-80943-56	AOC3-S3D-0.5	Total/NA	Solid	6010B	538884
320-80943-58	AOC3-S4D-0.5	Total/NA	Solid	6010B	538884
MB 320-538884/1-A	Method Blank	Total/NA	Solid	6010B	538884
MB 320-538889/1-A	Method Blank	Total/NA	Solid	6010B	538889
LCS 320-538884/2-A	Lab Control Sample	Total/NA	Solid	6010B	538884
LCS 320-538889/2-A	Lab Control Sample	Total/NA	Solid	6010B	538889
320-80943-1 MS	AOC3-S3B-0.5	Total/NA	Solid	6010B	538889
320-80943-1 MSD	AOC3-S3B-0.5	Total/NA	Solid	6010B	538889

Client Sample ID: AOC3-S3B-0.5

Lab Sample ID: 320-80943-1

Date Collected: 10/27/21 08:54

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.21 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		5			542519	11/13/21 15:18	K1D	TAL SAC
Total/NA	Prep	3546			15.21 g	5 mL	539467	11/03/21 07:59	TL	TAL SAC
Total/NA	Analysis	8082		1			543265	11/16/21 22:05	K1D	TAL SAC
Total/NA	Prep	3050B			1.50 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 15:58	GSH	TAL SAC

Client Sample ID: AOC3-S3B-2

Lab Sample ID: 320-80943-2

Date Collected: 10/27/21 09:00

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.27 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		2			542519	11/13/21 15:37	K1D	TAL SAC

Client Sample ID: AOC3-S2A-0.5

Lab Sample ID: 320-80943-3

Date Collected: 10/27/21 09:00

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.22 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		10			542519	11/13/21 15:56	K1D	TAL SAC
Total/NA	Prep	3546			15.22 g	5 mL	539467	11/03/21 07:59	TL	TAL SAC
Total/NA	Analysis	8082		1			543265	11/16/21 22:25	K1D	TAL SAC
Total/NA	Prep	3050B			1.51 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 16:17	GSH	TAL SAC

Client Sample ID: AOC3-S2A-2

Lab Sample ID: 320-80943-4

Date Collected: 10/27/21 09:02

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.99 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		1			542519	11/13/21 16:15	K1D	TAL SAC

Client Sample ID: AOC3-S3A-0.5

Lab Sample ID: 320-80943-5

Date Collected: 10/27/21 09:06

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.58 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		10			542519	11/13/21 16:34	K1D	TAL SAC
Total/NA	Prep	3546			15.58 g	5 mL	539467	11/03/21 07:59	TL	TAL SAC
Total/NA	Analysis	8082		1			543265	11/16/21 22:46	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 16:20	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S3A-2
Date Collected: 10/27/21 09:10
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.99 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		1			542519	11/13/21 16:52	K1D	TAL SAC

Client Sample ID: AOC3-S4A-0.5
Date Collected: 10/27/21 09:43
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.40 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		1			542519	11/13/21 17:11	K1D	TAL SAC
Total/NA	Prep	3546			15.40 g	5 mL	539467	11/03/21 07:59	TL	TAL SAC
Total/NA	Analysis	8082		1			543265	11/16/21 23:06	K1D	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 16:24	GSH	TAL SAC

Client Sample ID: AOC3-S4A-2
Date Collected: 10/27/21 09:45
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.26 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		20			542519	11/13/21 17:30	K1D	TAL SAC

Client Sample ID: AOC3-S5A-0.5
Date Collected: 10/27/21 09:45
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.14 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		10			542519	11/13/21 17:49	K1D	TAL SAC
Total/NA	Prep	3546			15.14 g	5 mL	539467	11/03/21 07:59	TL	TAL SAC
Total/NA	Analysis	8082		1			543265	11/16/21 23:27	K1D	TAL SAC
Total/NA	Prep	3050B			1.94 g	100 mL	192816	11/09/21 08:59	WL8G	ECL 1
Total/NA	Analysis	6010B		1			193505	11/10/21 17:27	ULPF	ECL 1
Total/NA	Prep	7471A			.61 g	100 mL	192815	11/09/21 08:55	WL8G	ECL 1
Total/NA	Analysis	7471A		1			192900	11/09/21 12:26	VWJ7	ECL 1

Client Sample ID: AOC3-S5A-2
Date Collected: 10/27/21 09:50
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.48 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		1			542519	11/13/21 18:08	K1D	TAL SAC

Client Sample ID: AOC3-S4B-0.5

Lab Sample ID: 320-80943-11

Date Collected: 10/27/21 09:56

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.31 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		10			542519	11/13/21 18:27	K1D	TAL SAC
Total/NA	Prep	3546			15.31 g	5 mL	539467	11/03/21 07:59	TL	TAL SAC
Total/NA	Analysis	8082		1			543265	11/16/21 23:48	K1D	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 16:28	GSH	TAL SAC

Client Sample ID: AOC3-S4B-2

Lab Sample ID: 320-80943-12

Date Collected: 10/27/21 09:58

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.34 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		1			542519	11/13/21 18:46	K1D	TAL SAC

Client Sample ID: AOC3/AOC8-S5B-0.5

Lab Sample ID: 320-80943-13

Date Collected: 10/27/21 10:00

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.52 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		10			542519	11/13/21 19:04	K1D	TAL SAC
Total/NA	Prep	3546			15.52 g	5 mL	539467	11/03/21 07:59	TL	TAL SAC
Total/NA	Analysis	8082		1			543265	11/17/21 00:08	K1D	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 16:32	GSH	TAL SAC

Client Sample ID: AOC3/AOC8-S5B-2

Lab Sample ID: 320-80943-14

Date Collected: 10/27/21 10:02

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.38 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		5			542519	11/13/21 19:23	K1D	TAL SAC

Client Sample ID: AOC3-S6B-0.5

Lab Sample ID: 320-80943-15

Date Collected: 10/27/21 10:23

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.01 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		5			542519	11/13/21 19:42	K1D	TAL SAC
Total/NA	Prep	3546			15.01 g	5 mL	539467	11/03/21 07:59	TL	TAL SAC
Total/NA	Analysis	8082		1			543265	11/17/21 00:29	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 16:43	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S6B-2
Lab Sample ID: 320-80943-16
Date Collected: 10/27/21 10:26
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.99 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		1			542519	11/13/21 20:01	K1D	TAL SAC

Client Sample ID: AOC3-S6A-0.5
Lab Sample ID: 320-80943-17
Date Collected: 10/27/21 10:28
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.06 g	5 mL	539466	11/03/21 07:57	TL	TAL SAC
Total/NA	Analysis	8081A		20			542519	11/13/21 20:58	K1D	TAL SAC
Total/NA	Prep	3546			15.06 g	5 mL	539467	11/03/21 07:59	TL	TAL SAC
Total/NA	Analysis	8082		1			543265	11/17/21 00:49	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 16:47	GSH	TAL SAC

Client Sample ID: AOC3-S6A-2
Lab Sample ID: 320-80943-18
Date Collected: 10/27/21 10:30
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.67 g	5 mL	539525	11/03/21 10:14	NGK	TAL SAC
Total/NA	Analysis	8081A		2			542188	11/12/21 18:24	K1D	TAL SAC

Client Sample ID: AOC3-S7A-0.5
Lab Sample ID: 320-80943-19
Date Collected: 10/27/21 10:35
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.35 g	5 mL	539525	11/03/21 10:14	NGK	TAL SAC
Total/NA	Analysis	8081A		10			542188	11/12/21 18:42	K1D	TAL SAC
Total/NA	Prep	3546			15.35 g	5 mL	539538	11/03/21 10:18	NGK	TAL SAC
Total/NA	Analysis	8082		1			543943	11/18/21 19:25	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 16:51	GSH	TAL SAC

Client Sample ID: AOC3-S7A-2
Lab Sample ID: 320-80943-20
Date Collected: 10/27/21 10:38
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.48 g	5 mL	539525	11/03/21 10:14	NGK	TAL SAC
Total/NA	Analysis	8081A		1			542188	11/12/21 19:39	K1D	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S7B-0.5

Lab Sample ID: 320-80943-21

Date Collected: 10/27/21 10:43

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.71 g	5 mL	539525	11/03/21 10:17	NGK	TAL SAC
Total/NA	Analysis	8081A		10			542188	11/12/21 19:58	K1D	TAL SAC
Total/NA	Prep	3546			15.71 g	5 mL	539538	11/03/21 10:18	NGK	TAL SAC
Total/NA	Analysis	8082		1			543943	11/18/21 19:46	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 16:55	GSH	TAL SAC

Client Sample ID: AOC3-S7B-2

Lab Sample ID: 320-80943-22

Date Collected: 10/27/21 10:47

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.82 g	5 mL	539525	11/03/21 10:17	NGK	TAL SAC
Total/NA	Analysis	8081A		2			542188	11/12/21 20:17	K1D	TAL SAC

Client Sample ID: AOC3/AOC10-S8A-0.5

Lab Sample ID: 320-80943-23

Date Collected: 10/27/21 11:01

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30.22 g	10 mL	539206	11/02/21 11:54	SJ	TAL SAC
Total/NA	Analysis	8270C		40			541624	11/11/21 11:17	D1R	TAL SAC
Total/NA	Prep	3546			10.14 g	1 mL	539143	11/02/21 09:36	SJ	TAL SAC
Total/NA	Analysis	8270C SIM		50			540863	11/08/21 11:04	Y1S	TAL SAC
Total/NA	Prep	3546			15.34 g	5 mL	539525	11/03/21 10:17	NGK	TAL SAC
Total/NA	Analysis	8081A		10			542188	11/12/21 20:36	K1D	TAL SAC
Total/NA	Prep	3546			15.34 g	5 mL	539538	11/03/21 10:18	NGK	TAL SAC
Total/NA	Analysis	8082		1			543943	11/18/21 20:48	K1D	TAL SAC
Total/NA	Prep	3050B			2.03 g	100 mL	192816	11/09/21 08:59	WL8G	ECL 1
Total/NA	Analysis	6010B		1			193505	11/10/21 17:32	ULPF	ECL 1
Total/NA	Prep	7471A			.59 g	100 mL	192815	11/09/21 08:55	WL8G	ECL 1
Total/NA	Analysis	7471A		1			192900	11/09/21 12:31	VWJ7	ECL 1

Client Sample ID: AOC3/AOC10-S8A-2

Lab Sample ID: 320-80943-24

Date Collected: 10/27/21 11:03

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30.53 g	1 mL	539206	11/02/21 11:54	SJ	TAL SAC
Total/NA	Analysis	8270C		20			541624	11/11/21 11:41	D1R	TAL SAC
Total/NA	Prep	3546			10.24 g	1 mL	539143	11/02/21 09:36	SJ	TAL SAC
Total/NA	Analysis	8270C SIM		1			547670	12/02/21 15:01	KT	TAL SAC
Total/NA	Prep	3546			15.77 g	5 mL	539525	11/03/21 10:17	NGK	TAL SAC
Total/NA	Analysis	8081A		1			542188	11/12/21 20:54	K1D	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S8A-2

Lab Sample ID: 320-80943-24

Date Collected: 10/27/21 11:03

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			2.10 g	100 mL	192816	11/09/21 08:59	WL8G	ECL 1
Total/NA	Analysis	6010B		1			193505	11/10/21 17:34	ULPF	ECL 1
Total/NA	Prep	7471A			.60 g	100 mL	192815	11/09/21 08:55	WL8G	ECL 1
Total/NA	Analysis	7471A		1			192900	11/09/21 12:33	VWJ7	ECL 1

Client Sample ID: AOC3/AOC10-S8B-0.5

Lab Sample ID: 320-80943-25

Date Collected: 10/27/21 11:27

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30.70 g	10 mL	539206	11/02/21 11:54	SJ	TAL SAC
Total/NA	Analysis	8270C		40			541624	11/11/21 12:06	D1R	TAL SAC
Total/NA	Prep	3546			10.86 g	1 mL	539143	11/02/21 09:36	SJ	TAL SAC
Total/NA	Analysis	8270C SIM		50			540863	11/08/21 12:03	Y1S	TAL SAC
Total/NA	Prep	3546			15.95 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		5			541611	11/10/21 19:05	K1D	TAL SAC
Total/NA	Prep	3546			15.95 g	5 mL	539860	11/04/21 09:21	TL	TAL SAC
Total/NA	Analysis	8082		1			541881	11/11/21 14:21	VMN	TAL SAC
Total/NA	Prep	3050B			1.95 g	100 mL	192816	11/09/21 08:59	WL8G	ECL 1
Total/NA	Analysis	6010B		1			193505	11/10/21 17:36	ULPF	ECL 1
Total/NA	Prep	7471A			.58 g	100 mL	192815	11/09/21 08:55	WL8G	ECL 1
Total/NA	Analysis	7471A		1			192900	11/09/21 12:35	VWJ7	ECL 1

Client Sample ID: AOC3/AOC10-S8B-2

Lab Sample ID: 320-80943-26

Date Collected: 10/27/21 11:29

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30.93 g	1 mL	539206	11/02/21 11:54	SJ	TAL SAC
Total/NA	Analysis	8270C		40			541624	11/11/21 12:31	D1R	TAL SAC
Total/NA	Prep	3546			10.91 g	1 mL	539143	11/02/21 09:36	SJ	TAL SAC
Total/NA	Analysis	8270C SIM		1			547670	12/02/21 15:30	KT	TAL SAC
Total/NA	Prep	3546			15.31 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		1			541611	11/10/21 19:23	K1D	TAL SAC
Total/NA	Prep	3050B			1.98 g	100 mL	192816	11/09/21 08:59	WL8G	ECL 1
Total/NA	Analysis	6010B		1			193505	11/10/21 17:38	ULPF	ECL 1
Total/NA	Prep	7471A			.61 g	100 mL	192815	11/09/21 08:55	WL8G	ECL 1
Total/NA	Analysis	7471A		1			192900	11/09/21 12:37	VWJ7	ECL 1

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S9C-0.5

Lab Sample ID: 320-80943-27

Date Collected: 10/27/21 11:41
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30.64 g	10 mL	539206	11/02/21 11:59	SJ	TAL SAC
Total/NA	Analysis	8270C		40			541624	11/11/21 12:56	D1R	TAL SAC
Total/NA	Prep	3546			10.16 g	1 mL	539143	11/02/21 09:36	SJ	TAL SAC
Total/NA	Analysis	8270C SIM		50			540863	11/08/21 13:03	Y1S	TAL SAC
Total/NA	Prep	3546			15.43 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		5			541611	11/10/21 19:42	K1D	TAL SAC
Total/NA	Prep	3546			15.43 g	5 mL	539860	11/04/21 09:21	TL	TAL SAC
Total/NA	Analysis	8082		1			541881	11/11/21 14:42	VMN	TAL SAC
Total/NA	Prep	3050B			1.93 g	100 mL	192816	11/09/21 08:59	WL8G	ECL 1
Total/NA	Analysis	6010B		1			193505	11/10/21 17:40	ULPF	ECL 1
Total/NA	Prep	7471A			.60 g	100 mL	192815	11/09/21 08:55	WL8G	ECL 1
Total/NA	Analysis	7471A		1			192900	11/09/21 12:42	VWJ7	ECL 1

Client Sample ID: AOC3/AOC10-S9C-0.5DUP

Lab Sample ID: 320-80943-28

Date Collected: 10/27/21 11:41
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30.90 g	10 mL	539206	11/02/21 11:59	SJ	TAL SAC
Total/NA	Analysis	8270C		40			541624	11/11/21 13:21	D1R	TAL SAC
Total/NA	Prep	3546			10.05 g	1 mL	539143	11/02/21 09:36	SJ	TAL SAC
Total/NA	Analysis	8270C SIM		50			540863	11/08/21 13:32	Y1S	TAL SAC
Total/NA	Prep	3546			15.30 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		5			541611	11/10/21 20:01	K1D	TAL SAC
Total/NA	Prep	3546			15.30 g	5 mL	539860	11/04/21 09:21	TL	TAL SAC
Total/NA	Analysis	8082		1			541881	11/11/21 15:02	VMN	TAL SAC
Total/NA	Prep	3050B			1.99 g	100 mL	192816	11/09/21 08:59	WL8G	ECL 1
Total/NA	Analysis	6010B		1			193505	11/10/21 17:49	ULPF	ECL 1
Total/NA	Prep	7471A			.59 g	100 mL	192815	11/09/21 08:55	WL8G	ECL 1
Total/NA	Analysis	7471A		1			192900	11/09/21 12:44	VWJ7	ECL 1

Client Sample ID: AOC3/AOC10-S9C-2

Lab Sample ID: 320-80943-29

Date Collected: 10/27/21 11:44
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30.73 g	10 mL	539206	11/02/21 11:59	SJ	TAL SAC
Total/NA	Analysis	8270C		100			541624	11/11/21 13:46	D1R	TAL SAC
Total/NA	Prep	3546			10.19 g	1 mL	539143	11/02/21 09:36	SJ	TAL SAC
Total/NA	Analysis	8270C SIM		50			540863	11/08/21 14:02	Y1S	TAL SAC
Total/NA	Prep	3546			15.60 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		10			541611	11/10/21 20:20	K1D	TAL SAC
Total/NA	Prep	3050B			2.05 g	100 mL	192816	11/09/21 08:59	WL8G	ECL 1
Total/NA	Analysis	6010B		1			193505	11/10/21 17:51	ULPF	ECL 1

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC10-S9C-2

Lab Sample ID: 320-80943-29
Date Collected: 10/27/21 11:44
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			.63 g	100 mL	192815	11/09/21 08:55	WL8G	ECL 1
Total/NA	Analysis	7471A		1			192900	11/09/21 12:46	VWJ7	ECL 1

Client Sample ID: AOC3-S8D-0.5

Lab Sample ID: 320-80943-30
Date Collected: 10/27/21 11:45
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.18 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		5			541611	11/10/21 20:39	K1D	TAL SAC
Total/NA	Prep	3546			15.18 g	5 mL	539860	11/04/21 09:21	TL	TAL SAC
Total/NA	Analysis	8082		1			541881	11/11/21 15:23	VMN	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 16:59	GSH	TAL SAC

Client Sample ID: AOC3-S8D-2

Lab Sample ID: 320-80943-31
Date Collected: 10/27/21 11:50
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.10 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		1			541611	11/10/21 20:58	K1D	TAL SAC

Client Sample ID: AOC3/AOC8-S8C-0.5

Lab Sample ID: 320-80943-32
Date Collected: 10/27/21 11:55
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.51 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		10			541611	11/10/21 21:17	K1D	TAL SAC
Total/NA	Prep	3546			15.51 g	5 mL	539860	11/04/21 09:21	TL	TAL SAC
Total/NA	Analysis	8082		1			541881	11/11/21 15:44	VMN	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 17:02	GSH	TAL SAC

Client Sample ID: AOC3/AOC8-S8C-2

Lab Sample ID: 320-80943-33
Date Collected: 10/27/21 12:00
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.48 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		1			541611	11/10/21 21:35	K1D	TAL SAC

Client Sample ID: AOC3-S7C-0.5

Lab Sample ID: 320-80943-34

Date Collected: 10/27/21 11:59

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.07 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		5			541611	11/10/21 21:54	K1D	TAL SAC
Total/NA	Prep	3546			15.07 g	5 mL	539860	11/04/21 09:21	TL	TAL SAC
Total/NA	Analysis	8082		1			541881	11/11/21 16:04	VMN	TAL SAC
Total/NA	Prep	3050B			1.01 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 17:06	GSH	TAL SAC

Client Sample ID: AOC3-S7C-2

Lab Sample ID: 320-80943-35

Date Collected: 10/27/21 12:01

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.11 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		1			541611	11/10/21 22:13	K1D	TAL SAC

Client Sample ID: AOC3-S6C-0.5

Lab Sample ID: 320-80943-36

Date Collected: 10/27/21 12:05

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.61 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		10			541611	11/10/21 22:32	K1D	TAL SAC
Total/NA	Prep	3546			15.61 g	5 mL	539860	11/04/21 09:21	TL	TAL SAC
Total/NA	Analysis	8082		1			541881	11/11/21 16:25	VMN	TAL SAC
Total/NA	Prep	3050B			1.04 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 17:10	GSH	TAL SAC

Client Sample ID: AOC3-S6C-2

Lab Sample ID: 320-80943-37

Date Collected: 10/27/21 12:07

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.33 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		1			541611	11/10/21 22:51	K1D	TAL SAC

Client Sample ID: AOC3-S7D-0.5

Lab Sample ID: 320-80943-38

Date Collected: 10/27/21 12:25

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.65 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		5			541611	11/10/21 23:10	K1D	TAL SAC
Total/NA	Prep	3546			15.65 g	5 mL	539860	11/04/21 09:21	TL	TAL SAC
Total/NA	Analysis	8082		1			541881	11/11/21 16:45	VMN	TAL SAC
Total/NA	Prep	3050B			2.00 g	100 mL	192816	11/09/21 08:59	WL8G	ECL 1
Total/NA	Analysis	6010B		1			193505	11/10/21 18:25	ULPF	ECL 1

Client Sample ID: AOC3-S7D-0.5

Lab Sample ID: 320-80943-38

Date Collected: 10/27/21 12:25

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			.58 g	100 mL	192815	11/09/21 08:55	WL8G	ECL 1
Total/NA	Analysis	7471A		1			192900	11/09/21 12:48	VWJ7	ECL 1

Client Sample ID: AOC3-S7D-2

Lab Sample ID: 320-80943-39

Date Collected: 10/27/21 12:30

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.79 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		1			542188	11/12/21 21:13	K1D	TAL SAC
Total/NA	Prep	3050B			1.94 g	100 mL	192816	11/09/21 08:59	WL8G	ECL 1
Total/NA	Analysis	6010B		1			193505	11/10/21 18:27	ULPF	ECL 1
Total/NA	Prep	7471A			.61 g	100 mL	192815	11/09/21 08:55	WL8G	ECL 1
Total/NA	Analysis	7471A		1			192900	11/09/21 12:50	VWJ7	ECL 1

Client Sample ID: AOC3-S5C-0.5

Lab Sample ID: 320-80943-40

Date Collected: 10/27/21 12:30

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.68 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		10			542188	11/12/21 21:32	K1D	TAL SAC
Total/NA	Prep	3546			15.68 g	5 mL	539860	11/04/21 09:21	TL	TAL SAC
Total/NA	Analysis	8082		1			541881	11/11/21 17:06	VMN	TAL SAC
Total/NA	Prep	3050B			1.05 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 17:14	GSH	TAL SAC

Client Sample ID: AOC3-S5C-2

Lab Sample ID: 320-80943-41

Date Collected: 10/27/21 12:35

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.60 g	5 mL	539858	11/04/21 09:18	TL	TAL SAC
Total/NA	Analysis	8081A		1			542188	11/12/21 21:51	K1D	TAL SAC

Client Sample ID: AOC3-S4C-0.5

Lab Sample ID: 320-80943-42

Date Collected: 10/27/21 12:35

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.45 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		10			544755	11/21/21 18:04	K1D	TAL SAC
Total/NA	Prep	3546			15.45 g	5 mL	540587	11/06/21 10:17	PT	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 19:28	K1D	TAL SAC
Total/NA	Prep	3050B			1.04 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 17:18	GSH	TAL SAC

Client Sample ID: AOC3-S4C-2

Lab Sample ID: 320-80943-43

Date Collected: 10/27/21 12:40

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.15 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		1			544755	11/21/21 19:01	K1D	TAL SAC

Client Sample ID: AOC3-S3C-0.5

Lab Sample ID: 320-80943-44

Date Collected: 10/27/21 12:50

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.62 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		10			544755	11/21/21 19:20	K1D	TAL SAC
Total/NA	Prep	3546			15.62 g	5 mL	540587	11/06/21 10:17	PT	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 19:48	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 17:29	GSH	TAL SAC

Client Sample ID: AOC3-S3C-2

Lab Sample ID: 320-80943-45

Date Collected: 10/27/21 12:55

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.07 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		5			544755	11/21/21 19:39	K1D	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 17:33	GSH	TAL SAC

Client Sample ID: AOC3-S1D-0.5

Lab Sample ID: 320-80943-46

Date Collected: 10/27/21 13:14

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.17 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		5			544755	11/21/21 19:57	K1D	TAL SAC
Total/NA	Prep	3546			15.17 g	5 mL	540587	11/06/21 10:17	PT	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 20:29	K1D	TAL SAC
Total/NA	Prep	3050B			1.97 g	100 mL	192816	11/09/21 08:59	WL8G	ECL 1
Total/NA	Analysis	6010B		1			193505	11/10/21 18:29	ULPF	ECL 1
Total/NA	Prep	7471A			.60 g	100 mL	192815	11/09/21 08:55	WL8G	ECL 1
Total/NA	Analysis	7471A		1			192900	11/09/21 12:52	VWJ7	ECL 1

Client Sample ID: AOC3-S1D-2

Lab Sample ID: 320-80943-47

Date Collected: 10/27/21 13:15

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.74 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		1			544755	11/21/21 20:16	K1D	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3/AOC8-S2D-0.5
Lab Sample ID: 320-80943-48
Date Collected: 10/27/21 13:16
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.04 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		5			544755	11/21/21 20:35	K1D	TAL SAC
Total/NA	Prep	3546			15.04 g	5 mL	540587	11/06/21 10:17	PT	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 20:50	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 17:37	GSH	TAL SAC

Client Sample ID: AOC3/AOC8-S2D-2
Lab Sample ID: 320-80943-49
Date Collected: 10/27/21 13:18
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.06 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		1			544755	11/21/21 20:54	K1D	TAL SAC

Client Sample ID: AOC3/AOC8-S1E-0.5
Lab Sample ID: 320-80943-50
Date Collected: 10/27/21 13:27
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.51 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		10			544755	11/21/21 21:13	K1D	TAL SAC
Total/NA	Prep	3546			15.51 g	5 mL	540587	11/06/21 10:17	PT	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 21:10	K1D	TAL SAC
Total/NA	Prep	3050B			1.05 g	100 mL	538889	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 17:41	GSH	TAL SAC

Client Sample ID: AOC3/AOC8-S1E-2
Lab Sample ID: 320-80943-51
Date Collected: 10/27/21 13:29
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.20 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		1			544755	11/21/21 21:32	K1D	TAL SAC

Client Sample ID: AOC3-S2E-0.5
Lab Sample ID: 320-80943-52
Date Collected: 10/27/21 13:30
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.55 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		10			544755	11/21/21 21:51	K1D	TAL SAC
Total/NA	Prep	3546			15.55 g	5 mL	540587	11/06/21 10:17	PT	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 21:31	K1D	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	538884	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 13:17	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Client Sample ID: AOC3-S2E-2
Lab Sample ID: 320-80943-53
Date Collected: 10/27/21 13:32
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.06 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		1			544755	11/21/21 22:10	K1D	TAL SAC

Client Sample ID: AOC3-S3E-0.5
Lab Sample ID: 320-80943-54
Date Collected: 10/27/21 13:50
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.58 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		10			544755	11/21/21 22:29	K1D	TAL SAC
Total/NA	Prep	3546			15.58 g	5 mL	540587	11/06/21 10:17	PT	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 21:52	K1D	TAL SAC
Total/NA	Prep	3050B			1.05 g	100 mL	538884	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 13:21	GSH	TAL SAC

Client Sample ID: AOC3-S3E-2
Lab Sample ID: 320-80943-55
Date Collected: 10/27/21 13:52
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.17 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		1			544755	11/21/21 22:48	K1D	TAL SAC

Client Sample ID: AOC3-S3D-0.5
Lab Sample ID: 320-80943-56
Date Collected: 10/27/21 13:52
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.69 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		10			544755	11/21/21 23:06	K1D	TAL SAC
Total/NA	Prep	3546			15.69 g	5 mL	540587	11/06/21 10:17	PT	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 22:12	K1D	TAL SAC
Total/NA	Prep	3050B			1.05 g	100 mL	538884	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 13:25	GSH	TAL SAC

Client Sample ID: AOC3-S3D-2
Lab Sample ID: 320-80943-57
Date Collected: 10/27/21 13:54
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.09 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		1			544755	11/21/21 23:25	K1D	TAL SAC

Client Sample ID: AOC3-S4D-0.5

Lab Sample ID: 320-80943-58

Date Collected: 10/27/21 13:58

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.55 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		10			544755	11/21/21 23:44	K1D	TAL SAC
Total/NA	Prep	3546			15.55 g	5 mL	540587	11/06/21 10:17	PT	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 22:33	K1D	TAL SAC
Total/NA	Prep	3050B			1.05 g	100 mL	538884	11/01/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 13:29	GSH	TAL SAC

Client Sample ID: AOC3-S4D-2

Lab Sample ID: 320-80943-59

Date Collected: 10/27/21 14:00

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.73 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		1			544755	11/22/21 00:03	K1D	TAL SAC

Client Sample ID: AOC3-S4E-0.5

Lab Sample ID: 320-80943-60

Date Collected: 10/27/21 14:05

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.39 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		10			544755	11/22/21 00:22	K1D	TAL SAC
Total/NA	Prep	3546			15.39 g	5 mL	540587	11/06/21 10:18	PT	TAL SAC
Total/NA	Analysis	8082		1			543551	11/17/21 22:53	K1D	TAL SAC
Total/NA	Prep	3050B			1.92 g	100 mL	192816	11/09/21 08:59	WL8G	ECL 1
Total/NA	Analysis	6010B		1			193505	11/10/21 18:31	ULPF	ECL 1
Total/NA	Prep	7471A			.58 g	100 mL	192815	11/09/21 08:55	WL8G	ECL 1
Total/NA	Analysis	7471A		1			192900	11/09/21 12:54	VWJ7	ECL 1

Client Sample ID: AOC3-S4E-2

Lab Sample ID: 320-80943-61

Date Collected: 10/27/21 14:07

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.12 g	5 mL	540585	11/06/21 10:08	PT	TAL SAC
Total/NA	Analysis	8081A		1			544755	11/22/21 00:41	K1D	TAL SAC

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

Laboratory: Eurofins Calscience LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2944	09-30-22

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL SAC
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL SAC
8081A	Organochlorine Pesticides (GC)	SW846	TAL SAC
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL SAC
6010B	Metals (ICP)	SW846	ECL 1
6010B	Metals (ICP)	SW846	TAL SAC
7471A	Mercury (CVAA)	SW846	ECL 1
3050B	Preparation, Metals	SW846	ECL 1
3050B	Preparation, Metals	SW846	TAL SAC
3546	Microwave Extraction	SW846	TAL SAC
3550B	Ultrasonic Extraction	SW846	TAL SAC
7471A	Preparation, Mercury	SW846	ECL 1

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-80943-1	AOC3-S3B-0.5	Solid	10/27/21 08:54	10/28/21 12:50
320-80943-2	AOC3-S3B-2	Solid	10/27/21 09:00	10/28/21 12:50
320-80943-3	AOC3-S2A-0.5	Solid	10/27/21 09:00	10/28/21 12:50
320-80943-4	AOC3-S2A-2	Solid	10/27/21 09:02	10/28/21 12:50
320-80943-5	AOC3-S3A-0.5	Solid	10/27/21 09:06	10/28/21 12:50
320-80943-6	AOC3-S3A-2	Solid	10/27/21 09:10	10/28/21 12:50
320-80943-7	AOC3-S4A-0.5	Solid	10/27/21 09:43	10/28/21 12:50
320-80943-8	AOC3-S4A-2	Solid	10/27/21 09:45	10/28/21 12:50
320-80943-9	AOC3-S5A-0.5	Solid	10/27/21 09:45	10/28/21 12:50
320-80943-10	AOC3-S5A-2	Solid	10/27/21 09:50	10/28/21 12:50
320-80943-11	AOC3-S4B-0.5	Solid	10/27/21 09:56	10/28/21 12:50
320-80943-12	AOC3-S4B-2	Solid	10/27/21 09:58	10/28/21 12:50
320-80943-13	AOC3/AOC8-S5B-0.5	Solid	10/27/21 10:00	10/28/21 12:50
320-80943-14	AOC3/AOC8-S5B-2	Solid	10/27/21 10:02	10/28/21 12:50
320-80943-15	AOC3-S6B-0.5	Solid	10/27/21 10:23	10/28/21 12:50
320-80943-16	AOC3-S6B-2	Solid	10/27/21 10:26	10/28/21 12:50
320-80943-17	AOC3-S6A-0.5	Solid	10/27/21 10:28	10/28/21 12:50
320-80943-18	AOC3-S6A-2	Solid	10/27/21 10:30	10/28/21 12:50
320-80943-19	AOC3-S7A-0.5	Solid	10/27/21 10:35	10/28/21 12:50
320-80943-20	AOC3-S7A-2	Solid	10/27/21 10:38	10/28/21 12:50
320-80943-21	AOC3-S7B-0.5	Solid	10/27/21 10:43	10/28/21 12:50
320-80943-22	AOC3-S7B-2	Solid	10/27/21 10:47	10/28/21 12:50
320-80943-23	AOC3/AOC10-S8A-0.5	Solid	10/27/21 11:01	10/28/21 12:50
320-80943-24	AOC3/AOC10-S8A-2	Solid	10/27/21 11:03	10/28/21 12:50
320-80943-25	AOC3/AOC10-S8B-0.5	Solid	10/27/21 11:27	10/28/21 12:50
320-80943-26	AOC3/AOC10-S8B-2	Solid	10/27/21 11:29	10/28/21 12:50
320-80943-27	AOC3/AOC10-S9C-0.5	Solid	10/27/21 11:41	10/28/21 12:50
320-80943-28	AOC3/AOC10-S9C-0.5DUP	Solid	10/27/21 11:41	10/28/21 12:50
320-80943-29	AOC3/AOC10-S9C-2	Solid	10/27/21 11:44	10/28/21 12:50
320-80943-30	AOC3-S8D-0.5	Solid	10/27/21 11:45	10/28/21 12:50
320-80943-31	AOC3-S8D-2	Solid	10/27/21 11:50	10/28/21 12:50
320-80943-32	AOC3/AOC8-S8C-0.5	Solid	10/27/21 11:55	10/28/21 12:50
320-80943-33	AOC3/AOC8-S8C-2	Solid	10/27/21 12:00	10/28/21 12:50
320-80943-34	AOC3-S7C-0.5	Solid	10/27/21 11:59	10/28/21 12:50
320-80943-35	AOC3-S7C-2	Solid	10/27/21 12:01	10/28/21 12:50
320-80943-36	AOC3-S6C-0.5	Solid	10/27/21 12:05	10/28/21 12:50
320-80943-37	AOC3-S6C-2	Solid	10/27/21 12:07	10/28/21 12:50
320-80943-38	AOC3-S7D-0.5	Solid	10/27/21 12:25	10/28/21 12:50
320-80943-39	AOC3-S7D-2	Solid	10/27/21 12:30	10/28/21 12:50
320-80943-40	AOC3-S5C-0.5	Solid	10/27/21 12:30	10/28/21 12:50
320-80943-41	AOC3-S5C-2	Solid	10/27/21 12:35	10/28/21 12:50
320-80943-42	AOC3-S4C-0.5	Solid	10/27/21 12:35	10/28/21 12:50
320-80943-43	AOC3-S4C-2	Solid	10/27/21 12:40	10/28/21 12:50
320-80943-44	AOC3-S3C-0.5	Solid	10/27/21 12:50	10/28/21 12:50
320-80943-45	AOC3-S3C-2	Solid	10/27/21 12:55	10/28/21 12:50
320-80943-46	AOC3-S1D-0.5	Solid	10/27/21 13:14	10/28/21 12:50
320-80943-47	AOC3-S1D-2	Solid	10/27/21 13:15	10/28/21 12:50
320-80943-48	AOC3/AOC8-S2D-0.5	Solid	10/27/21 13:16	10/28/21 12:50
320-80943-49	AOC3/AOC8-S2D-2	Solid	10/27/21 13:18	10/28/21 12:50
320-80943-50	AOC3/AOC8-S1E-0.5	Solid	10/27/21 13:27	10/28/21 12:50
320-80943-51	AOC3/AOC8-S1E-2	Solid	10/27/21 13:29	10/28/21 12:50
320-80943-52	AOC3-S2E-0.5	Solid	10/27/21 13:30	10/28/21 12:50
320-80943-53	AOC3-S2E-2	Solid	10/27/21 13:32	10/28/21 12:50
320-80943-54	AOC3-S3E-0.5	Solid	10/27/21 13:50	10/28/21 12:50
320-80943-55	AOC3-S3E-2	Solid	10/27/21 13:52	10/28/21 12:50

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-80943-56	AOC3-S3D-0.5	Solid	10/27/21 13:52	10/28/21 12:50
320-80943-57	AOC3-S3D-2	Solid	10/27/21 13:54	10/28/21 12:50
320-80943-58	AOC3-S4D-0.5	Solid	10/27/21 13:58	10/28/21 12:50
320-80943-59	AOC3-S4D-2	Solid	10/27/21 14:00	10/28/21 12:50
320-80943-60	AOC3-S4E-0.5	Solid	10/27/21 14:05	10/28/21 12:50
320-80943-61	AOC3-S4E-2	Solid	10/27/21 14:07	10/28/21 12:50

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

320-80943

201237

eurofins

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Nathan Diem	Date: 10.27.21	COC No:
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier:	1 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: NDD & NES
Alameda California 94501	Analysis Turnaround Time: ☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(510) 343-3000	TAT if different from Below: ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			Walk-in Client:
(510) 343-3001				Lab Sampling:
Project Name: Cole School PEA				Job / SDG No
Site: 11101 Union Street, Oakland				
P O # 403668001				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3-S3B-0.5	10.27.21	854	G	S	1							X	X		X	
AOC3-S3B-2 ND		900										X				
AOC3-S2A-0.5 ND		900										X	X		X	
AOC3-S2A-2		902										X				
AOC3-S3A-0.5		906										X	X		X	
AOC3-S3A-2		910										X				
AOC3-S4A-0.5		943										X	X		X	
AOC3-S4A-2		945										X				
AOC3-S5A-0.5		945								X		X	X			
AOC3-S5A-2		950										X				
AOC3-S4B-0.5		956										X	X		X	

320-80943 Chain of Custody

Preservation Used. 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments: Hold samples for addional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No	Cooler Temp. (°C): Obs'd: _____ Corr'd _____ Therm ID No _____			
Relinquished by:	Company: N&M	Date/Time: 10.27.21 1520	Received by: Leslie Jung	Company: N&M	Date/Time: 10.27 1520
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10/28 1144	Received by:	Company: ETA-SJ	Date/Time: 10.28.21 1144
Relinquished by:	Company: ETA-SJ	Date/Time: 10.28.21 1250	Received in Laboratory by:	Company: ETA-SJ	Date/Time: 10/28/21 1250

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2.5 | 2.4

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

eurofins Environment Testing America

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Nathan	Date 10.27.21
Ninyo & Moore	Email. ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226		COC No 2 of 6 COCs
Alameda, California 94501	**Analysis Turnaround Time**		Sampler
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS		For Lab Use Only:
(510) 343-3001	TAT if different from Below _____		Walk-in Client:
Project Name: Cole School PEA	☐ 2 weeks		Lab Sampling:
Site: 11101 Union Street, Oakland	☐ 1 week		Job / SDG No.
P O # 403668001	☐ 2 days		
	☐ 1 day		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3-54B-2	10.27.21	958	G	S	1							X	*			
AOC3/AOC8-55B-0.5		1000										X	X	X	X	
AOC3/AOC8-55B-2		1002										X		X		
AOC3-56B-0.5		1023										X	X		X	
AOC3-56B-2		1026										X				
AOC3-56A-0.5		1028										X	X		X	
AOC3-56A-2		1030										X	ND		ND	
AOC3-57A-0.5		1035										X	X		X	
AOC3-57A-2		1038										X				
AOC3-57B-0.5		1043										X	X		X	
AOC3-57B-2		1047										X				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.

Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No		Cooler Temp. (°C): Obs'd._____ Corr'd._____		Therm ID No._____
Relinquished by:	Company: N&M	Date/Time: 10.27.21 1520	Received by: Leslie Jung	Company: N&M	Date/Time: 10.27.21 1520
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10.27.21 1144	Received by:	Company: ETA SJ	Date/Time: 10.28.21 1144
Relinquished by:	Company: ETA SJ	Date/Time: 10.28.21 1250	Received in Laboratory by:	Company: ETA SJ	Date/Time: 10.28.21 1250

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway

West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

eurofins

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Nathan Diem	Date: 10.27.21	COC No:
Ninyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier:	3 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler:
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes.
AOC3/AOC10-S8A-0.5	10.27.21	1101	G	S	1				X	X	X	X	X			
AOC3/AOC10-S8A-2		1103							X	X	X	X				
AOC3/AOC10-S8B-0.5		1127							X	X	X	X	X			
~~AOC3/AOC10-S8B-0.5~~																
AOC3/AOC10-S8B-2		1129							X	X	X	X				
AOC3/AOC10-S9C-0.5		1141							X	X	X	X	X			
AOC3/AOC10-S9C-05 DUP		1141							X	X	X	X	X			
AOC3/AOC10-S9C-2		1144							X	X	X	X				
AOC3-S8D-0.5		1145										X	X		X	
AOC3-S8D-2.0		1150										X				
AOC3/AOC8-S8C-0.5		1155										X	X	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3, 5=NaOH, 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments

Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No | Cooler Temp. (°C): Obs'd: _____ Corr'd. _____ Therm ID No. _____

Relinquished by:	Company: N&M	Date/Time: 10 27.21 1530	Received by: Leslie Jung	Company: N&M	Date/Time: 10/27 1520
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10/27 1144	Received by:	Company: EA SJ	Date/Time: 10/28/21 1144
Relinquished by:	Company: EA SJ	Date/Time: 10/28/21 1250	Received in Laboratory by:	Company: EA SS	Date/Time: 10/28/21 1250

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

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Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

eurofins

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact:	Date:	COC No.
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier:	4 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler:
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling
Project Name: Cole School PEA	☑ 2 weeks			Job / SDG No
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3/AOC8-58C-2	10.27.21	1200	G	S	1							X		X		
AOC3-57C-0.5		1159										X	X		X	
AOC3-57C-2		1201										X	[illegible]			
AOC3-56C-0.5		1205										X	X		X	
AOC3-56C-2		1207										X				
AOC3-57D-0.5		1225								X		X	X			
AOC3-57D-2		1230								X		X				
AOC3-55C-0.5		1230										X	X		X	
AOC3-55C-2		1235										X				
AOC3-54C-0.5		1235										X	X		X	
AOC3-54C-2		1240										X				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4, 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments
Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp (°C): Obs'd._____ Corr'd._____ Therm ID No. _____

Relinquished by:	Company: N&M	Date/Time: 10.27.21 1520	Received by: Leslie Jung	Company: N&M	Date/Time: 10/27 1520
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10/28 11:44	Received by:	Company: ETA SV	Date/Time: 10/28/21 1144
Relinquished by:	Company: ETA-SV	Date/Time: 10/28/21 1250	Received in Laboratory by:	Company: ETA SV	Date/Time: 10/28/21 1250

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

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12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

eurofins

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

Client Contact	Project Manager: Nathan Diem	Site Contact: Nathan Diem	Date: 10.27.21	COC No.
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier:	5 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler:
Alameda, California 94501	**Analysis Turnaround Time**			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☑ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name. Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes.
AOC3-S3C-0.5	10.27.21	12:50										X	X		X	
AOC3-S3C-2	"	1255										X	X		X	
AOC3-S1D-0.5		1314								X		X	X			
AOC3-S1D-2		1315								BND		X				
AOC3/AOC8-S2D-0.5		1316										X	X	X	X	
AOC3/AOC8-S2D-2		1318										X		X		
AOC3/AOC8-S1E-0.5		1327										X	X	X	X	
AOC3/AOC8-S1E-2		1329										X		X		
AOC3-S2E-0.5		1330										X	X		X	
AOC3-S2E-2 BND		1332										X				
AOC3-S3E-0.5		1350										X	X		X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Hold Samples for additional Analysis

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. | Cooler Temp. (°C): Obs'd: _____ Corr'd _____ Therm ID No. _____

Relinquished by:	Company: N&M	Date/Time: 10.27.21 1520	Received by: Leslie Tung	Company: N&M	Date/Time: 10/27 15:20
Relinquished by: Leslie Tung	Company: N&M	Date/Time: 10/28 1144	Received by:	Company: ETA-SJ	Date/Time: 10.28.21 1144
Relinquished by:	Company: ETA-SJ	Date/Time: 10.28.21 1250	Received in Laboratory by:	Company: ETA-SJ	Date/Time: 10/28/21 1250

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

eurofins Environment Testing America

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Nathan Diem	Date: 10.27.21	COC No:
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier:	6 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler:
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes.
~~NDS~~ AOC3-S3E-2	10.27.21	1352	G	S	1							X				
AOC3-S3D-0.5		1352										X	X		X	
AOC3-S3D-2		1354										X	~~ND~~ 5		~~ND~~	
AOC3-S4D-0.5		1358										X	X		X	
AOC3-S4D-2		1400										X				
AOC3-S4E-0.5		1405								X		X	X			
AOC3-S4E-2		1407										X				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.
Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp (°C): Obs'd._____ Corr'd:_____ Therm ID No.:_____			
Relinquished by:	Company: NEM	Date/Time: 10.27.21 1520	Received by: Leslie Jung	Company: NEM	Date/Time: 10/27 1520
Relinquished by: Leslie Jung	Company: NEM	Date/Time: 10/28 1144	Received by:	Company: EA-SS	Date/Time: 10/28/21 1144
Relinquished by:	Company: EA SS	Date/Time: 10/28/21 1250	Received in Laboratory by:	Company: EA SS	Date/Time: 10/28/21 1250

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

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12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247275.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/3/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8270C/3550B (MOD) Local Method	8270C_SIM/3546 (MOD) PAH SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S3B-0.5 (320-80943-1)	10/27/21	08:54 Pacific		Solid			X	X	X				1	
AOC3-S3B-2ND (320-80943-2)	10/27/21	09:00 Pacific		Solid				X					1	
AOC3-S2A-0.5ND (320-80943-3)	10/27/21	09:00 Pacific		Solid			X	X	X				1	
AOC3-S2A-2 (320-80943-4)	10/27/21	09:02 Pacific		Solid				X					1	
AOC3-S3A-0.5 (320-80943-5)	10/27/21	09:06 Pacific		Solid			X	X	X				1	
AOC3-S3A-2 (320-80943-6)	10/27/21	09:10 Pacific		Solid				X					1	
AOC3-S4A-0.5 (320-80943-7)	10/27/21	09:43 Pacific		Solid			X	X	X				1	
AOC3-S4A-2 (320-80943-8)	10/27/21	09:45 Pacific		Solid				X					1	
AOC3-S5A-0.5 (320-80943-9)	10/27/21	09:45 Pacific		Solid				X	X				1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] 1600	10/28/21	EMSL	Paul dcs	10/28/21 1600	DCS
2	[signature] 1600	Date/Time:	Company	Received by: Paul dcs	Date/Time: 1900	Company
3	Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 10-28-21 19:00	Company EETEAC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.5 & 2.2

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247275.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 2 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/3/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8270C/3550B (MOD) Local Method	8270C_SIM/3546 (MOD) PAH SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S5A-2 (320-80943-10)	10/27/21	09:50 Pacific		Solid				X					1	
AOC3-S4B-0.5 (320-80943-11)	10/27/21	09:56 Pacific		Solid			X	X	X				1	
AOC3-S4B-2 (320-80943-12)	10/27/21	09:58 Pacific		Solid				X					1	
AOC3/AOC8-S5B-0.5 (320-80943-13)	10/27/21	10:00 Pacific		Solid			X	X	X	X			1	
AOC3/AOC8-S5B-2 (320-80943-14)	10/27/21	10:02 Pacific		Solid				X		X			1	
AOC3-A6B-0.5 (320-80943-15)	10/27/21	10:23 Pacific		Solid			X	X	X				1	
AOC3-A6B-2 (320-80943-16)	10/27/21	10:26 Pacific		Solid				X					1	
AOC3-S6A-0.5 (320-80943-17)	10/27/21	10:28 Pacific		Solid			X	X	X				1	
AOC3-S6A-2 (320-80943-18)	10/27/21	10:30 Pacific		Solid				X					1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] 1600	10/28/21	TAS	Paul dcs	10/28/21 1600	DCS
2	[signature] 1900			Paul dcs	1900	
3				[signature]	10-28-21 19:00	EETSAC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247275.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 3 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/3/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8270C/3550B (MOD) Local Method	8270C_SIM/3546 (MOD) PAH SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S7A-0.5 (320-80943-19)	10/27/21	10:35 Pacific		Solid			X	X	X				1	
AOC3-S7A-2 (320-80943-20)	10/27/21	10:38 Pacific		Solid				X					1	
AOC3-S7B-0.5 (320-80943-21)	10/27/21	10:43 Pacific		Solid			X	X	X				1	
AOC3-S7B-2 (320-80943-22)	10/27/21	10:47 Pacific		Solid				X					1	
AOC3/AOC10-S8A-0.5 (320-80943-23)	10/27/21	11:01 Pacific		Solid				X	X		X	X	1	
AOC3/AOC10-S8A-2 (320-80943-24)	10/27/21	11:03 Pacific		Solid				X			X	X	1	
AOC3/AOC10-S8B-0.5 (320-80943-25)	10/27/21	11:27 Pacific		Solid				X	X		X	X	1	
AOC3/AOC10-S8B-2 (320-80943-26)	10/27/21	11:29 Pacific		Solid				X			X	X	1	
AOC3/AOC10-S9C-0.5 (320-80943-27)	10/27/21	11:41 Pacific		Solid				X	X		X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] 1600	10/28/21	TestAmerica	Paul dcs	10/28/21 1600	DCS
2	[signature] 1900		Company	Paul dcs	1900	Company
3	Relinquished by:	Date/Time:	Company	Received by: [signature]	10-28-21 19:00	EETSAC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247275.4
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 4 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/3/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8270C/3550B (MOD) Local Method	8270C_SIM/3546 (MOD) PAH SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3/AOC10-S9C-0.5DUP (320-80943-28)	10/27/21	11:41 Pacific		Solid				X	X		X	X	1	
AOC3/AOC10-S9C-2 (320-80943-29)	10/27/21	11:44 Pacific		Solid				X			X	X	1	
AOC3-S8D-0.5 (320-80943-30)	10/27/21	11:45 Pacific		Solid			X	X	X				1	
AOC3-S8D-2 (320-80943-31)	10/27/21	11:50 Pacific		Solid				X					1	
AOC3/AOC8-S8C-0.5 (320-80943-32)	10/27/21	11:55 Pacific		Solid			X	X	X	X			1	
AOC3/AOC8-S8C-2 (320-80943-33)	10/27/21	12:00 Pacific		Solid				X		X			1	
AOC3-S7C-0.5 (320-80943-34)	10/27/21	11:59 Pacific		Solid			X	X	X				1	
AOC3-S7C-2 (320-80943-35)	10/27/21	12:01 Pacific		Solid				X					1	
AOC3-S6C-0.5 (320-80943-36)	10/27/21	12:05 Pacific		Solid			X	X	X				1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] 1600	10/28/21	FEDEX	dcs Paul	10/28/21 1600	DCS
2	1900			dcs Paul	1900	
3				[signature]	10-28-21/19:00	EETSAC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247275.5
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 5 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/3/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8270C/3550B (MOD) Local Method	8270C_SIM/3546 (MOD) PAH SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S6C-2 (320-80943-37)	10/27/21	12:07 Pacific		Solid				X					1	
AOC3-S7D-0.5 (320-80943-38)	10/27/21	12:25 Pacific		Solid				X	X				1	
AOC3-S7D-2 (320-80943-39)	10/27/21	12:30 Pacific		Solid				X					1	
AOC3-S5C-0.5 (320-80943-40)	10/27/21	12:30 Pacific		Solid			X	X	X				1	
AOC3-S5C-2 (320-80943-41)	10/27/21	12:35 Pacific		Solid				X					1	
AOC3-S4C-0.5 (320-80943-42)	10/27/21	12:35 Pacific		Solid			X	X	X				1	
AOC3-S4C-2 (320-80943-43)	10/27/21	12:40 Pacific		Solid				X					1	
AOC3-S3C-0.5 (320-80943-44)	10/27/21	12:50 Pacific		Solid			X	X	X				1	
AOC3-S3C-2 (320-80943-45)	10/27/21	12:55 Pacific		Solid			X	X	X				1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: 1600	10/28/21	EST	Paul dcs	10/28/21 1600	DCS
Relinquished by: 1900	Date/Time:	Company	Received by: Paul dcs	Date/Time: 1900	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10-28-21 A:00	Company EETSAC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247275.6
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 6 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/3/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8270C/3550B (MOD) Local Method	8270C_SIM/3546 (MOD) PAH SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S1D-0.5 (320-80943-46)	10/27/21	13:14 Pacific		Solid				X	X				1	
AOC3-S1D-2 (320-80943-47)	10/27/21	13:15 Pacific		Solid				X					1	
AOC3/AOC8-S2D-0.5 (320-80943-48)	10/27/21	13:16 Pacific		Solid			X	X	X	X			1	
AOC3/AOC8-S2D-2 (320-80943-49)	10/27/21	13:18 Pacific		Solid				X		X			1	
AOC3/AOC8-S1E-0.5 (320-80943-50)	10/27/21	13:27 Pacific		Solid			X	X	X	X			1	
AOC3/AOC8-S1E-2 (320-80943-51)	10/27/21	13:29 Pacific		Solid				X		X			1	
AOC3-S2E-0.5 (320-80943-52)	10/27/21	13:30 Pacific		Solid			X	X	X				1	
AOC3-S2E-2ND (320-80943-53)	10/27/21	13:32 Pacific		Solid				X					1	
AOC3-S3E-0.5 (320-80943-54)	10/27/21	13:50 Pacific		Solid			X	X	X				1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] 1600	10/28/21	EETSAC	Paul dcs	10/28/21 1600	DCS
2	[signature] 1900			Paul dcs	1900	
3				[signature]	10-28-21 19:00	EETSAC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247275.7
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 7 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/3/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8270C/3550B (MOD) Local Method	8270C_SIM/3546 (MOD) PAH SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S3E-2 (320-80943-55)	10/27/21	13:52 Pacific		Solid				X					1	
AOC3-S3D-0.5 (320-80943-56)	10/27/21	13:52 Pacific		Solid			X	X	X				1	
AOC3-S3D-2 (320-80943-57)	10/27/21	13:54 Pacific		Solid				X					1	
AOC3-S4D-0.5 (320-80943-58)	10/27/21	13:58 Pacific		Solid			X	X	X				1	
AOC3-S4D-2 (320-80943-59)	10/27/21	14:00 Pacific		Solid				X					1	
AOC3-S4E-0.5 (320-80943-60)	10/27/21	14:05 Pacific		Solid				X	X				1	
AOC3-S4E-2 (320-80943-61)	10/27/21	14:07 Pacific		Solid				X					1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: 1600	12/28/21	[illegible]	Paul dcs	10/28/21 1600	DCS
Relinquished by: 1900	Date/Time:	Company	Received by: Paul dcs	Date/Time: 1900	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10-28-21 / 19:00	Company EETSAC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

TestAmerica CUSTO SEAL

Date 10/28/21 Signature

/IRC

NG

320-80943 Waybill

ORIGIN ID:LVKA (928) 484-1919
SAMPLE RECEIVING
EUROFINS TLST AMERICA
780 MONTAGUE EXPRESSWAY
SUITE 602
SAN JOSE, CA 95131
UNITED STATES US

SHIP DATE: 28OCT21
ACTWGT: 40.90 LB
CAD: 0795504/CAFE3507
DIMS: 28x16x15 IN

BILL SENDER

TO SAMPLE RECEIVING
EUROFINS CALSCIENCE, LLC
7440 LINCOLN WAY

GARDEN GROVE CA 92841

(714) 895-5494 REF:

INV:
PO:
DEPT

RT 399 ST 7 5 10:30 C 7519 10 29

FedEx Express

J211020121101uv

FRI - 29 OCT 10:30A
PRIORITY OVERNIGHT

TRK# 0201 5047 2941 7519

92 APVA

92841
CA-US SNA

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No.: 320-247274 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 2
Company: Eurofins Calscience LLC		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 7440 Lincoln Way, ,	Due Date Requested: 11/10/2021			
City: Garden Grove	TAT Requested (days):			
State, Zip: CA, 92841				
Phone: 714-895-5494(Tel) 714-894-7501(Fax)	PO #:			
Email	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Preservation Codes:

A - HCL	M Hexane
B - NaOH	N None
C - Zn Acetate	O AsNaO2
D - Nitric Acid	P Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S H2SO4
H - Ascorbic Acid	T TSP Dodecahydrate
I - Ice	U Acetone
J - DI Water	V MCAA
K - EDTA	W - pH 4-5
L - EDA	Z other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17, no Mercury	7471A/7471A_Prep Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
AOC3-S5A-0 5 (320-80943-9)	10/27/21	09 45 Pacific		Solid			X	X	1	
AOC3/AOC10-S8A-0 5 (320-80943-23)	10/27/21	11 01 Pacific		Solid			X	X	1	
AOC3/AOC10-S8A-2 (320-80943-24)	10/27/21	11 03 Pacific		Solid			X	X	1	
AOC3/AOC10-S8B-0 5 (320-80943-25)	10/27/21	11:27 Pacific		Solid			X	X	1	
AOC3/AOC10-S8B-2 (320-80943-26)	10/27/21	11:29 Pacific		Solid			X	X	1	
AOC3/AOC10-S9C-0 5 (320-80943-27)	10/27/21	11 41 Pacific		Solid			X	X	1	
AOC3/AOC10-S9C-0 5DUP (320-80943-28)	10/27/21	11 41 Pacific		Solid			X	X	1	
AOC3/AOC10-S9C-2 (320-80943-29)	10/27/21	11 44 Pacific		Solid			X	X	1	
AOC3-S7D-0 5 (320-80943-38)	10/27/21	12 25 Pacific		Solid			X	X	1	

Note. Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	10/28/21 1600	EUAS		10/29/21 0900	BCL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No: N/A	Cooler Temperature(s) °C and Other Remarks: 1.6/2.5 CF

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No. 320-247274 2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin. California	Page: Page 2 of 2
Company: Eurofins Calscience LLC		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 7440 Lincoln Way, ,	Due Date Requested: 11/10/2021			
City: Garden Grove	TAT Requested (days):			
State, Zip: CA, 92841				
Phone: 714-895-5494(Tel) 714-894-7501(Fax)	PO #:			
Email	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A - HCL	M Hexane
B - NaOH	N - None
C - Zn Acetate	O AsNaO2
D - Nitric Acid	P Na2O4S
E - NaHSO4	Q Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V MCAA
K - EDTA	W - pH 4-5
L EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17, no Mercury	7471A/7471A_Prep Mercury	Total Number of containers	Special Instructions/Note.
			Preservation Code:							
AOC3-S7D-2 (320-80943-39)	10/27/21	12:30 Pacific		Solid			X	X	1	
AOC3-S1D-0 5 (320-80943-46)	10/27/21	13.14 Pacific		Solid			X	X	1	
AOC3-S4E-0 5 (320-80943-60)	10/27/21	14 05 Pacific		Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/28/21 1600	ESS		10/29/21 1000	ECG6
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks.
		1.8/2.5 IR#5

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80943-1

Login Number: 80943
List Number: 1
Creator: Garcia, Hilario A

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80943-1

Login Number: 80943
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5 & 2.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80943-1

Login Number: 80943
List Number: 3
Creator: Ortiz-Luis, Michael

List Source: Eurofins Calscience LLC
List Creation: 10/29/21 02:15 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-80943-2
Client Project/Site: Cole School PEA
Revision: 1

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/15/2021 9:27:20 AM

Justinn Gonzales, Project Manager I
(925)484-1919
Justinn.Gonzales@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Qualifiers

Dioxin

Qualifier	Qualifier Description
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
q	The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 320-80943-2

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-80943-2

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 11/18/2021. The report (revision 1) is being revised due to: Report samples to MDL or EDL for 8290A per client request. Total TEQ also added.

Receipt
The samples were received on 10/28/2021 12:50 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.4º C and 2.5º C.

Dioxin
Method 8290A: The Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit: AOC3/AOC8-S2D-0.5 (320-80943-48). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample.

Method 8290A: The bracketing continuing calibration verification (CCV) associated with batch 320-541728 has analytes with percent difference values that are between the method criteria of 30% to 35% deviation from the initial calibration curve. Per method guidelines, an average relative response factor (RRF) is calculated from the bracketing CCV and is used to quantitate the Isotope Dilution Analyte (IDA) recovery in the associated samples.

Method 8290A: The Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit: AOC3/AOC8-S2D-0.5 (320-80943-48). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Dioxin Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Client Sample ID: AOC3/AOC8-S5B-0.5 — Lab Sample ID: 320-80943-13

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDF	0.61	J q	0.96	0.22	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.49	J q B	4.8	0.15	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	0.38	J q	4.8	0.15	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.65	J q	4.8	0.24	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.51	J q	4.8	0.23	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.36	J	4.8	0.24	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	1.5	J B	4.8	0.10	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.87	J B	4.8	0.18	pg/g	1		8290A	Total/NA
OCDD	9.0	J B	9.6	0.11	pg/g	1		8290A	Total/NA
OCDF	1.0	J q B	9.6	0.24	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S5B-2 — Lab Sample ID: 320-80943-14

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDF	0.24	J q	0.95	0.074	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.37	J q B	4.7	0.10	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	0.35	J q B	4.7	0.047	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.21	J q B	4.7	0.040	pg/g	1		8290A	Total/NA
1,2,3,4,7,8,9-HpCDF	0.13	J q B	4.7	0.051	pg/g	1		8290A	Total/NA
OCDD	2.4	J B	9.5	0.079	pg/g	1		8290A	Total/NA
OCDF	0.45	J B	9.5	0.082	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S8C-0.5 — Lab Sample ID: 320-80943-32

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,4,7,8-PeCDF	1.1	J q	4.9	0.61	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	1.2	J q B	4.9	0.56	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	6.0	B	4.9	0.32	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	2.1	J q B	4.9	0.32	pg/g	1		8290A	Total/NA
OCDD	17	B	9.8	0.58	pg/g	1		8290A	Total/NA
OCDF	2.4	J B	9.8	0.66	pg/g	1		8290A	Total/NA
2,3,7,8-TCDF - RA	1.3		0.98	0.22	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S8C-2 — Lab Sample ID: 320-80943-33

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDF	0.16	J	0.95	0.057	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.28	J B	4.7	0.067	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	0.12	J q B	4.7	0.058	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDF	0.14	J	4.7	0.13	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	0.30	J q B	4.7	0.028	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.24	J B	4.7	0.036	pg/g	1		8290A	Total/NA
1,2,3,4,7,8,9-HpCDF	0.12	J B	4.7	0.045	pg/g	1		8290A	Total/NA
OCDD	1.6	J B	9.5	0.072	pg/g	1		8290A	Total/NA
OCDF	0.39	J B	9.5	0.076	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S2D-0.5 — Lab Sample ID: 320-80943-48

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDD	1.3	q	0.98	0.42	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDF	0.65	J	4.9	0.29	pg/g	1		8290A	Total/NA
2,3,4,7,8-PeCDF	0.87	J	4.9	0.29	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.71	J q B	4.9	0.16	pg/g	1		8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AOC3/AOC8-S2D-0.5 (Continued) — Lab Sample ID: 320-80943-48

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,6,7,8-HxCDD	0.62	J q	4.9	0.15	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	0.72	J B	4.9	0.14	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.67	J	4.9	0.26	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.74	J q	4.9	0.25	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDF	0.62	J	4.9	0.26	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.74	J	4.9	0.25	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	3.8	J B	4.9	0.078	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	1.4	J B	4.9	0.082	pg/g	1		8290A	Total/NA
1,2,3,4,7,8,9-HpCDF	0.52	J q B	4.9	0.10	pg/g	1		8290A	Total/NA
OCDD	19	B	9.8	0.12	pg/g	1		8290A	Total/NA
OCDF	2.4	J B	9.8	0.11	pg/g	1		8290A	Total/NA
2,3,7,8-TCDF - RA	1.0		0.98	0.56	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S2D-2 — Lab Sample ID: 320-80943-49

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDF	0.50	J	0.96	0.065	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDF	0.31	J	4.8	0.074	pg/g	1		8290A	Total/NA
2,3,4,7,8-PeCDF	0.13	J q	4.8	0.075	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.25	J q B	4.8	0.084	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.15	J q	4.8	0.11	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.20	J	4.8	0.10	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDF	0.13	J	4.8	0.11	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.16	J	4.8	0.10	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	0.51	J B	4.8	0.045	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.41	J B	4.8	0.043	pg/g	1		8290A	Total/NA
1,2,3,4,7,8,9-HpCDF	0.18	J q B	4.8	0.054	pg/g	1		8290A	Total/NA
OCDD	2.4	J B	9.6	0.075	pg/g	1		8290A	Total/NA
OCDF	0.93	J B	9.6	0.099	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S1E-0.5 — Lab Sample ID: 320-80943-50

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDD	0.32	J q	1.0	0.090	pg/g	1		8290A	Total/NA
2,3,7,8-TCDF	0.30	J	1.0	0.058	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.37	J B	5.0	0.10	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	0.29	J	5.0	0.098	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	0.33	J B	5.0	0.087	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	2.2	J B	5.0	0.078	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.68	J B	5.0	0.077	pg/g	1		8290A	Total/NA
OCDD	22	B	10	0.14	pg/g	1		8290A	Total/NA
OCDF	1.7	J q B	10	0.12	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S1E-2 — Lab Sample ID: 320-80943-51

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDF	0.23	J	0.96	0.049	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.29	J q B	4.8	0.097	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	0.42	J B	4.8	0.065	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.20	J q B	4.8	0.045	pg/g	1		8290A	Total/NA
OCDD	2.5	J B	9.6	0.099	pg/g	1		8290A	Total/NA
OCDF	0.59	J B	9.6	0.099	pg/g	1		8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Client Sample ID: AOC3/AOC8-S5B-0.5
Date Collected: 10/27/21 10:00
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-13
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.96	0.35	pg/g		11/01/21 10:14	11/10/21 19:44	1
2,3,7,8-TCDF	**0.61**	**J q**	0.96	0.22	pg/g		11/01/21 10:14	11/10/21 19:44	1
1,2,3,7,8-PeCDD	ND		4.8	0.30	pg/g		11/01/21 10:14	11/10/21 19:44	1
1,2,3,7,8-PeCDF	ND		4.8	0.21	pg/g		11/01/21 10:14	11/10/21 19:44	1
2,3,4,7,8-PeCDF	ND		4.8	0.21	pg/g		11/01/21 10:14	11/10/21 19:44	1
1,2,3,4,7,8-HxCDD	**0.49**	**J q B**	4.8	0.15	pg/g		11/01/21 10:14	11/10/21 19:44	1
1,2,3,6,7,8-HxCDD	**0.38**	**J q**	4.8	0.15	pg/g		11/01/21 10:14	11/10/21 19:44	1
1,2,3,7,8,9-HxCDD	ND		4.8	0.13	pg/g		11/01/21 10:14	11/10/21 19:44	1
1,2,3,4,7,8-HxCDF	**0.65**	**J q**	4.8	0.24	pg/g		11/01/21 10:14	11/10/21 19:44	1
1,2,3,6,7,8-HxCDF	**0.51**	**J q**	4.8	0.23	pg/g		11/01/21 10:14	11/10/21 19:44	1
1,2,3,7,8,9-HxCDF	ND		4.8	0.25	pg/g		11/01/21 10:14	11/10/21 19:44	1
2,3,4,6,7,8-HxCDF	**0.36**	**J**	4.8	0.24	pg/g		11/01/21 10:14	11/10/21 19:44	1
1,2,3,4,6,7,8-HpCDD	**1.5**	**J B**	4.8	0.10	pg/g		11/01/21 10:14	11/10/21 19:44	1
1,2,3,4,6,7,8-HpCDF	**0.87**	**J B**	4.8	0.18	pg/g		11/01/21 10:14	11/10/21 19:44	1
1,2,3,4,7,8,9-HpCDF	ND		4.8	0.23	pg/g		11/01/21 10:14	11/10/21 19:44	1
OCDD	**9.0**	**J B**	9.6	0.11	pg/g		11/01/21 10:14	11/10/21 19:44	1
OCDF	**1.0**	**J q B**	9.6	0.24	pg/g		11/01/21 10:14	11/10/21 19:44	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*57*		*40 - 135*	*11/01/21 10:14*	*11/10/21 19:44*	*1*
13C-2,3,7,8-TCDF	*59*		*40 - 135*	*11/01/21 10:14*	*11/10/21 19:44*	*1*
13C-1,2,3,7,8-PeCDD	*63*		*40 - 135*	*11/01/21 10:14*	*11/10/21 19:44*	*1*
13C-1,2,3,7,8-PeCDF	*64*		*40 - 135*	*11/01/21 10:14*	*11/10/21 19:44*	*1*
13C-1,2,3,6,7,8-HxCDD	*54*		*40 - 135*	*11/01/21 10:14*	*11/10/21 19:44*	*1*
13C-1,2,3,4,7,8-HxCDF	*61*		*40 - 135*	*11/01/21 10:14*	*11/10/21 19:44*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*74*		*40 - 135*	*11/01/21 10:14*	*11/10/21 19:44*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*68*		*40 - 135*	*11/01/21 10:14*	*11/10/21 19:44*	*1*
13C-OCDD	*69*		*40 - 135*	*11/01/21 10:14*	*11/10/21 19:44*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Client Sample ID: AOC3/AOC8-S5B-2
Date Collected: 10/27/21 10:02
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-14
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.95	0.15	pg/g		11/01/21 10:14	11/11/21 18:53	1
2,3,7,8-TCDF	**0.24**	**J q**	0.95	0.074	pg/g		11/01/21 10:14	11/11/21 18:53	1
1,2,3,7,8-PeCDD	ND		4.7	0.14	pg/g		11/01/21 10:14	11/11/21 18:53	1
1,2,3,7,8-PeCDF	ND		4.7	0.097	pg/g		11/01/21 10:14	11/11/21 18:53	1
2,3,4,7,8-PeCDF	ND		4.7	0.099	pg/g		11/01/21 10:14	11/11/21 18:53	1
1,2,3,4,7,8-HxCDD	**0.37**	**J q B**	4.7	0.10	pg/g		11/01/21 10:14	11/11/21 18:53	1
1,2,3,6,7,8-HxCDD	ND		4.7	0.10	pg/g		11/01/21 10:14	11/11/21 18:53	1
1,2,3,7,8,9-HxCDD	ND		4.7	0.089	pg/g		11/01/21 10:14	11/11/21 18:53	1
1,2,3,4,7,8-HxCDF	ND		4.7	0.12	pg/g		11/01/21 10:14	11/11/21 18:53	1
1,2,3,6,7,8-HxCDF	ND		4.7	0.11	pg/g		11/01/21 10:14	11/11/21 18:53	1
1,2,3,7,8,9-HxCDF	ND		4.7	0.12	pg/g		11/01/21 10:14	11/11/21 18:53	1
2,3,4,6,7,8-HxCDF	ND		4.7	0.11	pg/g		11/01/21 10:14	11/11/21 18:53	1
1,2,3,4,6,7,8-HpCDD	**0.35**	**J q B**	4.7	0.047	pg/g		11/01/21 10:14	11/11/21 18:53	1
1,2,3,4,6,7,8-HpCDF	**0.21**	**J q B**	4.7	0.040	pg/g		11/01/21 10:14	11/11/21 18:53	1
1,2,3,4,7,8,9-HpCDF	**0.13**	**J q B**	4.7	0.051	pg/g		11/01/21 10:14	11/11/21 18:53	1
OCDD	**2.4**	**J B**	9.5	0.079	pg/g		11/01/21 10:14	11/11/21 18:53	1
OCDF	**0.45**	**J B**	9.5	0.082	pg/g		11/01/21 10:14	11/11/21 18:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*60*		*40 - 135*	*11/01/21 10:14*	*11/11/21 18:53*	*1*
13C-2,3,7,8-TCDF	*62*		*40 - 135*	*11/01/21 10:14*	*11/11/21 18:53*	*1*
13C-1,2,3,7,8-PeCDD	*65*		*40 - 135*	*11/01/21 10:14*	*11/11/21 18:53*	*1*
13C-1,2,3,7,8-PeCDF	*67*		*40 - 135*	*11/01/21 10:14*	*11/11/21 18:53*	*1*
13C-1,2,3,6,7,8-HxCDD	*65*		*40 - 135*	*11/01/21 10:14*	*11/11/21 18:53*	*1*
13C-1,2,3,4,7,8-HxCDF	*66*		*40 - 135*	*11/01/21 10:14*	*11/11/21 18:53*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*79*		*40 - 135*	*11/01/21 10:14*	*11/11/21 18:53*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*72*		*40 - 135*	*11/01/21 10:14*	*11/11/21 18:53*	*1*
13C-OCDD	*77*		*40 - 135*	*11/01/21 10:14*	*11/11/21 18:53*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Client Sample ID: AOC3/AOC8-S8C-0.5

Date Collected: 10/27/21 11:55
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-32

Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.98	0.97	pg/g		11/01/21 10:14	11/11/21 19:38	1
1,2,3,7,8-PeCDD	ND		4.9	0.78	pg/g		11/01/21 10:14	11/11/21 19:38	1
1,2,3,7,8-PeCDF	ND		4.9	0.60	pg/g		11/01/21 10:14	11/11/21 19:38	1
2,3,4,7,8-PeCDF	**1.1**	**J q**	4.9	0.61	pg/g		11/01/21 10:14	11/11/21 19:38	1
1,2,3,4,7,8-HxCDD	ND		4.9	0.65	pg/g		11/01/21 10:14	11/11/21 19:38	1
1,2,3,6,7,8-HxCDD	ND		4.9	0.63	pg/g		11/01/21 10:14	11/11/21 19:38	1
1,2,3,7,8,9-HxCDD	**1.2**	**J q B**	4.9	0.56	pg/g		11/01/21 10:14	11/11/21 19:38	1
1,2,3,4,7,8-HxCDF	ND		4.9	0.90	pg/g		11/01/21 10:14	11/11/21 19:38	1
1,2,3,6,7,8-HxCDF	ND		4.9	0.87	pg/g		11/01/21 10:14	11/11/21 19:38	1
1,2,3,7,8,9-HxCDF	ND		4.9	0.93	pg/g		11/01/21 10:14	11/11/21 19:38	1
2,3,4,6,7,8-HxCDF	ND		4.9	0.88	pg/g		11/01/21 10:14	11/11/21 19:38	1
1,2,3,4,6,7,8-HpCDD	**6.0**	**B**	4.9	0.32	pg/g		11/01/21 10:14	11/11/21 19:38	1
1,2,3,4,6,7,8-HpCDF	**2.1**	**J q B**	4.9	0.32	pg/g		11/01/21 10:14	11/11/21 19:38	1
1,2,3,4,7,8,9-HpCDF	ND		4.9	0.40	pg/g		11/01/21 10:14	11/11/21 19:38	1
OCDD	**17**	**B**	9.8	0.58	pg/g		11/01/21 10:14	11/11/21 19:38	1
OCDF	**2.4**	**J B**	9.8	0.66	pg/g		11/01/21 10:14	11/11/21 19:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*70*		*40 - 135*	*11/01/21 10:14*	*11/11/21 19:38*	*1*
13C-1,2,3,7,8-PeCDD	*71*		*40 - 135*	*11/01/21 10:14*	*11/11/21 19:38*	*1*
13C-1,2,3,7,8-PeCDF	*75*		*40 - 135*	*11/01/21 10:14*	*11/11/21 19:38*	*1*
13C-1,2,3,6,7,8-HxCDD	*63*		*40 - 135*	*11/01/21 10:14*	*11/11/21 19:38*	*1*
13C-1,2,3,4,7,8-HxCDF	*66*		*40 - 135*	*11/01/21 10:14*	*11/11/21 19:38*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*71*		*40 - 135*	*11/01/21 10:14*	*11/11/21 19:38*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*68*		*40 - 135*	*11/01/21 10:14*	*11/11/21 19:38*	*1*
13C-OCDD	*66*		*40 - 135*	*11/01/21 10:14*	*11/11/21 19:38*	*1*

Method: 8290A - Dioxins and Furans (HRGC/HRMS) - RA

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDF	**1.3**		0.98	0.22	pg/g		11/01/21 10:14	11/18/21 10:56	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDF	*73*		*40 - 135*	*11/01/21 10:14*	*11/18/21 10:56*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Client Sample ID: AOC3/AOC8-S8C-2
Date Collected: 10/27/21 12:00
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-33
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.95	0.11	pg/g		11/01/21 10:14	11/11/21 20:23	1
2,3,7,8-TCDF	**0.16**	**J**	0.95	0.057	pg/g		11/01/21 10:14	11/11/21 20:23	1
1,2,3,7,8-PeCDD	ND		4.7	0.087	pg/g		11/01/21 10:14	11/11/21 20:23	1
1,2,3,7,8-PeCDF	ND		4.7	0.060	pg/g		11/01/21 10:14	11/11/21 20:23	1
2,3,4,7,8-PeCDF	ND		4.7	0.061	pg/g		11/01/21 10:14	11/11/21 20:23	1
1,2,3,4,7,8-HxCDD	**0.28**	**J B**	4.7	0.067	pg/g		11/01/21 10:14	11/11/21 20:23	1
1,2,3,6,7,8-HxCDD	ND		4.7	0.065	pg/g		11/01/21 10:14	11/11/21 20:23	1
1,2,3,7,8,9-HxCDD	**0.12**	**J q B**	4.7	0.058	pg/g		11/01/21 10:14	11/11/21 20:23	1
1,2,3,4,7,8-HxCDF	ND		4.7	0.12	pg/g		11/01/21 10:14	11/11/21 20:23	1
1,2,3,6,7,8-HxCDF	ND		4.7	0.12	pg/g		11/01/21 10:14	11/11/21 20:23	1
1,2,3,7,8,9-HxCDF	**0.14**	**J**	4.7	0.13	pg/g		11/01/21 10:14	11/11/21 20:23	1
2,3,4,6,7,8-HxCDF	ND		4.7	0.12	pg/g		11/01/21 10:14	11/11/21 20:23	1
1,2,3,4,6,7,8-HpCDD	**0.30**	**J q B**	4.7	0.028	pg/g		11/01/21 10:14	11/11/21 20:23	1
1,2,3,4,6,7,8-HpCDF	**0.24**	**J B**	4.7	0.036	pg/g		11/01/21 10:14	11/11/21 20:23	1
1,2,3,4,7,8,9-HpCDF	**0.12**	**J B**	4.7	0.045	pg/g		11/01/21 10:14	11/11/21 20:23	1
OCDD	**1.6**	**J B**	9.5	0.072	pg/g		11/01/21 10:14	11/11/21 20:23	1
OCDF	**0.39**	**J B**	9.5	0.076	pg/g		11/01/21 10:14	11/11/21 20:23	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*60*		*40 - 135*	*11/01/21 10:14*	*11/11/21 20:23*	*1*
13C-2,3,7,8-TCDF	*64*		*40 - 135*	*11/01/21 10:14*	*11/11/21 20:23*	*1*
13C-1,2,3,7,8-PeCDD	*66*		*40 - 135*	*11/01/21 10:14*	*11/11/21 20:23*	*1*
13C-1,2,3,7,8-PeCDF	*67*		*40 - 135*	*11/01/21 10:14*	*11/11/21 20:23*	*1*
13C-1,2,3,6,7,8-HxCDD	*64*		*40 - 135*	*11/01/21 10:14*	*11/11/21 20:23*	*1*
13C-1,2,3,4,7,8-HxCDF	*67*		*40 - 135*	*11/01/21 10:14*	*11/11/21 20:23*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*78*		*40 - 135*	*11/01/21 10:14*	*11/11/21 20:23*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*70*		*40 - 135*	*11/01/21 10:14*	*11/11/21 20:23*	*1*
13C-OCDD	*74*		*40 - 135*	*11/01/21 10:14*	*11/11/21 20:23*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Client Sample ID: AOC3/AOC8-S2D-0.5

Date Collected: 10/27/21 13:16
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-48

Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	1.3	q	0.98	0.42	pg/g		11/01/21 10:14	11/11/21 21:08	1
1,2,3,7,8-PeCDD	ND		4.9	0.30	pg/g		11/01/21 10:14	11/11/21 21:08	1
1,2,3,7,8-PeCDF	0.65	J	4.9	0.29	pg/g		11/01/21 10:14	11/11/21 21:08	1
2,3,4,7,8-PeCDF	0.87	J	4.9	0.29	pg/g		11/01/21 10:14	11/11/21 21:08	1
1,2,3,4,7,8-HxCDD	0.71	J q B	4.9	0.16	pg/g		11/01/21 10:14	11/11/21 21:08	1
1,2,3,6,7,8-HxCDD	0.62	J q	4.9	0.15	pg/g		11/01/21 10:14	11/11/21 21:08	1
1,2,3,7,8,9-HxCDD	0.72	J B	4.9	0.14	pg/g		11/01/21 10:14	11/11/21 21:08	1
1,2,3,4,7,8-HxCDF	0.67	J	4.9	0.26	pg/g		11/01/21 10:14	11/11/21 21:08	1
1,2,3,6,7,8-HxCDF	0.74	J q	4.9	0.25	pg/g		11/01/21 10:14	11/11/21 21:08	1
1,2,3,7,8,9-HxCDF	0.62	J	4.9	0.26	pg/g		11/01/21 10:14	11/11/21 21:08	1
2,3,4,6,7,8-HxCDF	0.74	J	4.9	0.25	pg/g		11/01/21 10:14	11/11/21 21:08	1
1,2,3,4,6,7,8-HpCDD	3.8	J B	4.9	0.078	pg/g		11/01/21 10:14	11/11/21 21:08	1
1,2,3,4,6,7,8-HpCDF	1.4	J B	4.9	0.082	pg/g		11/01/21 10:14	11/11/21 21:08	1
1,2,3,4,7,8,9-HpCDF	0.52	J q B	4.9	0.10	pg/g		11/01/21 10:14	11/11/21 21:08	1
OCDD	19	B	9.8	0.12	pg/g		11/01/21 10:14	11/11/21 21:08	1
OCDF	2.4	J B	9.8	0.11	pg/g		11/01/21 10:14	11/11/21 21:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*18*	*5-	*40 - 135*	*11/01/21 10:14*	*11/11/21 21:08*	*1*
13C-1,2,3,7,8-PeCDD	*31*	*5-	*40 - 135*	*11/01/21 10:14*	*11/11/21 21:08*	*1*
13C-1,2,3,7,8-PeCDF	*29*	*5-	*40 - 135*	*11/01/21 10:14*	*11/11/21 21:08*	*1*
13C-1,2,3,6,7,8-HxCDD	*46*		*40 - 135*	*11/01/21 10:14*	*11/11/21 21:08*	*1*
13C-1,2,3,4,7,8-HxCDF	*43*		*40 - 135*	*11/01/21 10:14*	*11/11/21 21:08*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*68*		*40 - 135*	*11/01/21 10:14*	*11/11/21 21:08*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*58*		*40 - 135*	*11/01/21 10:14*	*11/11/21 21:08*	*1*
13C-OCDD	*68*		*40 - 135*	*11/01/21 10:14*	*11/11/21 21:08*	*1*

Method: 8290A - Dioxins and Furans (HRGC/HRMS) - RA

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDF	1.0		0.98	0.56	pg/g		11/01/21 10:14	11/18/21 11:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDF	*23*	*5-	*40 - 135*	*11/01/21 10:14*	*11/18/21 11:35*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Client Sample ID: AOC3/AOC8-S2D-2
Date Collected: 10/27/21 13:18
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-49
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.96	0.12	pg/g		11/01/21 10:14	11/11/21 21:53	1
2,3,7,8-TCDF	**0.50**	**J**	0.96	0.065	pg/g		11/01/21 10:14	11/11/21 21:53	1
1,2,3,7,8-PeCDD	ND		4.8	0.12	pg/g		11/01/21 10:14	11/11/21 21:53	1
1,2,3,7,8-PeCDF	**0.31**	**J**	4.8	0.074	pg/g		11/01/21 10:14	11/11/21 21:53	1
2,3,4,7,8-PeCDF	**0.13**	**J q**	4.8	0.075	pg/g		11/01/21 10:14	11/11/21 21:53	1
1,2,3,4,7,8-HxCDD	**0.25**	**J q B**	4.8	0.084	pg/g		11/01/21 10:14	11/11/21 21:53	1
1,2,3,6,7,8-HxCDD	ND		4.8	0.080	pg/g		11/01/21 10:14	11/11/21 21:53	1
1,2,3,7,8,9-HxCDD	ND		4.8	0.072	pg/g		11/01/21 10:14	11/11/21 21:53	1
1,2,3,4,7,8-HxCDF	**0.15**	**J q**	4.8	0.11	pg/g		11/01/21 10:14	11/11/21 21:53	1
1,2,3,6,7,8-HxCDF	**0.20**	**J**	4.8	0.10	pg/g		11/01/21 10:14	11/11/21 21:53	1
1,2,3,7,8,9-HxCDF	**0.13**	**J**	4.8	0.11	pg/g		11/01/21 10:14	11/11/21 21:53	1
2,3,4,6,7,8-HxCDF	**0.16**	**J**	4.8	0.10	pg/g		11/01/21 10:14	11/11/21 21:53	1
1,2,3,4,6,7,8-HpCDD	**0.51**	**J B**	4.8	0.045	pg/g		11/01/21 10:14	11/11/21 21:53	1
1,2,3,4,6,7,8-HpCDF	**0.41**	**J B**	4.8	0.043	pg/g		11/01/21 10:14	11/11/21 21:53	1
1,2,3,4,7,8,9-HpCDF	**0.18**	**J q B**	4.8	0.054	pg/g		11/01/21 10:14	11/11/21 21:53	1
OCDD	**2.4**	**J B**	9.6	0.075	pg/g		11/01/21 10:14	11/11/21 21:53	1
OCDF	**0.93**	**J B**	9.6	0.099	pg/g		11/01/21 10:14	11/11/21 21:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*62*		*40 - 135*	*11/01/21 10:14*	*11/11/21 21:53*	*1*
13C-2,3,7,8-TCDF	*64*		*40 - 135*	*11/01/21 10:14*	*11/11/21 21:53*	*1*
13C-1,2,3,7,8-PeCDD	*65*		*40 - 135*	*11/01/21 10:14*	*11/11/21 21:53*	*1*
13C-1,2,3,7,8-PeCDF	*67*		*40 - 135*	*11/01/21 10:14*	*11/11/21 21:53*	*1*
13C-1,2,3,6,7,8-HxCDD	*67*		*40 - 135*	*11/01/21 10:14*	*11/11/21 21:53*	*1*
13C-1,2,3,4,7,8-HxCDF	*69*		*40 - 135*	*11/01/21 10:14*	*11/11/21 21:53*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*81*		*40 - 135*	*11/01/21 10:14*	*11/11/21 21:53*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*72*		*40 - 135*	*11/01/21 10:14*	*11/11/21 21:53*	*1*
13C-OCDD	*83*		*40 - 135*	*11/01/21 10:14*	*11/11/21 21:53*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Client Sample ID: AOC3/AOC8-S1E-0.5
Date Collected: 10/27/21 13:27
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-50
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	**0.32**	**J q**	1.0	0.090	pg/g		11/01/21 10:14	11/11/21 22:38	1
2,3,7,8-TCDF	**0.30**	**J**	1.0	0.058	pg/g		11/01/21 10:14	11/11/21 22:38	1
1,2,3,7,8-PeCDD	ND		5.0	0.13	pg/g		11/01/21 10:14	11/11/21 22:38	1
1,2,3,7,8-PeCDF	ND		5.0	0.090	pg/g		11/01/21 10:14	11/11/21 22:38	1
2,3,4,7,8-PeCDF	ND		5.0	0.091	pg/g		11/01/21 10:14	11/11/21 22:38	1
1,2,3,4,7,8-HxCDD	**0.37**	**J B**	5.0	0.10	pg/g		11/01/21 10:14	11/11/21 22:38	1
1,2,3,6,7,8-HxCDD	**0.29**	**J**	5.0	0.098	pg/g		11/01/21 10:14	11/11/21 22:38	1
1,2,3,7,8,9-HxCDD	**0.33**	**J B**	5.0	0.087	pg/g		11/01/21 10:14	11/11/21 22:38	1
1,2,3,4,7,8-HxCDF	ND		5.0	0.15	pg/g		11/01/21 10:14	11/11/21 22:38	1
1,2,3,6,7,8-HxCDF	ND		5.0	0.14	pg/g		11/01/21 10:14	11/11/21 22:38	1
1,2,3,7,8,9-HxCDF	ND		5.0	0.15	pg/g		11/01/21 10:14	11/11/21 22:38	1
2,3,4,6,7,8-HxCDF	ND		5.0	0.15	pg/g		11/01/21 10:14	11/11/21 22:38	1
1,2,3,4,6,7,8-HpCDD	**2.2**	**J B**	5.0	0.078	pg/g		11/01/21 10:14	11/11/21 22:38	1
1,2,3,4,6,7,8-HpCDF	**0.68**	**J B**	5.0	0.077	pg/g		11/01/21 10:14	11/11/21 22:38	1
1,2,3,4,7,8,9-HpCDF	ND		5.0	0.097	pg/g		11/01/21 10:14	11/11/21 22:38	1
OCDD	**22**	**B**	10	0.14	pg/g		11/01/21 10:14	11/11/21 22:38	1
OCDF	**1.7**	**J q B**	10	0.12	pg/g		11/01/21 10:14	11/11/21 22:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*63*		*40 - 135*	*11/01/21 10:14*	*11/11/21 22:38*	*1*
13C-2,3,7,8-TCDF	*65*		*40 - 135*	*11/01/21 10:14*	*11/11/21 22:38*	*1*
13C-1,2,3,7,8-PeCDD	*69*		*40 - 135*	*11/01/21 10:14*	*11/11/21 22:38*	*1*
13C-1,2,3,7,8-PeCDF	*72*		*40 - 135*	*11/01/21 10:14*	*11/11/21 22:38*	*1*
13C-1,2,3,6,7,8-HxCDD	*68*		*40 - 135*	*11/01/21 10:14*	*11/11/21 22:38*	*1*
13C-1,2,3,4,7,8-HxCDF	*67*		*40 - 135*	*11/01/21 10:14*	*11/11/21 22:38*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*69*		*40 - 135*	*11/01/21 10:14*	*11/11/21 22:38*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*63*		*40 - 135*	*11/01/21 10:14*	*11/11/21 22:38*	*1*
13C-OCDD	*65*		*40 - 135*	*11/01/21 10:14*	*11/11/21 22:38*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Client Sample ID: AOC3/AOC8-S1E-2
Date Collected: 10/27/21 13:29
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-51
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.96	0.098	pg/g		11/01/21 10:14	11/11/21 23:23	1
2,3,7,8-TCDF	**0.23**	**J**	0.96	0.049	pg/g		11/01/21 10:14	11/11/21 23:23	1
1,2,3,7,8-PeCDD	ND		4.8	0.097	pg/g		11/01/21 10:14	11/11/21 23:23	1
1,2,3,7,8-PeCDF	ND		4.8	0.068	pg/g		11/01/21 10:14	11/11/21 23:23	1
2,3,4,7,8-PeCDF	ND		4.8	0.069	pg/g		11/01/21 10:14	11/11/21 23:23	1
1,2,3,4,7,8-HxCDD	**0.29**	**J q B**	4.8	0.097	pg/g		11/01/21 10:14	11/11/21 23:23	1
1,2,3,6,7,8-HxCDD	ND		4.8	0.093	pg/g		11/01/21 10:14	11/11/21 23:23	1
1,2,3,7,8,9-HxCDD	ND		4.8	0.083	pg/g		11/01/21 10:14	11/11/21 23:23	1
1,2,3,4,7,8-HxCDF	ND		4.8	0.16	pg/g		11/01/21 10:14	11/11/21 23:23	1
1,2,3,6,7,8-HxCDF	ND		4.8	0.16	pg/g		11/01/21 10:14	11/11/21 23:23	1
1,2,3,7,8,9-HxCDF	ND		4.8	0.17	pg/g		11/01/21 10:14	11/11/21 23:23	1
2,3,4,6,7,8-HxCDF	ND		4.8	0.16	pg/g		11/01/21 10:14	11/11/21 23:23	1
1,2,3,4,6,7,8-HpCDD	**0.42**	**J B**	4.8	0.065	pg/g		11/01/21 10:14	11/11/21 23:23	1
1,2,3,4,6,7,8-HpCDF	**0.20**	**J q B**	4.8	0.045	pg/g		11/01/21 10:14	11/11/21 23:23	1
1,2,3,4,7,8,9-HpCDF	ND		4.8	0.057	pg/g		11/01/21 10:14	11/11/21 23:23	1
OCDD	**2.5**	**J B**	9.6	0.099	pg/g		11/01/21 10:14	11/11/21 23:23	1
OCDF	**0.59**	**J B**	9.6	0.099	pg/g		11/01/21 10:14	11/11/21 23:23	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*61*		*40 - 135*	*11/01/21 10:14*	*11/11/21 23:23*	*1*
13C-2,3,7,8-TCDF	*64*		*40 - 135*	*11/01/21 10:14*	*11/11/21 23:23*	*1*
13C-1,2,3,7,8-PeCDD	*67*		*40 - 135*	*11/01/21 10:14*	*11/11/21 23:23*	*1*
13C-1,2,3,7,8-PeCDF	*68*		*40 - 135*	*11/01/21 10:14*	*11/11/21 23:23*	*1*
13C-1,2,3,6,7,8-HxCDD	*67*		*40 - 135*	*11/01/21 10:14*	*11/11/21 23:23*	*1*
13C-1,2,3,4,7,8-HxCDF	*66*		*40 - 135*	*11/01/21 10:14*	*11/11/21 23:23*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*75*		*40 - 135*	*11/01/21 10:14*	*11/11/21 23:23*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*69*		*40 - 135*	*11/01/21 10:14*	*11/11/21 23:23*	*1*
13C-OCDD	*70*		*40 - 135*	*11/01/21 10:14*	*11/11/21 23:23*	*1*

Toxicity Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Client Sample ID: AOC3/AOC8-S5B-0.5 — Lab Sample ID: 320-80943-13

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.96	0.35	pg/g	1	0.00	8290A
2,3,7,8-TCDF	**0.61**	**J q**	0.96	0.22	pg/g	0.1	**0.061**	8290A
1,2,3,7,8-PeCDD	ND		4.8	0.30	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	ND		4.8	0.21	pg/g	0.03	0.00	8290A
2,3,4,7,8-PeCDF	ND		4.8	0.21	pg/g	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	**0.49**	**J q B**	4.8	0.15	pg/g	0.1	**0.049**	8290A
1,2,3,6,7,8-HxCDD	**0.38**	**J q**	4.8	0.15	pg/g	0.1	**0.038**	8290A
1,2,3,7,8,9-HxCDD	ND		4.8	0.13	pg/g	0.1	0.00	8290A
1,2,3,4,7,8-HxCDF	**0.65**	**J q**	4.8	0.24	pg/g	0.1	**0.065**	8290A
1,2,3,6,7,8-HxCDF	**0.51**	**J q**	4.8	0.23	pg/g	0.1	**0.051**	8290A
1,2,3,7,8,9-HxCDF	ND		4.8	0.25	pg/g	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	**0.36**	**J**	4.8	0.24	pg/g	0.1	**0.036**	8290A
1,2,3,4,6,7,8-HpCDD	**1.5**	**J B**	4.8	0.10	pg/g	0.01	**0.015**	8290A
1,2,3,4,6,7,8-HpCDF	**0.87**	**J B**	4.8	0.18	pg/g	0.01	**0.0087**	8290A
1,2,3,4,7,8,9-HpCDF	ND		4.8	0.23	pg/g	0.01	0.00	8290A
OCDD	**9.0**	**J B**	9.6	0.11	pg/g	0.0003	**0.0027**	8290A
OCDF	**1.0**	**J q B**	9.6	0.24	pg/g	0.0003	**0.00030**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.33	TEQ

Client Sample ID: AOC3/AOC8-S5B-2 — Lab Sample ID: 320-80943-14

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.95	0.15	pg/g	1	0.00	8290A
2,3,7,8-TCDF	**0.24**	**J q**	0.95	0.074	pg/g	0.1	**0.024**	8290A
1,2,3,7,8-PeCDD	ND		4.7	0.14	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	ND		4.7	0.097	pg/g	0.03	0.00	8290A
2,3,4,7,8-PeCDF	ND		4.7	0.099	pg/g	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	**0.37**	**J q B**	4.7	0.10	pg/g	0.1	**0.037**	8290A
1,2,3,6,7,8-HxCDD	ND		4.7	0.10	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDD	ND		4.7	0.089	pg/g	0.1	0.00	8290A
1,2,3,4,7,8-HxCDF	ND		4.7	0.12	pg/g	0.1	0.00	8290A
1,2,3,6,7,8-HxCDF	ND		4.7	0.11	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDF	ND		4.7	0.12	pg/g	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	ND		4.7	0.11	pg/g	0.1	0.00	8290A
1,2,3,4,6,7,8-HpCDD	**0.35**	**J q B**	4.7	0.047	pg/g	0.01	**0.0035**	8290A
1,2,3,4,6,7,8-HpCDF	**0.21**	**J q B**	4.7	0.040	pg/g	0.01	**0.0021**	8290A
1,2,3,4,7,8,9-HpCDF	**0.13**	**J q B**	4.7	0.051	pg/g	0.01	**0.0013**	8290A
OCDD	**2.4**	**J B**	9.5	0.079	pg/g	0.0003	**0.00072**	8290A
OCDF	**0.45**	**J B**	9.5	0.082	pg/g	0.0003	**0.00014**	8290A

TEF Reference:
WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Client Sample ID: AOC3/AOC8-S5B-2 (Continued) — Lab Sample ID: 320-80943-14

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.069	TEQ

Client Sample ID: AOC3/AOC8-S8C-0.5 — Lab Sample ID: 320-80943-32

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.98	0.97	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDD	ND		4.9	0.78	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	ND		4.9	0.60	pg/g	0.03	0.00	8290A
2,3,4,7,8-PeCDF	**1.1**	**J q**	4.9	0.61	pg/g	0.3	**0.33**	8290A
1,2,3,4,7,8-HxCDD	ND		4.9	0.65	pg/g	0.1	0.00	8290A
1,2,3,6,7,8-HxCDD	ND		4.9	0.63	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDD	**1.2**	**J q B**	4.9	0.56	pg/g	0.1	**0.12**	8290A
1,2,3,4,7,8-HxCDF	ND		4.9	0.90	pg/g	0.1	0.00	8290A
1,2,3,6,7,8-HxCDF	ND		4.9	0.87	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDF	ND		4.9	0.93	pg/g	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	ND		4.9	0.88	pg/g	0.1	0.00	8290A
1,2,3,4,6,7,8-HpCDD	**6.0**	**B**	4.9	0.32	pg/g	0.01	**0.060**	8290A
1,2,3,4,6,7,8-HpCDF	**2.1**	**J q B**	4.9	0.32	pg/g	0.01	**0.021**	8290A
1,2,3,4,7,8,9-HpCDF	ND		4.9	0.40	pg/g	0.01	0.00	8290A
OCDD	**17**	**B**	9.8	0.58	pg/g	0.0003	**0.0051**	8290A
OCDF	**2.4**	**J B**	9.8	0.66	pg/g	0.0003	**0.00072**	8290A
2,3,7,8-TCDF - RA	**1.3**		0.98	0.22	pg/g	0.1	**0.13**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.67	TEQ

Client Sample ID: AOC3/AOC8-S8C-2 — Lab Sample ID: 320-80943-33

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.95	0.11	pg/g	1	0.00	8290A
2,3,7,8-TCDF	**0.16**	**J**	0.95	0.057	pg/g	0.1	**0.016**	8290A
1,2,3,7,8-PeCDD	ND		4.7	0.087	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	ND		4.7	0.060	pg/g	0.03	0.00	8290A
2,3,4,7,8-PeCDF	ND		4.7	0.061	pg/g	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	**0.28**	**J B**	4.7	0.067	pg/g	0.1	**0.028**	8290A
1,2,3,6,7,8-HxCDD	ND		4.7	0.065	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDD	**0.12**	**J q B**	4.7	0.058	pg/g	0.1	**0.012**	8290A
1,2,3,4,7,8-HxCDF	ND		4.7	0.12	pg/g	0.1	0.00	8290A
1,2,3,6,7,8-HxCDF	ND		4.7	0.12	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDF	**0.14**	**J**	4.7	0.13	pg/g	0.1	**0.014**	8290A
2,3,4,6,7,8-HxCDF	ND		4.7	0.12	pg/g	0.1	0.00	8290A

TEF Reference:
WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Client Sample ID: AOC3/AOC8-S8C-2 (Continued) — Lab Sample ID: 320-80943-33

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
1,2,3,4,6,7,8-HpCDD	0.30	J q B	4.7	0.028	pg/g	0.01	0.0030	8290A
1,2,3,4,6,7,8-HpCDF	0.24	J B	4.7	0.036	pg/g	0.01	0.0024	8290A
1,2,3,4,7,8,9-HpCDF	0.12	J B	4.7	0.045	pg/g	0.01	0.0012	8290A
OCDD	1.6	J B	9.5	0.072	pg/g	0.0003	0.00048	8290A
OCDF	0.39	J B	9.5	0.076	pg/g	0.0003	0.00012	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.077	TEQ

Client Sample ID: AOC3/AOC8-S2D-0.5 — Lab Sample ID: 320-80943-48

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	1.3	q	0.98	0.42	pg/g	1	1.3	8290A
1,2,3,7,8-PeCDD	ND		4.9	0.30	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	0.65	J	4.9	0.29	pg/g	0.03	0.020	8290A
2,3,4,7,8-PeCDF	0.87	J	4.9	0.29	pg/g	0.3	0.26	8290A
1,2,3,4,7,8-HxCDD	0.71	J q B	4.9	0.16	pg/g	0.1	0.071	8290A
1,2,3,6,7,8-HxCDD	0.62	J q	4.9	0.15	pg/g	0.1	0.062	8290A
1,2,3,7,8,9-HxCDD	0.72	J B	4.9	0.14	pg/g	0.1	0.072	8290A
1,2,3,4,7,8-HxCDF	0.67	J	4.9	0.26	pg/g	0.1	0.067	8290A
1,2,3,6,7,8-HxCDF	0.74	J q	4.9	0.25	pg/g	0.1	0.074	8290A
1,2,3,7,8,9-HxCDF	0.62	J	4.9	0.26	pg/g	0.1	0.062	8290A
2,3,4,6,7,8-HxCDF	0.74	J	4.9	0.25	pg/g	0.1	0.074	8290A
1,2,3,4,6,7,8-HpCDD	3.8	J B	4.9	0.078	pg/g	0.01	0.038	8290A
1,2,3,4,6,7,8-HpCDF	1.4	J B	4.9	0.082	pg/g	0.01	0.014	8290A
1,2,3,4,7,8,9-HpCDF	0.52	J q B	4.9	0.10	pg/g	0.01	0.0052	8290A
OCDD	19	B	9.8	0.12	pg/g	0.0003	0.0057	8290A
OCDF	2.4	J B	9.8	0.11	pg/g	0.0003	0.00072	8290A
2,3,7,8-TCDF - RA	1.0		0.98	0.56	pg/g	0.1	0.10	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		2.2	TEQ

Client Sample ID: AOC3/AOC8-S2D-2 — Lab Sample ID: 320-80943-49

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.96	0.12	pg/g	1	0.00	8290A
2,3,7,8-TCDF	0.50	J	0.96	0.065	pg/g	0.1	0.050	8290A
1,2,3,7,8-PeCDD	ND		4.8	0.12	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	0.31	J	4.8	0.074	pg/g	0.03	0.0093	8290A

TEF Reference:
WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Client Sample ID: AOC3/AOC8-S2D-2 (Continued)

Lab Sample ID: 320-80943-49

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,4,7,8-PeCDF	0.13	J q	4.8	0.075	pg/g	0.3	0.039	8290A
1,2,3,4,7,8-HxCDD	0.25	J q B	4.8	0.084	pg/g	0.1	0.025	8290A
1,2,3,6,7,8-HxCDD	ND		4.8	0.080	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDD	ND		4.8	0.072	pg/g	0.1	0.00	8290A
1,2,3,4,7,8-HxCDF	0.15	J q	4.8	0.11	pg/g	0.1	0.015	8290A
1,2,3,6,7,8-HxCDF	0.20	J	4.8	0.10	pg/g	0.1	0.020	8290A
1,2,3,7,8,9-HxCDF	0.13	J	4.8	0.11	pg/g	0.1	0.013	8290A
2,3,4,6,7,8-HxCDF	0.16	J	4.8	0.10	pg/g	0.1	0.016	8290A
1,2,3,4,6,7,8-HpCDD	0.51	J B	4.8	0.045	pg/g	0.01	0.0051	8290A
1,2,3,4,6,7,8-HpCDF	0.41	J B	4.8	0.043	pg/g	0.01	0.0041	8290A
1,2,3,4,7,8,9-HpCDF	0.18	J q B	4.8	0.054	pg/g	0.01	0.0018	8290A
OCDD	2.4	J B	9.6	0.075	pg/g	0.0003	0.00072	8290A
OCDF	0.93	J B	9.6	0.099	pg/g	0.0003	0.00028	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.20	TEQ

Client Sample ID: AOC3/AOC8-S1E-0.5

Lab Sample ID: 320-80943-50

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	0.32	J q	1.0	0.090	pg/g	1	0.32	8290A
2,3,7,8-TCDF	0.30	J	1.0	0.058	pg/g	0.1	0.030	8290A
1,2,3,7,8-PeCDD	ND		5.0	0.13	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	ND		5.0	0.090	pg/g	0.03	0.00	8290A
2,3,4,7,8-PeCDF	ND		5.0	0.091	pg/g	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	0.37	J B	5.0	0.10	pg/g	0.1	0.037	8290A
1,2,3,6,7,8-HxCDD	0.29	J	5.0	0.098	pg/g	0.1	0.029	8290A
1,2,3,7,8,9-HxCDD	0.33	J B	5.0	0.087	pg/g	0.1	0.033	8290A
1,2,3,4,7,8-HxCDF	ND		5.0	0.15	pg/g	0.1	0.00	8290A
1,2,3,6,7,8-HxCDF	ND		5.0	0.14	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDF	ND		5.0	0.15	pg/g	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	ND		5.0	0.15	pg/g	0.1	0.00	8290A
1,2,3,4,6,7,8-HpCDD	2.2	J B	5.0	0.078	pg/g	0.01	0.022	8290A
1,2,3,4,6,7,8-HpCDF	0.68	J B	5.0	0.077	pg/g	0.01	0.0068	8290A
1,2,3,4,7,8,9-HpCDF	ND		5.0	0.097	pg/g	0.01	0.00	8290A
OCDD	22	B	10	0.14	pg/g	0.0003	0.0066	8290A
OCDF	1.7	J q B	10	0.12	pg/g	0.0003	0.00051	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.48	TEQ

TEF Reference:

WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Toxicity Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Client Sample ID: AOC3/AOC8-S1E-2

Lab Sample ID: 320-80943-51

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.96	0.098	pg/g	1	0.00	8290A
2,3,7,8-TCDF	**0.23**	**J**	0.96	0.049	pg/g	0.1	**0.023**	8290A
1,2,3,7,8-PeCDD	ND		4.8	0.097	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	ND		4.8	0.068	pg/g	0.03	0.00	8290A
2,3,4,7,8-PeCDF	ND		4.8	0.069	pg/g	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	**0.29**	**J q B**	4.8	0.097	pg/g	0.1	**0.029**	8290A
1,2,3,6,7,8-HxCDD	ND		4.8	0.093	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDD	ND		4.8	0.083	pg/g	0.1	0.00	8290A
1,2,3,4,7,8-HxCDF	ND		4.8	0.16	pg/g	0.1	0.00	8290A
1,2,3,6,7,8-HxCDF	ND		4.8	0.16	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDF	ND		4.8	0.17	pg/g	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	ND		4.8	0.16	pg/g	0.1	0.00	8290A
1,2,3,4,6,7,8-HpCDD	**0.42**	**J B**	4.8	0.065	pg/g	0.01	**0.0042**	8290A
1,2,3,4,6,7,8-HpCDF	**0.20**	**J q B**	4.8	0.045	pg/g	0.01	**0.0020**	8290A
1,2,3,4,7,8,9-HpCDF	ND		4.8	0.057	pg/g	0.01	0.00	8290A
OCDD	**2.5**	**J B**	9.6	0.099	pg/g	0.0003	**0.00075**	8290A
OCDF	**0.59**	**J B**	9.6	0.099	pg/g	0.0003	**0.00018**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.059	TEQ

TEF Reference:

WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Isotope Dilution Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (40-135)	TCDF (40-135)	PeCDD (40-135)	PeCDF (40-135)	HxDD (40-135)	HxCDF (40-135)	HpCDD (40-135)	HpCDF (40-135)
320-80943-13	AOC3/AOC8-S5B-0.5	57	59	63	64	54	61	74	68
320-80943-14	AOC3/AOC8-S5B-2	60	62	65	67	65	66	79	72
320-80943-32	AOC3/AOC8-S8C-0.5	70		71	75	63	66	71	68
320-80943-32 - RA	AOC3/AOC8-S8C-0.5		73						
320-80943-33	AOC3/AOC8-S8C-2	60	64	66	67	64	67	78	70
320-80943-48	AOC3/AOC8-S2D-0.5	18 *5-		31 *5-	29 *5-	46	43	68	58
320-80943-48 - RA	AOC3/AOC8-S2D-0.5		23 *5-						
320-80943-49	AOC3/AOC8-S2D-2	62	64	65	67	67	69	81	72
320-80943-50	AOC3/AOC8-S1E-0.5	63	65	69	72	68	67	69	63
320-80943-51	AOC3/AOC8-S1E-2	61	64	67	68	67	66	75	69
LCS 320-538806/2-A	Lab Control Sample	59	62	60	61	71	74	78	75
LCSD 320-538806/3-A	Lab Control Sample Dup	61	61	67	66	62	60	79	68
MB 320-538806/1-A	Method Blank	60	60	65	64	69	71	77	71

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OCDD (40-135)
320-80943-13	AOC3/AOC8-S5B-0.5	69
320-80943-14	AOC3/AOC8-S5B-2	77
320-80943-32	AOC3/AOC8-S8C-0.5	66
320-80943-32 - RA	AOC3/AOC8-S8C-0.5	
320-80943-33	AOC3/AOC8-S8C-2	74
320-80943-48	AOC3/AOC8-S2D-0.5	68
320-80943-48 - RA	AOC3/AOC8-S2D-0.5	
320-80943-49	AOC3/AOC8-S2D-2	83
320-80943-50	AOC3/AOC8-S1E-0.5	65
320-80943-51	AOC3/AOC8-S1E-2	70
LCS 320-538806/2-A	Lab Control Sample	73
LCSD 320-538806/3-A	Lab Control Sample Dup	77
MB 320-538806/1-A	Method Blank	75

Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF = 13C-1,2,3,7,8-PeCDF
HxDD = 13C-1,2,3,6,7,8-HxCDD
HxCDF = 13C-1,2,3,4,7,8-HxCDF
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
OCDD = 13C-OCDD

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 320-538806/1-A
Matrix: Solid
Analysis Batch: 541728

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538806

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.0	0.54	pg/g		11/01/21 10:14	11/10/21 16:44	1
2,3,7,8-TCDF	ND		1.0	0.30	pg/g		11/01/21 10:14	11/10/21 16:44	1
1,2,3,7,8-PeCDD	ND		5.0	0.42	pg/g		11/01/21 10:14	11/10/21 16:44	1
1,2,3,7,8-PeCDF	ND		5.0	0.24	pg/g		11/01/21 10:14	11/10/21 16:44	1
2,3,4,7,8-PeCDF	ND		5.0	0.24	pg/g		11/01/21 10:14	11/10/21 16:44	1
1,2,3,4,7,8-HxCDD	0.452	J	5.0	0.21	pg/g		11/01/21 10:14	11/10/21 16:44	1
1,2,3,6,7,8-HxCDD	ND		5.0	0.20	pg/g		11/01/21 10:14	11/10/21 16:44	1
1,2,3,7,8,9-HxCDD	0.506	J	5.0	0.18	pg/g		11/01/21 10:14	11/10/21 16:44	1
1,2,3,4,7,8-HxCDF	ND		5.0	0.41	pg/g		11/01/21 10:14	11/10/21 16:44	1
1,2,3,6,7,8-HxCDF	ND		5.0	0.39	pg/g		11/01/21 10:14	11/10/21 16:44	1
1,2,3,7,8,9-HxCDF	ND		5.0	0.42	pg/g		11/01/21 10:14	11/10/21 16:44	1
2,3,4,6,7,8-HxCDF	ND		5.0	0.40	pg/g		11/01/21 10:14	11/10/21 16:44	1
1,2,3,4,6,7,8-HpCDD	0.764	J	5.0	0.14	pg/g		11/01/21 10:14	11/10/21 16:44	1
1,2,3,4,6,7,8-HpCDF	0.630	J	5.0	0.080	pg/g		11/01/21 10:14	11/10/21 16:44	1
1,2,3,4,7,8,9-HpCDF	0.346	J q	5.0	0.10	pg/g		11/01/21 10:14	11/10/21 16:44	1
OCDD	6.40	J	10	0.24	pg/g		11/01/21 10:14	11/10/21 16:44	1
OCDF	0.947	J q	10	0.31	pg/g		11/01/21 10:14	11/10/21 16:44	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*60*		*40 - 135*	*11/01/21 10:14*	*11/10/21 16:44*	*1*
13C-2,3,7,8-TCDF	*60*		*40 - 135*	*11/01/21 10:14*	*11/10/21 16:44*	*1*
13C-1,2,3,7,8-PeCDD	*65*		*40 - 135*	*11/01/21 10:14*	*11/10/21 16:44*	*1*
13C-1,2,3,7,8-PeCDF	*64*		*40 - 135*	*11/01/21 10:14*	*11/10/21 16:44*	*1*
13C-1,2,3,6,7,8-HxCDD	*69*		*40 - 135*	*11/01/21 10:14*	*11/10/21 16:44*	*1*
13C-1,2,3,4,7,8-HxCDF	*71*		*40 - 135*	*11/01/21 10:14*	*11/10/21 16:44*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*77*		*40 - 135*	*11/01/21 10:14*	*11/10/21 16:44*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*71*		*40 - 135*	*11/01/21 10:14*	*11/10/21 16:44*	*1*
13C-OCDD	*75*		*40 - 135*	*11/01/21 10:14*	*11/10/21 16:44*	*1*

Lab Sample ID: LCS 320-538806/2-A
Matrix: Solid
Analysis Batch: 541728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	20.0	23.8		pg/g		119	77 - 130
2,3,7,8-TCDF	20.0	22.6		pg/g		113	79 - 137
1,2,3,7,8-PeCDD	100	111		pg/g		111	79 - 134
1,2,3,7,8-PeCDF	100	109		pg/g		109	81 - 134
2,3,4,7,8-PeCDF	100	104		pg/g		104	76 - 132
1,2,3,4,7,8-HxCDD	100	119		pg/g		119	65 - 144
1,2,3,6,7,8-HxCDD	100	115		pg/g		115	73 - 147
1,2,3,7,8,9-HxCDD	100	107		pg/g		107	80 - 143
1,2,3,4,7,8-HxCDF	100	116		pg/g		116	72 - 140
1,2,3,6,7,8-HxCDF	100	115		pg/g		115	63 - 152
1,2,3,7,8,9-HxCDF	100	105		pg/g		105	72 - 152
2,3,4,6,7,8-HxCDF	100	111		pg/g		111	72 - 151
1,2,3,4,6,7,8-HpCDD	100	110		pg/g		110	86 - 134
1,2,3,4,6,7,8-HpCDF	100	108		pg/g		108	81 - 137
1,2,3,4,7,8,9-HpCDF	100	115		pg/g		115	79 - 139

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-538806/2-A
Matrix: Solid
Analysis Batch: 541728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538806

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
OCDD			200	225		pg/g		113	80 - 137		
OCDF			200	229		pg/g		115	75 - 141		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*59*		*40 - 135*
13C-2,3,7,8-TCDF	*62*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*60*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*61*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*71*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*74*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*78*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*75*		*40 - 135*
13C-OCDD	*73*		*40 - 135*

Lab Sample ID: LCSD 320-538806/3-A
Matrix: Solid
Analysis Batch: 541728

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 538806

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,7,8-TCDD			20.0	24.5		pg/g		122	77 - 130	3	20
2,3,7,8-TCDF			20.0	23.6		pg/g		118	79 - 137	4	20
1,2,3,7,8-PeCDD			100	108		pg/g		108	79 - 134	3	20
1,2,3,7,8-PeCDF			100	112		pg/g		112	81 - 134	2	20
2,3,4,7,8-PeCDF			100	103		pg/g		103	76 - 132	1	20
1,2,3,4,7,8-HxCDD			100	107		pg/g		107	65 - 144	11	20
1,2,3,6,7,8-HxCDD			100	120		pg/g		120	73 - 147	4	20
1,2,3,7,8,9-HxCDD			100	118		pg/g		118	80 - 143	10	20
1,2,3,4,7,8-HxCDF			100	120		pg/g		120	72 - 140	4	20
1,2,3,6,7,8-HxCDF			100	118		pg/g		118	63 - 152	3	20
1,2,3,7,8,9-HxCDF			100	127		pg/g		127	72 - 152	19	20
2,3,4,6,7,8-HxCDF			100	118		pg/g		118	72 - 151	6	20
1,2,3,4,6,7,8-HpCDD			100	107		pg/g		107	86 - 134	2	20
1,2,3,4,6,7,8-HpCDF			100	115		pg/g		115	81 - 137	6	20
1,2,3,4,7,8,9-HpCDF			100	130		pg/g		130	79 - 139	13	20
OCDD			200	225		pg/g		113	80 - 137	0	20
OCDF			200	230		pg/g		115	75 - 141	0	20

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*61*		*40 - 135*
13C-2,3,7,8-TCDF	*61*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*67*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*66*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*62*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*60*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*79*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*68*		*40 - 135*
13C-OCDD	*77*		*40 - 135*

QC Association Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Specialty Organics

Prep Batch: 538806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-13	AOC3/AOC8-S5B-0.5	Total/NA	Solid	8290	
320-80943-14	AOC3/AOC8-S5B-2	Total/NA	Solid	8290	
320-80943-32	AOC3/AOC8-S8C-0.5	Total/NA	Solid	8290	
320-80943-32 - RA	AOC3/AOC8-S8C-0.5	Total/NA	Solid	8290	
320-80943-33	AOC3/AOC8-S8C-2	Total/NA	Solid	8290	
320-80943-48	AOC3/AOC8-S2D-0.5	Total/NA	Solid	8290	
320-80943-48 - RA	AOC3/AOC8-S2D-0.5	Total/NA	Solid	8290	
320-80943-49	AOC3/AOC8-S2D-2	Total/NA	Solid	8290	
320-80943-50	AOC3/AOC8-S1E-0.5	Total/NA	Solid	8290	
320-80943-51	AOC3/AOC8-S1E-2	Total/NA	Solid	8290	
MB 320-538806/1-A	Method Blank	Total/NA	Solid	8290	
LCS 320-538806/2-A	Lab Control Sample	Total/NA	Solid	8290	
LCSD 320-538806/3-A	Lab Control Sample Dup	Total/NA	Solid	8290	

Analysis Batch: 541728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-13	AOC3/AOC8-S5B-0.5	Total/NA	Solid	8290A	538806
MB 320-538806/1-A	Method Blank	Total/NA	Solid	8290A	538806
LCS 320-538806/2-A	Lab Control Sample	Total/NA	Solid	8290A	538806
LCSD 320-538806/3-A	Lab Control Sample Dup	Total/NA	Solid	8290A	538806

Analysis Batch: 542002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-14	AOC3/AOC8-S5B-2	Total/NA	Solid	8290A	538806
320-80943-32	AOC3/AOC8-S8C-0.5	Total/NA	Solid	8290A	538806
320-80943-33	AOC3/AOC8-S8C-2	Total/NA	Solid	8290A	538806
320-80943-48	AOC3/AOC8-S2D-0.5	Total/NA	Solid	8290A	538806
320-80943-49	AOC3/AOC8-S2D-2	Total/NA	Solid	8290A	538806
320-80943-50	AOC3/AOC8-S1E-0.5	Total/NA	Solid	8290A	538806
320-80943-51	AOC3/AOC8-S1E-2	Total/NA	Solid	8290A	538806

Analysis Batch: 543816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-32 - RA	AOC3/AOC8-S8C-0.5	Total/NA	Solid	8290A	538806
320-80943-48 - RA	AOC3/AOC8-S2D-0.5	Total/NA	Solid	8290A	538806

Lab Chronicle

Client: Ninyo & Moore
Job ID: 320-80943-2
Project/Site: Cole School PEA

Client Sample ID: AOC3/AOC8-S5B-0.5
Lab Sample ID: 320-80943-13
Date Collected: 10/27/21 10:00
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.44 g	20.0 uL	538806	11/01/21 10:14	FC	TAL SAC
Total/NA	Analysis	8290A		1			541728	11/10/21 19:44	DB	TAL SAC

Client Sample ID: AOC3/AOC8-S5B-2
Lab Sample ID: 320-80943-14
Date Collected: 10/27/21 10:02
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.54 g	20.0 uL	538806	11/01/21 10:14	FC	TAL SAC
Total/NA	Analysis	8290A		1			542002	11/11/21 18:53	GRB	TAL SAC

Client Sample ID: AOC3/AOC8-S8C-0.5
Lab Sample ID: 320-80943-32
Date Collected: 10/27/21 11:55
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.19 g	20.0 uL	538806	11/01/21 10:14	FC	TAL SAC
Total/NA	Analysis	8290A		1			542002	11/11/21 19:38	GRB	TAL SAC
Total/NA	Prep	8290	RA		10.19 g	20.0 uL	538806	11/01/21 10:14	FC	TAL SAC
Total/NA	Analysis	8290A	RA	1			543816	11/18/21 10:56	DB	TAL SAC

Client Sample ID: AOC3/AOC8-S8C-2
Lab Sample ID: 320-80943-33
Date Collected: 10/27/21 12:00
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.54 g	20.0 uL	538806	11/01/21 10:14	FC	TAL SAC
Total/NA	Analysis	8290A		1			542002	11/11/21 20:23	GRB	TAL SAC

Client Sample ID: AOC3/AOC8-S2D-0.5
Lab Sample ID: 320-80943-48
Date Collected: 10/27/21 13:16
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.17 g	20.0 uL	538806	11/01/21 10:14	FC	TAL SAC
Total/NA	Analysis	8290A		1			542002	11/11/21 21:08	GRB	TAL SAC
Total/NA	Prep	8290	RA		10.17 g	20.0 uL	538806	11/01/21 10:14	FC	TAL SAC
Total/NA	Analysis	8290A	RA	1			543816	11/18/21 11:35	DB	TAL SAC

Client Sample ID: AOC3/AOC8-S2D-2
Lab Sample ID: 320-80943-49
Date Collected: 10/27/21 13:18
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.44 g	20.0 uL	538806	11/01/21 10:14	FC	TAL SAC
Total/NA	Analysis	8290A		1			542002	11/11/21 21:53	GRB	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Client Sample ID: AOC3/AOC8-S1E-0.5

Lab Sample ID: 320-80943-50

Date Collected: 10/27/21 13:27

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.01 g	20.0 uL	538806	11/01/21 10:14	FC	TAL SAC
Total/NA	Analysis	8290A		1			542002	11/11/21 22:38	GRB	TAL SAC

Client Sample ID: AOC3/AOC8-S1E-2

Lab Sample ID: 320-80943-51

Date Collected: 10/27/21 13:29

Matrix: Solid

Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.41 g	20.0 uL	538806	11/01/21 10:14	FC	TAL SAC
Total/NA	Analysis	8290A		1			542002	11/11/21 23:23	GRB	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Laboratory: Eurofins TestAmerica, Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TEQ		Solid	Total Dioxin/Furan TEQ

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Method	Method Description	Protocol	Laboratory
8290A	Dioxins and Furans (HRGC/HRMS)	SW846	TAL SAC
TEQ	Total TEQ Calculation	Lab SOP	TAL SAC
8290	Soxhlet Extraction of Dioxins and Furans	SW846	TAL SAC

Protocol References:

Lab SOP = Laboratory Standard Operating Procedure

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-80943-13	AOC3/AOC8-S5B-0.5	Solid	10/27/21 10:00	10/28/21 12:50
320-80943-14	AOC3/AOC8-S5B-2	Solid	10/27/21 10:02	10/28/21 12:50
320-80943-32	AOC3/AOC8-S8C-0.5	Solid	10/27/21 11:55	10/28/21 12:50
320-80943-33	AOC3/AOC8-S8C-2	Solid	10/27/21 12:00	10/28/21 12:50
320-80943-48	AOC3/AOC8-S2D-0.5	Solid	10/27/21 13:16	10/28/21 12:50
320-80943-49	AOC3/AOC8-S2D-2	Solid	10/27/21 13:18	10/28/21 12:50
320-80943-50	AOC3/AOC8-S1E-0.5	Solid	10/27/21 13:27	10/28/21 12:50
320-80943-51	AOC3/AOC8-S1E-2	Solid	10/27/21 13:29	10/28/21 12:50

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

320-80943

201237

eurofins

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Nathan Diem	Date: 10.27.21	COC No:
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier:	1 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: NDD & NES
Alameda California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☑ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3-S3B-0.5	10.27.21	854	G	S	1							X	X		X	
AOC3-S3B-2 ND		900										X				
AOC3-S2A-0.5 ND		900										X	X		X	
AOC3-S2A-2		902										X				
AOC3-S3A-0.5		906										X	X		X	
AOC3-S3A-2		910										X				
AOC3-S4A-0.5		943										X	X		X	
AOC3-S4A-2		945										X				
AOC3-S5A-0.5		945								X		X	X			
AOC3-S5A-2		950										X				
AOC3-S4B-0.5		956										X	X		X	

320-80943 Chain of Custody

Preservation Used. 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments: Hold samples for addional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No		Cooler Temp. (°C): Obs'd: _____ Corr'd _____ Therm ID No _____		
Relinquished by:	Company: N&M	Date/Time: 10.27.21 1520	Received by: Leslie Jung	Company: N&M	Date/Time: 10.27 1520
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10/28 1144	Received by:	Company: ETA-SJ	Date/Time: 10.28.21 1144
Relinquished by:	Company: ETA-SJ	Date/Time: 10.28.21 1250	Received in Laboratory by:	Company: ETA-SJ	Date/Time: 10/28/21 1250

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

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2.5 | 2.4

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

eurofins Environment Testing America

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Nathan	Date 10.27.21	COC No
Ninyo & Moore	Email. ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier	2 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below			Lab Sampling:
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3-54B-2	10.27.21	958	G	S	1							X	*			
AOC3/AOC8-55B-0.5		1000										X	X	X	X	
AOC3/AOC8-55B-2		1002										X		X		
AOC3-56B-0.5		1023										X	X		X	
AOC3-56B-2		1026										X				
AOC3-56A-0.5		1028										X	X		X	
AOC3-56A-2		1030										X	ND		ND	
AOC3-57A-0.5		1035										X	X		X	
AOC3-57A-2		1038										X				
AOC3-57B-0.5		1043										X	X		X	
AOC3-57B-2		1047										X				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.
Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No	Cooler Temp. (°C): Obs'd.	Corr'd.	Therm ID No.

Relinquished by:	Company: NEM	Date/Time: 10.27.21 1520	Received by: Leslie Jung	Company: N&M	Date/Time: 10.27.21 1520
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10.27.21 1144	Received by:	Company: EA-SJ	Date/Time: 10.28.21 1144
Relinquished by:	Company: EA SJ	Date/Time: 10.28.21 1250	Received in Laboratory by:	Company: EASJ	Date/Time: 10.28.21 1250

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

eurofins Environment Testing TestAmerica

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Nathan Diem	Date: 10.27.21	COC No:
Ninyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier:	3 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler:
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes.
AOC3/AOC10-S8A-0.5	10.27.21	1101	G	S	1				X	X	X	X	X			
AOC3/AOC10-S8A-2		1103							X	X	X	X				
AOC3/AOC10-S8B-0.5		1127							X	X	X	X	X			
~~AOC3/AOC10-S8B-0.5~~																
AOC3/AOC10-S8B-2		1129							X	X	X	X				
AOC3/AOC10-S9C-0.5		1141							X	X	X	X	X			
AOC3/AOC10-S9C-05 DUP		1141							X	X	X	X	X			
AOC3/AOC10-S9C-2		1144							X	X	X	X				
AOC3-S8D-0.5		1145										X	X		X	
AOC3-S8D-2.0		1150										X				
AOC3/AOC8-S8C-0.5		1155										X	X	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3, 5=NaOH, 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments
Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No	Cooler Temp. (°C): Obs'd: _____ Corr'd. _____ Therm ID No. _____			
Relinquished by:	Company: N&M	Date/Time: 10 27.21 1530	Received by: Leslie Jung	Company: N&M	Date/Time: 10/27 15 20
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10 27 11 44	Received by:	Company: EA SJ	Date/Time: 10/28/21 1144
Relinquished by:	Company: EA SJ	Date/Time: 10/28/21 1250	Received in Laboratory by:	Company: EA SS	Date/Time: 10/28/21 1250

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

eurofins

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact:	Date:	COC No.
Ninyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier:	4 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler:
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling
Project Name: Cole School PEA	☑ 2 weeks			Job / SDG No
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3/AOC8-S8C-2	10.27.21	1200	G	S	1							X		X		
AOC3-S7C-0.5		1159										X	X		X	
AOC3-S7C-2		1201										X	[illegible]			
AOC3-S6C-0.5		1205										X	X		X	
AOC3-S6C-2		1207										X				
AOC3-S7D-0.5		1225								X		X	X			
AOC3-S7D-2		1230								X		X				
AOC3-S5C-0.5		1230										X	X		X	
AOC3-S5C-2		1235										X				
AOC3-S4C-0.5		1235										X	X		X	
AOC3-S4C-2		1240										X				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4, 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments
Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp (°C): Obs'd._____ Corr'd._____ Therm ID No. _____

Relinquished by:		Company: N&M	Date/Time: 10.27.21 1520	Received by: Leslie Jung	Company: N&M	Date/Time: 10/27 1520
Relinquished by: Leslie Jung		Company: N&M	Date/Time: 10/28 11:44	Received by:	Company: EFA SV	Date/Time: 10/28/21 1144
Relinquished by:		Company: EFA-SV	Date/Time: 10/28/21 1250	Received in Laboratory by:	Company: TALSS	Date/Time: 10/28/21 1250

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

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12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

eurofins

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

Client Contact	Project Manager: Nathan Diem	Site Contact: Nathan Diem	Date: 10.27.21	COC No.
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier:	5 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler:
Alameda, California 94501	**Analysis Turnaround Time**			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☑ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name. Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes.
AOC3-S3C-0.5	10.27.21	12:50										X	X		X	
AOC3-S3C-2	"	1255										X	X		X	
AOC3-S1D-0.5		1314								X		X	X			
AOC3-S1D-2		1315								X		X				
AOC3/AOC8-S2D-0.5		1316										X	X	X	X	
AOC3/AOC8-S2D-2		1318										X		X		
AOC3/AOC8-S1E-0.5		1327										X	X	X	X	
AOC3/AOC8-S1E-2		1329										X		X		
AOC3-S2E-0.5		1330										X	X		X	
AOC3-S2E-2 MS/MSD		1332										X				
AOC3-S3E-0.5		1350										X	X		X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Hold Samples for additional Analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp. (°C): Obs'd: _____ Corr'd _____ Therm ID No. _____			
Relinquished by:	Company: N&M	Date/Time: 10.27.21 1520	Received by: Leslie Jung	Company: N&M	Date/Time: 10/27 15:20
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10/28 1144	Received by:	Company: ETA-SJ	Date/Time: 10.28.21 1144
Relinquished by:	Company: ETA-SJ	Date/Time: 10.28.21 1250	Received in Laboratory by:	Company: ETA-SJ	Date/Time: 10/28/21 1250

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

eurofins Environment Testing America

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Nathan Diem	Date: 10.27.21	COC No:
Ninyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier:	6 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler:
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes.
~~NS~~ AOC3-S3E-2	10.27.21	1352	G	S	1							X				
AOC3-S3D-0.5		1352										X	X		X	
AOC3-S3D-2		1354										X	~~X~~		~~X~~	
AOC3-S4D-0.5		1358										X	X		X	
AOC3-S4D-2		1400										X				
AOC3-S4E-0.5		1405								X		X	X			
AOC3-S4E-2		1407										X				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.
Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp (°C): Obs'd._____ Corr'd:_____ Therm ID No._____			
Relinquished by:	Company: NMM	Date/Time: 10.27.21 1520	Received by: Leslie Jung	Company: NMM	Date/Time: 10/27 1520
Relinquished by: Leslie Jung	Company: NMM	Date/Time: 10/28 11:44	Received by:	Company: EA-SS	Date/Time: 10/28/21 1144
Relinquished by:	Company: EA SS	Date/Time: 10/28/21 1250	Received in Laboratory by:	Company: EA SS	Date/Time: 10/28/21 1250

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247275.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/3/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8270C/3550B (MOD) Local Method	8270C_SIM/3546 (MOD) PAH SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S3B-0.5 (320-80943-1)	10/27/21	08:54 Pacific		Solid			X	X	X				1	
AOC3-S3B-2ND (320-80943-2)	10/27/21	09:00 Pacific		Solid				X					1	
AOC3-S2A-0.5ND (320-80943-3)	10/27/21	09:00 Pacific		Solid			X	X	X				1	
AOC3-S2A-2 (320-80943-4)	10/27/21	09:02 Pacific		Solid				X					1	
AOC3-S3A-0.5 (320-80943-5)	10/27/21	09:06 Pacific		Solid			X	X	X				1	
AOC3-S3A-2 (320-80943-6)	10/27/21	09:10 Pacific		Solid				X					1	
AOC3-S4A-0.5 (320-80943-7)	10/27/21	09:43 Pacific		Solid			X	X	X				1	
AOC3-S4A-2 (320-80943-8)	10/27/21	09:45 Pacific		Solid				X					1	
AOC3-S5A-0.5 (320-80943-9)	10/27/21	09:45 Pacific		Solid				X	X				1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] 1600	10/28/21	EMSL	Paul dcs	10/28/21 1600	DCS
2	[signature] 1600	Date/Time:	Company	Received by: Paul dcs	Date/Time: 1900	Company
3	Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 10-28-21 19:00	Company EETEAC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.5 & 2.2

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247275.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 2 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/3/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8270C/3550B (MOD) Local Method	8270C_SIM/3546 (MOD) PAH SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S5A-2 (320-80943-10)	10/27/21	09:50 Pacific		Solid				X					1	
AOC3-S4B-0.5 (320-80943-11)	10/27/21	09:56 Pacific		Solid			X	X	X				1	
AOC3-S4B-2 (320-80943-12)	10/27/21	09:58 Pacific		Solid				X					1	
AOC3/AOC8-S5B-0.5 (320-80943-13)	10/27/21	10:00 Pacific		Solid			X	X	X	X			1	
AOC3/AOC8-S5B-2 (320-80943-14)	10/27/21	10:02 Pacific		Solid				X		X			1	
AOC3-A6B-0.5 (320-80943-15)	10/27/21	10:23 Pacific		Solid			X	X	X				1	
AOC3-A6B-2 (320-80943-16)	10/27/21	10:26 Pacific		Solid				X					1	
AOC3-S6A-0.5 (320-80943-17)	10/27/21	10:28 Pacific		Solid			X	X	X				1	
AOC3-S6A-2 (320-80943-18)	10/27/21	10:30 Pacific		Solid				X					1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] 1600	10/28/21	TAS	Paul dcs	10/28/21 1600	DCS
2	[signature] 1900			Paul dcs	1900	
3				[signature]	10-28-21 19:00	EETSAC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247275.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 3 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/3/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8270C/3550B (MOD) Local Method	8270C_SIM/3546 (MOD) PAH SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S7A-0.5 (320-80943-19)	10/27/21	10:35 Pacific		Solid			X	X	X				1	
AOC3-S7A-2 (320-80943-20)	10/27/21	10:38 Pacific		Solid				X					1	
AOC3-S7B-0.5 (320-80943-21)	10/27/21	10:43 Pacific		Solid			X	X	X				1	
AOC3-S7B-2 (320-80943-22)	10/27/21	10:47 Pacific		Solid				X					1	
AOC3/AOC10-S8A-0.5 (320-80943-23)	10/27/21	11:01 Pacific		Solid				X	X		X	X	1	
AOC3/AOC10-S8A-2 (320-80943-24)	10/27/21	11:03 Pacific		Solid				X			X	X	1	
AOC3/AOC10-S8B-0.5 (320-80943-25)	10/27/21	11:27 Pacific		Solid				X	X		X	X	1	
AOC3/AOC10-S8B-2 (320-80943-26)	10/27/21	11:29 Pacific		Solid				X			X	X	1	
AOC3/AOC10-S9C-0.5 (320-80943-27)	10/27/21	11:41 Pacific		Solid				X	X		X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] 1600	10/28/21	TestAmerica	Paul dcs	10/28/21 1600	DCS
2	[signature] 1900		Company	Paul dcs	1900	Company
3	Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 10-28-21 19:00	Company EETSAC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247275.4
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 4 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/3/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8270C/3550B (MOD) Local Method	8270C_SIM/3546 (MOD) PAH SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3/AOC10-S9C-0.5DUP (320-80943-28)	10/27/21	11:41 Pacific		Solid				X	X		X	X	1	
AOC3/AOC10-S9C-2 (320-80943-29)	10/27/21	11:44 Pacific		Solid				X			X	X	1	
AOC3-S8D-0.5 (320-80943-30)	10/27/21	11:45 Pacific		Solid			X	X	X				1	
AOC3-S8D-2 (320-80943-31)	10/27/21	11:50 Pacific		Solid				X					1	
AOC3/AOC8-S8C-0.5 (320-80943-32)	10/27/21	11:55 Pacific		Solid			X	X	X	X			1	
AOC3/AOC8-S8C-2 (320-80943-33)	10/27/21	12:00 Pacific		Solid				X		X			1	
AOC3-S7C-0.5 (320-80943-34)	10/27/21	11:59 Pacific		Solid			X	X	X				1	
AOC3-S7C-2 (320-80943-35)	10/27/21	12:01 Pacific		Solid				X					1	
AOC3-S6C-0.5 (320-80943-36)	10/27/21	12:05 Pacific		Solid			X	X	X				1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] 1600	10/28/21	FedEx	dcs Paul	10/28/21 1600	DCS
2	1900			dcs Paul	1900	
3				[signature]	10-28-21/19:00	EETSAC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247275.5
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 5 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/3/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8270C/3550B (MOD) Local Method	8270C_SIM/3546 (MOD) PAH SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S6C-2 (320-80943-37)	10/27/21	12:07 Pacific		Solid				X					1	
AOC3-S7D-0.5 (320-80943-38)	10/27/21	12:25 Pacific		Solid				X	X				1	
AOC3-S7D-2 (320-80943-39)	10/27/21	12:30 Pacific		Solid				X					1	
AOC3-S5C-0.5 (320-80943-40)	10/27/21	12:30 Pacific		Solid			X	X	X				1	
AOC3-S5C-2 (320-80943-41)	10/27/21	12:35 Pacific		Solid				X					1	
AOC3-S4C-0.5 (320-80943-42)	10/27/21	12:35 Pacific		Solid			X	X	X				1	
AOC3-S4C-2 (320-80943-43)	10/27/21	12:40 Pacific		Solid				X					1	
AOC3-S3C-0.5 (320-80943-44)	10/27/21	12:50 Pacific		Solid			X	X	X				1	
AOC3-S3C-2 (320-80943-45)	10/27/21	12:55 Pacific		Solid			X	X	X				1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] 1600	10/28/21	EST	Paul dcs	10/28/21 1600	DCS
2	[signature] 1900			Paul dcs	1900	
3				[signature]	10/28-21 / 19:00	LEETAC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247275.6
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 6 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/3/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8270C/3550B (MOD) Local Method	8270C_SIM/3546 (MOD) PAH SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S1D-0.5 (320-80943-46)	10/27/21	13:14 Pacific		Solid				X	X				1	
AOC3-S1D-2 (320-80943-47)	10/27/21	13:15 Pacific		Solid				X					1	
AOC3/AOC8-S2D-0.5 (320-80943-48)	10/27/21	13:16 Pacific		Solid			X	X	X	X			1	
AOC3/AOC8-S2D-2 (320-80943-49)	10/27/21	13:18 Pacific		Solid				X		X			1	
AOC3/AOC8-S1E-0.5 (320-80943-50)	10/27/21	13:27 Pacific		Solid			X	X	X	X			1	
AOC3/AOC8-S1E-2 (320-80943-51)	10/27/21	13:29 Pacific		Solid				X		X			1	
AOC3-S2E-0.5 (320-80943-52)	10/27/21	13:30 Pacific		Solid			X	X	X				1	
AOC3-S2E-2ND (320-80943-53)	10/27/21	13:32 Pacific		Solid				X					1	
AOC3-S3E-0.5 (320-80943-54)	10/27/21	13:50 Pacific		Solid			X	X	X				1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

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Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] 1600	10/28/21	[illegible]	Paul dcs	10/28/21 1600	DCS
2	[signature] 1900			Paul dcs	1900	
3				[signature]	10-28-21 19:00	EETSAC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247275.7
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 7 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-80943-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/3/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290/8290_P_Sox 17 Isomers List	8270C/3550B (MOD) Local Method	8270C_SIM/3546 (MOD) PAH SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S3E-2 (320-80943-55)	10/27/21	13:52 Pacific		Solid				X					1	
AOC3-S3D-0.5 (320-80943-56)	10/27/21	13:52 Pacific		Solid			X	X	X				1	
AOC3-S3D-2 (320-80943-57)	10/27/21	13:54 Pacific		Solid				X					1	
AOC3-S4D-0.5 (320-80943-58)	10/27/21	13:58 Pacific		Solid			X	X	X				1	
AOC3-S4D-2 (320-80943-59)	10/27/21	14:00 Pacific		Solid				X					1	
AOC3-S4E-0.5 (320-80943-60)	10/27/21	14:05 Pacific		Solid				X	X				1	
AOC3-S4E-2 (320-80943-61)	10/27/21	14:07 Pacific		Solid				X					1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by: 1600	12/28/21	GAMES	Paul dcs	12/28/21 1600	DCS
Relinquished by: 1900	Date/Time:	Company	Received by: Paul dcs	Date/Time: 1900	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12-28-21 / 19:00	Company EETSAC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

TestAmerica CUSTO SEAL

Date 10/28/21 Signature

/IRC NG

320-80943 Waybill

ORIGIN ID:LVKA (928) 484-1919
SAMPLE RECEIVING
EUROFINS TLST AMERICA
780 MONTAGUE EXPRESSWAY
SUITE 602
SAN JOSE, CA 95131
UNITED STATES US

SHIP DATE: 28OCT21
ACTWGT: 40.90 LB
CAD: 0795504/CAFE3507
DIMS: 28x16x15 IN

BILL SENDER

TO SAMPLE RECEIVING
EUROFINS CALSCIENCE, LLC
7440 LINCOLN WAY

GARDEN GROVE CA 92841
(714) 895-5494 REF:
INV:
PO: DEPT

570C3/14BA/5F4D

RT 399 ST 7 5 10:30 C 7519 10 29

FedEx Express

J211020121101uv

FRI - 29 OCT 10:30A
PRIORITY OVERNIGHT

TRK# 0201 5047 2941 7519

92 APVA

92841
CA-US SNA

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80943-2

Login Number: 80943
List Number: 1
Creator: Garcia, Hilario A

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80943-2

Login Number: 80943
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5 & 2.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-80943-3
Client Project/Site: Cole School PEA
Revision: 1

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/15/2021 9:35:58 AM

Justinn Gonzales, Project Manager I
(925)484-1919
Justinn.Gonzales@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary 32
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Definitions/Glossary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 320-80943-3

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-80943-3

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 11/18/2021. The report (revision 1) is being revised due to: Report samples to MDL per client request.

Receipt
The samples were received on 10/28/2021 12:50 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.4º C and 2.5º C.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-543191 and analytical batch 320-543762 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S3B-2 — Lab Sample ID: 320-80943-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	49	F1	0.49	0.13	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5A-2 — Lab Sample ID: 320-80943-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	4.4		0.95	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S4B-2 — Lab Sample ID: 320-80943-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.9		0.97	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3/AOC8-S5B-2 — Lab Sample ID: 320-80943-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.2		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S6B-2 — Lab Sample ID: 320-80943-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.4		0.95	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S6A-2 — Lab Sample ID: 320-80943-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	54		0.95	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S7A-2 — Lab Sample ID: 320-80943-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	5.5		0.95	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S7B-2 — Lab Sample ID: 320-80943-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	42		0.50	0.13	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3/AOC10-S8A-2 — Lab Sample ID: 320-80943-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	43		0.50	0.13	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S8D-2 — Lab Sample ID: 320-80943-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	3.0		0.95	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3/AOC8-S8C-2 — Lab Sample ID: 320-80943-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	6.3		1.0	0.26	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S7C-2 — Lab Sample ID: 320-80943-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	6.1		0.95	0.25	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S6C-2 — Lab Sample ID: 320-80943-37

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	140		0.95	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5C-2 — Lab Sample ID: 320-80943-41

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	3.3		0.99	0.26	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S4C-2 — Lab Sample ID: 320-80943-43

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.9		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S3E-2 — Lab Sample ID: 320-80943-55

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.0		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S3D-2 — Lab Sample ID: 320-80943-57

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.0		1.0	0.26	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S4D-2 — Lab Sample ID: 320-80943-59

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	17		0.98	0.25	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S3B-2

Date Collected: 10/27/21 09:00
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-2

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	49	F1	0.49	0.13	mg/Kg		11/16/21 13:35	11/17/21 15:13	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S5A-2

Date Collected: 10/27/21 09:50
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-10

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.4		0.95	0.25	mg/Kg		11/16/21 13:35	11/17/21 15:32	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S4B-2

Date Collected: 10/27/21 09:58
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-12

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.9		0.97	0.25	mg/Kg		11/16/21 13:35	11/17/21 15:35	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3/AOC8-S5B-2

Lab Sample ID: 320-80943-14

Date Collected: 10/27/21 10:02

Matrix: Solid

Date Received: 10/28/21 12:50

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.2		2.0	1.3	mg/Kg		11/16/21 13:35	11/17/21 15:39	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S6B-2

Date Collected: 10/27/21 10:26
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-16

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.4		0.95	0.25	mg/Kg		11/16/21 13:35	11/17/21 15:51	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S6A-2

Date Collected: 10/27/21 10:30
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-18

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	54		0.95	0.25	mg/Kg		11/16/21 13:35	11/17/21 15:55	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S7A-2
Date Collected: 10/27/21 10:38
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-20
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.5		0.95	0.25	mg/Kg		11/16/21 13:35	11/17/21 15:58	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S7B-2

Date Collected: 10/27/21 10:47
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-22

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	42		0.50	0.13	mg/Kg		11/16/21 13:35	11/17/21 16:02	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3/AOC10-S8A-2

Lab Sample ID: 320-80943-24

Date Collected: 10/27/21 11:03
Matrix: Solid
Date Received: 10/28/21 12:50

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	43		0.50	0.13	mg/Kg		11/16/21 13:35	11/17/21 16:06	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S8D-2

Date Collected: 10/27/21 11:50
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-31

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.0		0.95	0.25	mg/Kg		11/16/21 13:35	11/17/21 16:10	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3/AOC8-S8C-2

Lab Sample ID: 320-80943-33

Date Collected: 10/27/21 12:00

Matrix: Solid

Date Received: 10/28/21 12:50

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.3		1.0	0.26	mg/Kg		11/16/21 13:35	11/17/21 16:14	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S7C-2

Date Collected: 10/27/21 12:01
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-35

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.1		0.95	0.25	mg/Kg		11/16/21 13:35	11/17/21 16:17	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S6C-2

Date Collected: 10/27/21 12:07
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-37

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	140		0.95	0.25	mg/Kg		11/16/21 13:35	11/17/21 16:21	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S5C-2

Date Collected: 10/27/21 12:35
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-41

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.3		0.99	0.26	mg/Kg		11/16/21 13:35	11/17/21 16:25	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S4C-2
Date Collected: 10/27/21 12:40
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-43
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9		1.9	1.3	mg/Kg		11/16/21 13:35	11/17/21 16:36	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S3E-2

Date Collected: 10/27/21 13:52
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-55

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		2.0	1.3	mg/Kg		11/16/21 13:35	11/17/21 16:40	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S3D-2

Date Collected: 10/27/21 13:54
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-57

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.0		1.0	0.26	mg/Kg		11/16/21 13:35	11/17/21 16:44	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S4D-2

Date Collected: 10/27/21 14:00
Date Received: 10/28/21 12:50

Lab Sample ID: 320-80943-59

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	17		0.98	0.25	mg/Kg		11/16/21 13:35	11/17/21 16:48	1

QC Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 320-543191/1-A
Matrix: Solid
Analysis Batch: 543762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 543191

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.26	mg/Kg		11/16/21 13:35	11/17/21 15:05	1
Arsenic	ND		2.0	1.3	mg/Kg		11/16/21 13:35	11/17/21 15:05	1

Lab Sample ID: LCS 320-543191/2-A
Matrix: Solid
Analysis Batch: 543762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543191

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			25.0	23.1		mg/Kg		92	80 - 120		
Arsenic			50.0	44.8		mg/Kg		90	80 - 120		

Lab Sample ID: 320-80943-2 MS
Matrix: Solid
Analysis Batch: 543762

Client Sample ID: AOC3-S3B-2
Prep Type: Total/NA
Prep Batch: 543191

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	49	F1	12.6	64.7	F1	mg/Kg		126	80 - 120		
Arsenic	3.9		25.1	25.2		mg/Kg		85	80 - 120		

Lab Sample ID: 320-80943-2 MSD
Matrix: Solid
Analysis Batch: 543762

Client Sample ID: AOC3-S3B-2
Prep Type: Total/NA
Prep Batch: 543191

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	49	F1	12.3	60.2		mg/Kg		92	80 - 120	7	35
Arsenic	3.9		24.6	25.8		mg/Kg		89	80 - 120	2	35

QC Association Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Metals

Prep Batch: 543191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-2	AOC3-S3B-2	Total/NA	Solid	3050B	
320-80943-10	AOC3-S5A-2	Total/NA	Solid	3050B	
320-80943-12	AOC3-S4B-2	Total/NA	Solid	3050B	
320-80943-14	AOC3/AOC8-S5B-2	Total/NA	Solid	3050B	
320-80943-16	AOC3-S6B-2	Total/NA	Solid	3050B	
320-80943-18	AOC3-S6A-2	Total/NA	Solid	3050B	
320-80943-20	AOC3-S7A-2	Total/NA	Solid	3050B	
320-80943-22	AOC3-S7B-2	Total/NA	Solid	3050B	
320-80943-24	AOC3/AOC10-S8A-2	Total/NA	Solid	3050B	
320-80943-31	AOC3-S8D-2	Total/NA	Solid	3050B	
320-80943-33	AOC3/AOC8-S8C-2	Total/NA	Solid	3050B	
320-80943-35	AOC3-S7C-2	Total/NA	Solid	3050B	
320-80943-37	AOC3-S6C-2	Total/NA	Solid	3050B	
320-80943-41	AOC3-S5C-2	Total/NA	Solid	3050B	
320-80943-43	AOC3-S4C-2	Total/NA	Solid	3050B	
320-80943-55	AOC3-S3E-2	Total/NA	Solid	3050B	
320-80943-57	AOC3-S3D-2	Total/NA	Solid	3050B	
320-80943-59	AOC3-S4D-2	Total/NA	Solid	3050B	
MB 320-543191/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-543191/2-A	Lab Control Sample	Total/NA	Solid	3050B	
320-80943-2 MS	AOC3-S3B-2	Total/NA	Solid	3050B	
320-80943-2 MSD	AOC3-S3B-2	Total/NA	Solid	3050B	

Analysis Batch: 543762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80943-2	AOC3-S3B-2	Total/NA	Solid	6010B	543191
320-80943-10	AOC3-S5A-2	Total/NA	Solid	6010B	543191
320-80943-12	AOC3-S4B-2	Total/NA	Solid	6010B	543191
320-80943-14	AOC3/AOC8-S5B-2	Total/NA	Solid	6010B	543191
320-80943-16	AOC3-S6B-2	Total/NA	Solid	6010B	543191
320-80943-18	AOC3-S6A-2	Total/NA	Solid	6010B	543191
320-80943-20	AOC3-S7A-2	Total/NA	Solid	6010B	543191
320-80943-22	AOC3-S7B-2	Total/NA	Solid	6010B	543191
320-80943-24	AOC3/AOC10-S8A-2	Total/NA	Solid	6010B	543191
320-80943-31	AOC3-S8D-2	Total/NA	Solid	6010B	543191
320-80943-33	AOC3/AOC8-S8C-2	Total/NA	Solid	6010B	543191
320-80943-35	AOC3-S7C-2	Total/NA	Solid	6010B	543191
320-80943-37	AOC3-S6C-2	Total/NA	Solid	6010B	543191
320-80943-41	AOC3-S5C-2	Total/NA	Solid	6010B	543191
320-80943-43	AOC3-S4C-2	Total/NA	Solid	6010B	543191
320-80943-55	AOC3-S3E-2	Total/NA	Solid	6010B	543191
320-80943-57	AOC3-S3D-2	Total/NA	Solid	6010B	543191
320-80943-59	AOC3-S4D-2	Total/NA	Solid	6010B	543191
MB 320-543191/1-A	Method Blank	Total/NA	Solid	6010B	543191
LCS 320-543191/2-A	Lab Control Sample	Total/NA	Solid	6010B	543191
320-80943-2 MS	AOC3-S3B-2	Total/NA	Solid	6010B	543191
320-80943-2 MSD	AOC3-S3B-2	Total/NA	Solid	6010B	543191

Client Sample ID: AOC3-S3B-2
Lab Sample ID: 320-80943-2
Date Collected: 10/27/21 09:00
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			2.05 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 15:13	GSH	TAL SAC

Client Sample ID: AOC3-S5A-2
Lab Sample ID: 320-80943-10
Date Collected: 10/27/21 09:50
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 15:32	GSH	TAL SAC

Client Sample ID: AOC3-S4B-2
Lab Sample ID: 320-80943-12
Date Collected: 10/27/21 09:58
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 15:35	GSH	TAL SAC

Client Sample ID: AOC3/AOC8-S5B-2
Lab Sample ID: 320-80943-14
Date Collected: 10/27/21 10:02
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 15:39	GSH	TAL SAC

Client Sample ID: AOC3-S6B-2
Lab Sample ID: 320-80943-16
Date Collected: 10/27/21 10:26
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 15:51	GSH	TAL SAC

Client Sample ID: AOC3-S6A-2
Lab Sample ID: 320-80943-18
Date Collected: 10/27/21 10:30
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 15:55	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S7A-2
Lab Sample ID: 320-80943-20
Date Collected: 10/27/21 10:38
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 15:58	GSH	TAL SAC

Client Sample ID: AOC3-S7B-2
Lab Sample ID: 320-80943-22
Date Collected: 10/27/21 10:47
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			2.00 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 16:02	GSH	TAL SAC

Client Sample ID: AOC3/AOC10-S8A-2
Lab Sample ID: 320-80943-24
Date Collected: 10/27/21 11:03
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			2.02 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 16:06	GSH	TAL SAC

Client Sample ID: AOC3-S8D-2
Lab Sample ID: 320-80943-31
Date Collected: 10/27/21 11:50
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 16:10	GSH	TAL SAC

Client Sample ID: AOC3/AOC8-S8C-2
Lab Sample ID: 320-80943-33
Date Collected: 10/27/21 12:00
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 16:14	GSH	TAL SAC

Client Sample ID: AOC3-S7C-2
Lab Sample ID: 320-80943-35
Date Collected: 10/27/21 12:01
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 16:17	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Client Sample ID: AOC3-S6C-2
Lab Sample ID: 320-80943-37
Date Collected: 10/27/21 12:07
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 16:21	GSH	TAL SAC

Client Sample ID: AOC3-S5C-2
Lab Sample ID: 320-80943-41
Date Collected: 10/27/21 12:35
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 16:25	GSH	TAL SAC

Client Sample ID: AOC3-S4C-2
Lab Sample ID: 320-80943-43
Date Collected: 10/27/21 12:40
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 16:36	GSH	TAL SAC

Client Sample ID: AOC3-S3E-2
Lab Sample ID: 320-80943-55
Date Collected: 10/27/21 13:52
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 16:40	GSH	TAL SAC

Client Sample ID: AOC3-S3D-2
Lab Sample ID: 320-80943-57
Date Collected: 10/27/21 13:54
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 16:44	GSH	TAL SAC

Client Sample ID: AOC3-S4D-2
Lab Sample ID: 320-80943-59
Date Collected: 10/27/21 14:00
Matrix: Solid
Date Received: 10/28/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	100 mL	543191	11/16/21 13:35	JP	TAL SAC
Total/NA	Analysis	6010B		1			543762	11/17/21 16:48	GSH	TAL SAC

Laboratory References:
TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-80943-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-80943-2	AOC3-S3B-2	Solid	10/27/21 09:00	10/28/21 12:50
320-80943-10	AOC3-S5A-2	Solid	10/27/21 09:50	10/28/21 12:50
320-80943-12	AOC3-S4B-2	Solid	10/27/21 09:58	10/28/21 12:50
320-80943-14	AOC3/AOC8-S5B-2	Solid	10/27/21 10:02	10/28/21 12:50
320-80943-16	AOC3-S6B-2	Solid	10/27/21 10:26	10/28/21 12:50
320-80943-18	AOC3-S6A-2	Solid	10/27/21 10:30	10/28/21 12:50
320-80943-20	AOC3-S7A-2	Solid	10/27/21 10:38	10/28/21 12:50
320-80943-22	AOC3-S7B-2	Solid	10/27/21 10:47	10/28/21 12:50
320-80943-24	AOC3/AOC10-S8A-2	Solid	10/27/21 11:03	10/28/21 12:50
320-80943-31	AOC3-S8D-2	Solid	10/27/21 11:50	10/28/21 12:50
320-80943-33	AOC3/AOC8-S8C-2	Solid	10/27/21 12:00	10/28/21 12:50
320-80943-35	AOC3-S7C-2	Solid	10/27/21 12:01	10/28/21 12:50
320-80943-37	AOC3-S6C-2	Solid	10/27/21 12:07	10/28/21 12:50
320-80943-41	AOC3-S5C-2	Solid	10/27/21 12:35	10/28/21 12:50
320-80943-43	AOC3-S4C-2	Solid	10/27/21 12:40	10/28/21 12:50
320-80943-55	AOC3-S3E-2	Solid	10/27/21 13:52	10/28/21 12:50
320-80943-57	AOC3-S3D-2	Solid	10/27/21 13:54	10/28/21 12:50
320-80943-59	AOC3-S4D-2	Solid	10/27/21 14:00	10/28/21 12:50

Gonzales, Justinn

From: Gonzales, Justinn
Sent: Monday, November 15, 2021 3:50 PM
To: Nathan Diem
Subject: RE: Preliminary Eurofins TestAmerica report files from 320-80943-1 Cole School PEA

Got it. Sample AOC3-S3C-2 already has Lead and Arsenic reported.

Justinn Gonzales
Project Manager

Please take a minute to rate our service!



Phone: 925-484-1919
Direct: 916-374-4344



E-mail: Justinn.Gonzales@eurofinset.com
www.testamericainc.com | www.EurofinsUS.com/env

Follow us! Facebook | LinkedIn

From: Nathan Diem <ndiem@ninyoandmoore.com>
Sent: Monday, November 15, 2021 3:28 PM
To: Gonzales, Justinn <Justinn.Gonzales@Eurofinset.com>
Subject: RE: Preliminary Eurofins TestAmerica report files from 320-80943-1 Cole School PEA

EXTERNAL EMAIL*

Hi Justinn,

I need to run additional lead and arsenic for the following samples:

Lead:

AOC3-S3B-2
AOC3-S5A-2
AOC3-S4B-2
AOC3-S6B-2

AOC3-S6A-2
AOC3-S7A-2
AOC3-S7B-2
AOC3/AOC10-S8A-2
AOC3-S8D-2
AOC3/AOC8-S8C-2
AOC3-S7C-2
AOC3-S6C-2
AOC3-S5C-2
AOC3-S3C-2
AOC3/AOC8-S2D-2
AOC3-S3D-2
AOC3-S4D-2

Arsenic:

AOC3/AOC8-S5B-2
AOC3-S4C-2
AOC3-S3C-2
AOC3-S3E-2

Thanks

Nathan Diem
Project Geologist
Ninyo & Moore
510.343.3000 (**x15226**)

From: Justinn Gonzales [mailto:Justinn.Gonzales@Eurofinset.com]
Sent: Monday, November 15, 2021 1:05 PM
To: Nathan Diem <ndiem@ninyoandmoore.com>
Subject: Preliminary Eurofins TestAmerica report files from 320-80943-1 Cole School PEA

Hello,

Attached please find the report files for job 320-80943-1; Cole School PEA

Please feel free to contact me if you have any questions.

Thank you.

Justinn Gonzales
Project Manager

Eurofins TestAmerica, Sacramento
Phone: 925-484-1919

E-mail: Justinn.Gonzales@Eurofinset.com
www.eurofinsus.com/env

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80943-3

Login Number: 80943
List Number: 1
Creator: Garcia, Hilario A

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-80943-3

Login Number: 80943
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5 & 2.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-81042-1
Client Project/Site: Cole School PEA
Revision: 1

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/15/2021 10:09:43 AM

Justinn Gonzales, Project Manager I
(925)484-1919
Justinn.Gonzales@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
P	The %RPD between the primary and confirmation column/detector is >40%. The higher value has been reported
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 320-81042-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-81042-1

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 12/1/2021. The report (revision 1) is being revised due to: Report samples to MDL per client request.

Receipt
The samples were received on 10/29/2021 2:21 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.8º C, 1.0º C and 1.8º C.

GC Semi VOA
Method 8082: Surrogate recovery for the following samples were outside control limits: AOC3-S5E-0.5 (320-81042-5), AOC3/AOC8-S6E-0.5 (320-81042-7), AOC3-S7E-0.5 (320-81042-15), (320-81042-A-15-D MS), (320-81042-A-15-E MSD), AOC3-S2H-0.5 (320-81042-35), AOC3-S2F-0.5 (320-81042-37), AOC3-S2F-0.5 DUP (320-81042-39), AOC3-S1F-0.5 (320-81042-40), AOC3-S1G-0.5 (320-81042-42), AOC3-S1H-0.5 (320-81042-44), AOC3-S5H-0.5 (320-81042-46), AOC3-S4H-0.5 (320-81042-48), AOC3-S3H-0.5 (320-81042-50), AOC3-S4I-0.5 (320-81042-52) and AOC3-S5I-0.5 (320-81042-54). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8082: The following samples were diluted due to the nature of the sample matrix: AOC3-S6G-0.5 (320-81042-18), AOC3-S5F-0.5 (320-81042-20), AOC3-S4F-0.5 (320-81042-22), AOC3-S3F-0.5 (320-81042-24), AOC3/AOC8-S3G-0.5 (320-81042-26), AOC3-S4G-0.5 (320-81042-28) and AOC3-S5G-0.5 (320-81042-30). Elevated reporting limits (RLs) are provided.

Method 8082: The continuing calibration verification (CCV) associated with batch 320-544372 recovered above the upper control limit for PCB-1221 and PCB-1254. The samples associated with this CCV were non-detect for all PCB mixtures; therefore, the data have been reported. The associated samples are impacted: AOC3-S6G-0.5 (320-81042-18), AOC3-S5F-0.5 (320-81042-20), AOC3-S4F-0.5 (320-81042-22), AOC3-S3F-0.5 (320-81042-24), AOC3/AOC8-S3G-0.5 (320-81042-26), AOC3-S4G-0.5 (320-81042-28), AOC3-S5G-0.5 (320-81042-30), AOC3-S2G-0.5 (320-81042-33), AOC3-S2H-0.5 (320-81042-35), AOC3-S2F-0.5 (320-81042-37), AOC3-S2F-0.5 DUP (320-81042-39), AOC3-S1F-0.5 (320-81042-40), AOC3-S1G-0.5 (320-81042-42), AOC3-S1H-0.5 (320-81042-44), AOC3-S5H-0.5 (320-81042-46), AOC3-S4H-0.5 (320-81042-48), AOC3-S3H-0.5 (320-81042-50), (CCV 320-544372/4), (LCS 320-541215/2-A), (LCS 320-541228/2-A), (MB 320-541215/1-A) and (MB 320-541228/1-A).

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC3-S6D-0.5 (320-81042-1), AOC3-S5D--0.5 (320-81042-3), AOC3-S5E-0.5 (320-81042-5), AOC3/AOC8-S6E-0.5 (320-81042-7), AOC3-S8E-0.5 (320-81042-9), AOC3-S9E-0.5 (320-81042-12), AOC3-S9E-0.5 DUP (320-81042-13), AOC3-S7E-0.5 (320-81042-15), AOC3-S6F-0.5 (320-81042-16), AOC3-S6G-0.5 (320-81042-18), AOC3-S6G-2 (320-81042-19), AOC3-S5F-0.5 (320-81042-20), AOC3-S4F-0.5 (320-81042-22), AOC3-S4F-2 (320-81042-23), AOC3-S3F-0.5 (320-81042-24), AOC3/AOC8-S3G-0.5 (320-81042-26), AOC3-S4G-0.5 (320-81042-28), AOC3-S5G-0.5 (320-81042-30), AOC3-S2G-0.5 (320-81042-33), AOC3-S2H-0.5 (320-81042-35), AOC3-S2H-2 (320-81042-36), (320-81042-A-36-B MS), (320-81042-A-36-C MSD), AOC3-S2F-0.5 (320-81042-37), AOC3-S2F-0.5 DUP (320-81042-39), AOC3-S1F-0.5 (320-81042-40), AOC3-S1G-0.5 (320-81042-42), AOC3-S1H-0.5 (320-81042-44), AOC3-S5H-0.5 (320-81042-46), AOC3-S4H-0.5 (320-81042-48), AOC3-S3H-0.5 (320-81042-50), AOC3-S4I-0.5 (320-81042-52) and AOC3-S5I-0.5 (320-81042-54). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC3-S6D-2 (320-81042-2), AOC3-S5D-2 (320-81042-4), AOC3-S5E-2 (320-81042-6), AOC3-S8E-2 (320-81042-10), AOC3-S6F-2 (320-81042-17), AOC3-S5F-2 (320-81042-21), AOC3-S3F-2 (320-81042-25), AOC3/AOC8-S3G-2 (320-81042-27), AOC3-S4G-2 (320-81042-29), AOC3-S5G-2 (320-81042-31), AOC3-S5G-2 DUP (320-81042-32), AOC3-S2G-2 (320-81042-34), AOC3-S4I-2 (320-81042-53) and AOC3-S5I-2 (320-81042-55). Elevated reporting limits (RLs) are provided.

Method 8081A: Surrogate recovery for the following samples were outside control limits: AOC3-S5E-2 (320-81042-6), AOC3/AOC8-S6E-2 (320-81042-8), AOC3-S8E-2 (320-81042-10), AOC3-S7E-2 (320-81042-11), AOC3-S9E-2 (320-81042-14), AOC3-S6F-2 (320-81042-17), AOC3/AOC8-S3G-2 (320-81042-27), AOC3-S2F-2 (320-81042-38), AOC3-S1F-2 (320-81042-41), AOC3-S1G-2 (320-81042-43),

Job ID: 320-81042-1 (Continued)

Laboratory: Eurofins TestAmerica, Sacramento (Continued)

AOC3-S1H-2 (320-81042-45) and AOC3-S5I-2 (320-81042-55). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: (320-81042-A-16-C MS), (320-81042-A-16-D MSD), (320-81042-A-18-C MS), (320-81042-A-18-D MSD), (320-81042-A-36-B MS), (320-81042-A-36-C MSD), (320-81042-A-54-C MS) and (320-81042-A-54-D MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8081A: The %RPD between the primary and confirmation column exceeded 40% for Endrin ketone for the following samples: (320-81042-A-16-D MSD) and (320-81042-A-54-D MSD). The results from primary column have been reported and qualified in accordance with the laboratory's SOP.

Method 8081A: The %RPD between the primary and confirmation column exceeded 40% for Endosulfan I, Endosulfan II, Endrin ketone, Dieldrin, cis-Chlordane, Aldrin, Endrin and 4,4'-DDT for the following samples: (320-81042-A-18-C MS), (320-81042-A-18-D MSD) and (320-81042-A-36-B MS). The results from primary column have been reported and qualified in accordance with the laboratory's SOP. 320-81042-18[MS] for Endosulfan I, Endosulfan II and Endrin ketone Dieldrin. 320-81042-18[MSD] for Endosulfan I, Endosulfan II, Endrin ketone, Dieldrin, cis-Chlordane, Aldrin, Endrin, and 4,4'-DDT. 320-81042-36[MS] for Endosulfan I.

Method 8081A: The method blank for preparation batch 320-541292 and analytical batch 320-546025 contained Heptachlor above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-539068 and analytical batch 320-539464 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-539068 and analytical batch 320-539835 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010B: The serial dilution performed for the following samples associated with batch 320-539464 was above the control limits of 10% for the following analytes: Barium (13%). The associated sample is: (320-81042-A-1-A SD ^5).

Method 6010B: The serial dilution performed for the following samples associated with batch 320-539835 was above the control limits of 10% for the following analytes: Zinc (11%). The associated sample is: (320-81042-A-1-A SD ^5)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with method 8081A aqueous in preparation batch 320-539998.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with method 8082 aqueous in preparation batch 320-539996.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S6D-0.5 — Lab Sample ID: 320-81042-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	0.12	J	0.52	0.093	mg/Kg	1		6010B	Total/NA
Arsenic	4.6		2.1	1.3	mg/Kg	1		6010B	Total/NA
Barium	110	F1	1.0	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.40		0.21	0.031	mg/Kg	1		6010B	Total/NA
Cadmium	0.19	J	0.21	0.031	mg/Kg	1		6010B	Total/NA
Cobalt	5.5		0.52	0.26	mg/Kg	1		6010B	Total/NA
Chromium	21		0.52	0.14	mg/Kg	1		6010B	Total/NA
Copper	36	F1	1.5	0.23	mg/Kg	1		6010B	Total/NA
Nickel	20		1.0	0.25	mg/Kg	1		6010B	Total/NA
Lead	110	B	1.0	0.27	mg/Kg	1		6010B	Total/NA
Antimony	8.0	F1	2.1	0.97	mg/Kg	1		6010B	Total/NA
Vanadium	23	F1	0.52	0.20	mg/Kg	1		6010B	Total/NA
Zinc	110	F1	2.1	0.20	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S6D-2 — Lab Sample ID: 320-81042-2

No Detections.

Client Sample ID: AOC3-S5D--0.5 — Lab Sample ID: 320-81042-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	150	B	0.96	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	11		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5D-2 — Lab Sample ID: 320-81042-4

No Detections.

Client Sample ID: AOC3-S5E-0.5 — Lab Sample ID: 320-81042-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.1		2.0	1.3	mg/Kg	1		6010B	Total/NA
Barium	99		1.0	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.36		0.20	0.030	mg/Kg	1		6010B	Total/NA
Cadmium	0.34		0.20	0.030	mg/Kg	1		6010B	Total/NA
Cobalt	5.5		0.50	0.25	mg/Kg	1		6010B	Total/NA
Chromium	19		0.50	0.14	mg/Kg	1		6010B	Total/NA
Copper	19		1.5	0.22	mg/Kg	1		6010B	Total/NA
Nickel	17		1.0	0.24	mg/Kg	1		6010B	Total/NA
Lead	260	B	1.0	0.26	mg/Kg	1		6010B	Total/NA
Antimony	6.4		2.0	0.94	mg/Kg	1		6010B	Total/NA
Vanadium	21		0.50	0.19	mg/Kg	1		6010B	Total/NA
Zinc	130		2.0	0.19	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5E-2 — Lab Sample ID: 320-81042-6

No Detections.

Client Sample ID: AOC3/AOC8-S6E-0.5 — Lab Sample ID: 320-81042-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	690	B	1.0	0.27	mg/Kg	1		6010B	Total/NA
Arsenic	6.1		2.0	1.3	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3/AOC8-S6E-2 — Lab Sample ID: 320-81042-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methoxychlor	7.9		3.3	0.55	ug/Kg	1		8081A	Total/NA

Client Sample ID: AOC3-S8E-0.5 — Lab Sample ID: 320-81042-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	220	B	1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	12		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S8E-2 — Lab Sample ID: 320-81042-10

No Detections.

Client Sample ID: AOC3-S7E-2 — Lab Sample ID: 320-81042-11

No Detections.

Client Sample ID: AOC3-S9E-0.5 — Lab Sample ID: 320-81042-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	130	B	0.99	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	7.4		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S9E-0.5 DUP — Lab Sample ID: 320-81042-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	49	B	0.96	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	2.8		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S9E-2 — Lab Sample ID: 320-81042-14

No Detections.

Client Sample ID: AOC3-S7E-0.5 — Lab Sample ID: 320-81042-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	120	B	1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	3.2		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S6F-0.5 — Lab Sample ID: 320-81042-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	170	B	1.0	0.27	mg/Kg	1		6010B	Total/NA
Arsenic	4.0		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S6F-2 — Lab Sample ID: 320-81042-17

No Detections.

Client Sample ID: AOC3-S6G-0.5 — Lab Sample ID: 320-81042-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	0.12	J	0.50	0.090	mg/Kg	1		6010B	Total/NA
Arsenic	3.9		2.0	1.3	mg/Kg	1		6010B	Total/NA
Barium	130		1.0	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.46		0.20	0.030	mg/Kg	1		6010B	Total/NA
Cadmium	0.45		0.20	0.030	mg/Kg	1		6010B	Total/NA
Cobalt	4.6		0.50	0.25	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AOC3-S6G-0.5 (Continued) — Lab Sample ID: 320-81042-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	27		0.50	0.14	mg/Kg	1		6010B	Total/NA
Copper	31		1.5	0.22	mg/Kg	1		6010B	Total/NA
Nickel	18		1.0	0.24	mg/Kg	1		6010B	Total/NA
Lead	200	B	1.0	0.26	mg/Kg	1		6010B	Total/NA
Antimony	8.7		2.0	0.94	mg/Kg	1		6010B	Total/NA
Vanadium	24		0.50	0.19	mg/Kg	1		6010B	Total/NA
Zinc	260		2.0	0.19	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S6G-2 — Lab Sample ID: 320-81042-19

No Detections.

Client Sample ID: AOC3-S5F-0.5 — Lab Sample ID: 320-81042-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	200	B	0.97	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	3.9		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5F-2 — Lab Sample ID: 320-81042-21

No Detections.

Client Sample ID: AOC3-S4F-0.5 — Lab Sample ID: 320-81042-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	96	B	0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	4.1		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S4F-2 — Lab Sample ID: 320-81042-23

No Detections.

Client Sample ID: AOC3-S3F-0.5 — Lab Sample ID: 320-81042-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	180	B	0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	6.4		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S3F-2 — Lab Sample ID: 320-81042-25

No Detections.

Client Sample ID: AOC3/AOC8-S3G-0.5 — Lab Sample ID: 320-81042-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	88	B	1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	14		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3/AOC8-S3G-2 — Lab Sample ID: 320-81042-27

No Detections.

Client Sample ID: AOC3-S4G-0.5 — Lab Sample ID: 320-81042-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	130	B	1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	4.5		2.0	1.3	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S4G-2 — Lab Sample ID: 320-81042-29

No Detections.

Client Sample ID: AOC3-S5G-0.5 — Lab Sample ID: 320-81042-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	17	B	0.99	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	45		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5G-2 — Lab Sample ID: 320-81042-31

No Detections.

Client Sample ID: AOC3-S5G-2 DUP — Lab Sample ID: 320-81042-32

No Detections.

Client Sample ID: AOC3-S2G-0.5 — Lab Sample ID: 320-81042-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	13	B	1.0	0.27	mg/Kg	1		6010B	Total/NA
Arsenic	16		2.1	1.4	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S2G-2 — Lab Sample ID: 320-81042-34

No Detections.

Client Sample ID: AOC3-S2H-0.5 — Lab Sample ID: 320-81042-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	71	B	1.0	0.27	mg/Kg	1		6010B	Total/NA
Arsenic	10		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S2H-2 — Lab Sample ID: 320-81042-36

No Detections.

Client Sample ID: AOC3-S2F-0.5 — Lab Sample ID: 320-81042-37

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	8.9		1.2	0.76	mg/Kg	1		6010B	Total/NA
Barium	84		0.58	0.070	mg/Kg	1		6010B	Total/NA
Beryllium	0.29		0.12	0.018	mg/Kg	1		6010B	Total/NA
Cadmium	0.11	J	0.12	0.018	mg/Kg	1		6010B	Total/NA
Cobalt	6.6		0.29	0.15	mg/Kg	1		6010B	Total/NA
Chromium	8.8		0.29	0.082	mg/Kg	1		6010B	Total/NA
Copper	13		0.88	0.13	mg/Kg	1		6010B	Total/NA
Molybdenum	0.86	J	1.2	0.44	mg/Kg	1		6010B	Total/NA
Nickel	14		0.58	0.14	mg/Kg	1		6010B	Total/NA
Lead	5.9	B	0.58	0.15	mg/Kg	1		6010B	Total/NA
Antimony	2.1		1.2	0.55	mg/Kg	1		6010B	Total/NA
Vanadium	23		0.29	0.11	mg/Kg	1		6010B	Total/NA
Zinc	58		1.2	0.11	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S2F-2 — Lab Sample ID: 320-81042-38

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S2F-0.5 DUP — Lab Sample ID: 320-81042-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	13		1.9	1.2	mg/Kg	1		6010B	Total/NA
Barium	140		0.94	0.11	mg/Kg	1		6010B	Total/NA
Beryllium	0.46		0.19	0.028	mg/Kg	1		6010B	Total/NA
Cadmium	0.20		0.19	0.028	mg/Kg	1		6010B	Total/NA
Cobalt	11		0.47	0.24	mg/Kg	1		6010B	Total/NA
Chromium	12		0.47	0.13	mg/Kg	1		6010B	Total/NA
Copper	29		1.4	0.21	mg/Kg	1		6010B	Total/NA
Molybdenum	1.2	J	1.9	0.71	mg/Kg	1		6010B	Total/NA
Nickel	19		0.94	0.23	mg/Kg	1		6010B	Total/NA
Lead	12	B	0.94	0.25	mg/Kg	1		6010B	Total/NA
Antimony	1.8	J	1.9	0.89	mg/Kg	1		6010B	Total/NA
Vanadium	33		0.47	0.18	mg/Kg	1		6010B	Total/NA
Zinc	96		1.9	0.18	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S1F-0.5 — Lab Sample ID: 320-81042-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.2		0.97	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	4.4		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S1F-2 — Lab Sample ID: 320-81042-41

No Detections.

Client Sample ID: AOC3-S1G-0.5 — Lab Sample ID: 320-81042-42

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	13		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	3.2		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S1G-2 — Lab Sample ID: 320-81042-43

No Detections.

Client Sample ID: AOC3-S1H-0.5 — Lab Sample ID: 320-81042-44

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	79		0.97	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	8.4		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S1H-2 — Lab Sample ID: 320-81042-45

No Detections.

Client Sample ID: AOC3-S5H-0.5 — Lab Sample ID: 320-81042-46

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	670		0.97	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	9.1		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5H-2 — Lab Sample ID: 320-81042-47

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S4H-0.5 — Lab Sample ID: 320-81042-48

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	94		0.95	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	2.7		1.9	1.2	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S4H-2 — Lab Sample ID: 320-81042-49

No Detections.

Client Sample ID: AOC3-S3H-0.5 — Lab Sample ID: 320-81042-50

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	150		0.99	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	9.7		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S3H-2 — Lab Sample ID: 320-81042-51

No Detections.

Client Sample ID: AOC3-S4I-0.5 — Lab Sample ID: 320-81042-52

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	16		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	9.0		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S4I-2 — Lab Sample ID: 320-81042-53

No Detections.

Client Sample ID: AOC3-S5I-0.5 — Lab Sample ID: 320-81042-54

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	80		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	4.3		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5I-2 — Lab Sample ID: 320-81042-55

No Detections.

Client Sample ID: EB10282021 — Lab Sample ID: 320-81042-56

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S6D-0.5

Date Collected: 10/28/21 08:27
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-1

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		34	4.6	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
4,4'-DDE	ND		34	4.2	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
4,4'-DDT	ND		34	5.0	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
Aldrin	ND		34	2.8	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
alpha-BHC	ND		34	3.2	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
cis-Chlordane	ND		34	3.6	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
beta-BHC	ND		34	4.4	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
Chlordane (technical)	ND		400	190	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
delta-BHC	ND		34	6.9	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
Dieldrin	ND		34	4.0	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
Endosulfan I	ND		34	3.6	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
Endosulfan II	ND		34	3.6	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
Endosulfan sulfate	ND		34	6.9	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
Endrin	ND		34	4.0	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
Endrin aldehyde	ND		34	11	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
Endrin ketone	ND		34	5.4	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
trans-Chlordane	ND		34	12	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
gamma-BHC (Lindane)	ND		34	2.8	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
Heptachlor	ND		34	3.0	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
Heptachlor epoxide	ND		34	3.6	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
Methoxychlor	ND		68	11	ug/Kg		11/08/21 15:14	11/24/21 17:11	20
Toxaphene	ND		1300	440	ug/Kg		11/08/21 15:14	11/24/21 17:11	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*70*		*46 - 109*	*11/08/21 15:14*	*11/24/21 17:11*	*20*
DCB Decachlorobiphenyl	*50*		*46 - 109*	*11/08/21 15:14*	*11/24/21 17:11*	*20*
Tetrachloro-m-xylene	*113*	*S1+*	*47 - 107*	*11/08/21 15:14*	*11/24/21 17:11*	*20*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/08/21 15:14*	*11/24/21 17:11*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/08/21 15:15	11/18/21 21:50	1
PCB-1221	ND		33	3.6	ug/Kg		11/08/21 15:15	11/18/21 21:50	1
PCB-1232	ND		33	4.8	ug/Kg		11/08/21 15:15	11/18/21 21:50	1
PCB-1242	ND		33	5.9	ug/Kg		11/08/21 15:15	11/18/21 21:50	1
PCB-1248	ND		33	2.4	ug/Kg		11/08/21 15:15	11/18/21 21:50	1
PCB-1254	ND		33	3.8	ug/Kg		11/08/21 15:15	11/18/21 21:50	1
PCB-1260	ND		33	2.7	ug/Kg		11/08/21 15:15	11/18/21 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*53*		*52 - 138*	*11/08/21 15:15*	*11/18/21 21:50*	*1*
Tetrachloro-m-xylene	*68*		*56 - 114*	*11/08/21 15:15*	*11/18/21 21:50*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.12**	**J**	0.52	0.093	mg/Kg		11/02/21 06:55	11/02/21 18:43	1
Arsenic	**4.6**		2.1	1.3	mg/Kg		11/02/21 06:55	11/02/21 18:43	1
Barium	**110**	**F1**	1.0	0.12	mg/Kg		11/02/21 06:55	11/02/21 18:43	1
Beryllium	**0.40**		0.21	0.031	mg/Kg		11/02/21 06:55	11/02/21 18:43	1
Cadmium	**0.19**	**J**	0.21	0.031	mg/Kg		11/02/21 06:55	11/02/21 18:43	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S6D-0.5
Date Collected: 10/28/21 08:27
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-1
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	5.5		0.52	0.26	mg/Kg		11/02/21 06:55	11/02/21 18:43	1
Chromium	21		0.52	0.14	mg/Kg		11/02/21 06:55	11/02/21 18:43	1
Copper	36	F1	1.5	0.23	mg/Kg		11/02/21 06:55	11/02/21 18:43	1
Molybdenum	ND		2.1	0.77	mg/Kg		11/02/21 06:55	11/02/21 18:43	1
Nickel	20		1.0	0.25	mg/Kg		11/02/21 06:55	11/02/21 18:43	1
Lead	110	B	1.0	0.27	mg/Kg		11/02/21 06:55	11/02/21 18:43	1
Selenium	ND		2.1	1.4	mg/Kg		11/02/21 06:55	11/02/21 18:43	1
Antimony	8.0	F1	2.1	0.97	mg/Kg		11/02/21 06:55	11/02/21 18:43	1
Thallium	ND		2.1	0.87	mg/Kg		11/02/21 06:55	11/02/21 18:43	1
Vanadium	23	F1	0.52	0.20	mg/Kg		11/02/21 06:55	11/02/21 18:43	1
Zinc	110	F1	2.1	0.20	mg/Kg		11/02/21 06:55	11/03/21 16:47	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.079	0.013	mg/Kg		11/12/21 05:53	11/12/21 11:37	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S6D-2
Date Collected: 10/28/21 08:28
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-2
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.3	1.1	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
4,4'-DDE	ND		8.3	1.0	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
4,4'-DDT	ND		8.3	1.2	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
Aldrin	ND		8.3	0.68	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
alpha-BHC	ND		8.3	0.78	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
cis-Chlordane	ND		8.3	0.88	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
beta-BHC	ND		8.3	1.1	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
Chlordane (technical)	ND		98	46	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
delta-BHC	ND		8.3	1.7	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
Dieldrin	ND		8.3	0.98	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
Endosulfan I	ND		8.3	0.88	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
Endosulfan II	ND		8.3	0.88	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
Endosulfan sulfate	ND		8.3	1.7	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
Endrin	ND		8.3	0.98	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
Endrin aldehyde	ND		8.3	2.8	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
Endrin ketone	ND		8.3	1.3	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
trans-Chlordane	ND		8.3	2.9	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
gamma-BHC (Lindane)	ND		8.3	0.68	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
Heptachlor	ND		8.3	0.73	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
Heptachlor epoxide	ND		8.3	0.88	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
Methoxychlor	ND		17	2.7	ug/Kg		11/08/21 15:14	11/24/21 17:30	5
Toxaphene	ND		330	110	ug/Kg		11/08/21 15:14	11/24/21 17:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*54*		*46 - 109*	*11/08/21 15:14*	*11/24/21 17:30*	*5*
DCB Decachlorobiphenyl	*53*		*46 - 109*	*11/08/21 15:14*	*11/24/21 17:30*	*5*
Tetrachloro-m-xylene	*80*		*47 - 107*	*11/08/21 15:14*	*11/24/21 17:30*	*5*
Tetrachloro-m-xylene	*72*		*47 - 107*	*11/08/21 15:14*	*11/24/21 17:30*	*5*

Client Sample ID: AOC3-S5D--0.5

Date Collected: 10/28/21 08:27
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-3

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.5	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
4,4'-DDE	ND		33	4.1	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
4,4'-DDT	ND		33	4.9	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
Aldrin	ND		33	2.7	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
alpha-BHC	ND		33	3.1	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
beta-BHC	ND		33	4.3	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
Chlordane (technical)	ND		390	180	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
delta-BHC	ND		33	6.9	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
Dieldrin	ND		33	3.9	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
Endosulfan I	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
Endosulfan II	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
Endosulfan sulfate	ND		33	6.9	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
Endrin	ND		33	3.9	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
Endrin aldehyde	ND		33	11	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
Endrin ketone	ND		33	5.3	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
trans-Chlordane	ND		33	12	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
Heptachlor	ND		33	2.9	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
Methoxychlor	ND		67	11	ug/Kg		11/08/21 15:14	11/24/21 17:49	20
Toxaphene	ND		1300	440	ug/Kg		11/08/21 15:14	11/24/21 17:49	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*70*		*46 - 109*	*11/08/21 15:14*	*11/24/21 17:49*	*20*
DCB Decachlorobiphenyl	*55*		*46 - 109*	*11/08/21 15:14*	*11/24/21 17:49*	*20*
Tetrachloro-m-xylene	*115*	*S1+*	*47 - 107*	*11/08/21 15:14*	*11/24/21 17:49*	*20*
Tetrachloro-m-xylene	*73*		*47 - 107*	*11/08/21 15:14*	*11/24/21 17:49*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/08/21 15:15	11/18/21 22:10	1
PCB-1221	ND		32	3.5	ug/Kg		11/08/21 15:15	11/18/21 22:10	1
PCB-1232	ND		32	4.7	ug/Kg		11/08/21 15:15	11/18/21 22:10	1
PCB-1242	ND		32	5.8	ug/Kg		11/08/21 15:15	11/18/21 22:10	1
PCB-1248	ND		32	2.4	ug/Kg		11/08/21 15:15	11/18/21 22:10	1
PCB-1254	ND		32	3.7	ug/Kg		11/08/21 15:15	11/18/21 22:10	1
PCB-1260	ND		32	2.6	ug/Kg		11/08/21 15:15	11/18/21 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*59*		*52 - 138*	*11/08/21 15:15*	*11/18/21 22:10*	*1*
Tetrachloro-m-xylene	*75*		*56 - 114*	*11/08/21 15:15*	*11/18/21 22:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**150**	**B**	0.96	0.25	mg/Kg		11/02/21 06:55	11/02/21 19:09	1
Arsenic	**11**		1.9	1.3	mg/Kg		11/02/21 06:55	11/02/21 19:09	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S5D-2
Date Collected: 10/28/21 08:29
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-4
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.0	1.1	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
4,4'-DDE	ND		8.0	0.99	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
4,4'-DDT	ND		8.0	1.2	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
Aldrin	ND		8.0	0.66	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
alpha-BHC	ND		8.0	0.75	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
cis-Chlordane	ND		8.0	0.85	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
beta-BHC	ND		8.0	1.0	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
Chlordane (technical)	ND		94	44	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
delta-BHC	ND		8.0	1.6	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
Dieldrin	ND		8.0	0.94	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
Endosulfan I	ND		8.0	0.85	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
Endosulfan II	ND		8.0	0.85	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
Endosulfan sulfate	ND		8.0	1.6	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
Endrin	ND		8.0	0.94	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
Endrin aldehyde	ND		8.0	2.7	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
Endrin ketone	ND		8.0	1.3	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
trans-Chlordane	ND		8.0	2.8	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
gamma-BHC (Lindane)	ND		8.0	0.66	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
Heptachlor	ND		8.0	0.71	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
Heptachlor epoxide	ND		8.0	0.85	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
Methoxychlor	ND		16	2.6	ug/Kg		11/08/21 15:14	11/24/21 18:08	5
Toxaphene	ND		320	110	ug/Kg		11/08/21 15:14	11/24/21 18:08	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*50*		*46 - 109*	*11/08/21 15:14*	*11/24/21 18:08*	*5*
DCB Decachlorobiphenyl	*55*		*46 - 109*	*11/08/21 15:14*	*11/24/21 18:08*	*5*
Tetrachloro-m-xylene	*78*		*47 - 107*	*11/08/21 15:14*	*11/24/21 18:08*	*5*
Tetrachloro-m-xylene	*62*		*47 - 107*	*11/08/21 15:14*	*11/24/21 18:08*	*5*

Client Sample ID: AOC3-S5E-0.5

Date Collected: 10/28/21 08:34
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-5

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		34	4.5	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
4,4'-DDE	ND		34	4.1	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
4,4'-DDT	ND		34	4.9	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
Aldrin	ND		34	2.8	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
alpha-BHC	ND		34	3.2	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
cis-Chlordane	ND		34	3.6	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
beta-BHC	ND		34	4.3	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
Chlordane (technical)	ND		390	190	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
delta-BHC	ND		34	6.9	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
Dieldrin	ND		34	3.9	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
Endosulfan I	ND		34	3.6	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
Endosulfan II	ND		34	3.6	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
Endosulfan sulfate	ND		34	6.9	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
Endrin	ND		34	3.9	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
Endrin aldehyde	ND		34	11	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
Endrin ketone	ND		34	5.3	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
trans-Chlordane	ND		34	12	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
gamma-BHC (Lindane)	ND		34	2.8	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
Heptachlor	ND		34	3.0	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
Heptachlor epoxide	ND		34	3.6	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
Methoxychlor	ND		67	11	ug/Kg		11/08/21 15:14	11/24/21 18:27	20
Toxaphene	ND		1300	440	ug/Kg		11/08/21 15:14	11/24/21 18:27	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*58*		*46 - 109*	*11/08/21 15:14*	*11/24/21 18:27*	*20*
DCB Decachlorobiphenyl	*49*		*46 - 109*	*11/08/21 15:14*	*11/24/21 18:27*	*20*
Tetrachloro-m-xylene	*97*		*47 - 107*	*11/08/21 15:14*	*11/24/21 18:27*	*20*
Tetrachloro-m-xylene	*57*		*47 - 107*	*11/08/21 15:14*	*11/24/21 18:27*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/08/21 15:15	11/18/21 22:31	1
PCB-1221	ND		33	3.6	ug/Kg		11/08/21 15:15	11/18/21 22:31	1
PCB-1232	ND		33	4.7	ug/Kg		11/08/21 15:15	11/18/21 22:31	1
PCB-1242	ND		33	5.8	ug/Kg		11/08/21 15:15	11/18/21 22:31	1
PCB-1248	ND		33	2.4	ug/Kg		11/08/21 15:15	11/18/21 22:31	1
PCB-1254	ND		33	3.8	ug/Kg		11/08/21 15:15	11/18/21 22:31	1
PCB-1260	ND		33	2.7	ug/Kg		11/08/21 15:15	11/18/21 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*48*	*S1-*	*52 - 138*	*11/08/21 15:15*	*11/18/21 22:31*	*1*
Tetrachloro-m-xylene	*63*		*56 - 114*	*11/08/21 15:15*	*11/18/21 22:31*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.50	0.090	mg/Kg		11/02/21 06:55	11/02/21 19:13	1
Arsenic	**7.1**		2.0	1.3	mg/Kg		11/02/21 06:55	11/02/21 19:13	1
Barium	**99**		1.0	0.12	mg/Kg		11/02/21 06:55	11/02/21 19:13	1
Beryllium	**0.36**		0.20	0.030	mg/Kg		11/02/21 06:55	11/02/21 19:13	1
Cadmium	**0.34**		0.20	0.030	mg/Kg		11/02/21 06:55	11/02/21 19:13	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S5E-0.5
Date Collected: 10/28/21 08:34
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-5
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	5.5		0.50	0.25	mg/Kg		11/02/21 06:55	11/02/21 19:13	1
Chromium	19		0.50	0.14	mg/Kg		11/02/21 06:55	11/02/21 19:13	1
Copper	19		1.5	0.22	mg/Kg		11/02/21 06:55	11/02/21 19:13	1
Molybdenum	ND		2.0	0.75	mg/Kg		11/02/21 06:55	11/02/21 19:13	1
Nickel	17		1.0	0.24	mg/Kg		11/02/21 06:55	11/02/21 19:13	1
Lead	260	B	1.0	0.26	mg/Kg		11/02/21 06:55	11/02/21 19:13	1
Selenium	ND		2.0	1.4	mg/Kg		11/02/21 06:55	11/02/21 19:13	1
Antimony	6.4		2.0	0.94	mg/Kg		11/02/21 06:55	11/02/21 19:13	1
Thallium	ND		2.0	0.84	mg/Kg		11/02/21 06:55	11/02/21 19:13	1
Vanadium	21		0.50	0.19	mg/Kg		11/02/21 06:55	11/02/21 19:13	1
Zinc	130		2.0	0.19	mg/Kg		11/02/21 06:55	11/03/21 17:06	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.085	0.014	mg/Kg		11/12/21 05:53	11/12/21 11:39	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S5E-2
Date Collected: 10/28/21 08:35
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-6
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.2	0.43	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
4,4'-DDE	ND		3.2	0.39	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
4,4'-DDT	ND		3.2	0.47	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
Aldrin	ND		3.2	0.26	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
alpha-BHC	ND		3.2	0.30	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
cis-Chlordane	ND		3.2	0.34	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
beta-BHC	ND		3.2	0.41	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
Chlordane (technical)	ND		38	18	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
delta-BHC	ND		3.2	0.66	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
Dieldrin	ND		3.2	0.38	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
Endosulfan I	ND		3.2	0.34	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
Endosulfan II	ND		3.2	0.34	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
Endosulfan sulfate	ND		3.2	0.66	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
Endrin	ND		3.2	0.38	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
Endrin aldehyde	ND		3.2	1.1	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
Endrin ketone	ND		3.2	0.51	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
trans-Chlordane	ND		3.2	1.1	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
gamma-BHC (Lindane)	ND		3.2	0.26	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
Heptachlor	ND		3.2	0.28	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
Heptachlor epoxide	ND		3.2	0.34	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
Methoxychlor	ND		6.4	1.1	ug/Kg		11/08/21 15:14	11/24/21 18:46	2
Toxaphene	ND		130	42	ug/Kg		11/08/21 15:14	11/24/21 18:46	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*50*		*46 - 109*	*11/08/21 15:14*	*11/24/21 18:46*	*2*
DCB Decachlorobiphenyl	*42*	*S1-*	*46 - 109*	*11/08/21 15:14*	*11/24/21 18:46*	*2*
Tetrachloro-m-xylene	*70*		*47 - 107*	*11/08/21 15:14*	*11/24/21 18:46*	*2*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/08/21 15:14*	*11/24/21 18:46*	*2*

Client Sample ID: AOC3/AOC8-S6E-0.5

Lab Sample ID: 320-81042-7

Date Collected: 10/28/21 08:41

Matrix: Solid

Date Received: 10/29/21 14:21

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.4	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
4,4'-DDE	ND		33	4.0	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
4,4'-DDT	ND		33	4.8	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
Aldrin	ND		33	2.7	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
alpha-BHC	ND		33	3.1	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
beta-BHC	ND		33	4.2	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
Chlordane (technical)	ND		390	180	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
delta-BHC	ND		33	6.7	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
Dieldrin	ND		33	3.9	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
Endosulfan I	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
Endosulfan II	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
Endosulfan sulfate	ND		33	6.7	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
Endrin	ND		33	3.9	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
Endrin aldehyde	ND		33	11	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
Endrin ketone	ND		33	5.2	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
trans-Chlordane	ND		33	12	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
Heptachlor	ND		33	2.9	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
Methoxychlor	ND		66	11	ug/Kg		11/08/21 15:14	11/24/21 19:04	20
Toxaphene	ND		1300	430	ug/Kg		11/08/21 15:14	11/24/21 19:04	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*78*		*46 - 109*	*11/08/21 15:14*	*11/24/21 19:04*	*20*
DCB Decachlorobiphenyl	*54*		*46 - 109*	*11/08/21 15:14*	*11/24/21 19:04*	*20*
Tetrachloro-m-xylene	*111*	*S1+*	*47 - 107*	*11/08/21 15:14*	*11/24/21 19:04*	*20*
Tetrachloro-m-xylene	*70*		*47 - 107*	*11/08/21 15:14*	*11/24/21 19:04*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/08/21 15:15	11/18/21 22:51	1
PCB-1221	ND		32	3.5	ug/Kg		11/08/21 15:15	11/18/21 22:51	1
PCB-1232	ND		32	4.6	ug/Kg		11/08/21 15:15	11/18/21 22:51	1
PCB-1242	ND		32	5.7	ug/Kg		11/08/21 15:15	11/18/21 22:51	1
PCB-1248	ND		32	2.4	ug/Kg		11/08/21 15:15	11/18/21 22:51	1
PCB-1254	ND		32	3.7	ug/Kg		11/08/21 15:15	11/18/21 22:51	1
PCB-1260	ND		32	2.6	ug/Kg		11/08/21 15:15	11/18/21 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*47*	*S1-*	*52 - 138*	*11/08/21 15:15*	*11/18/21 22:51*	*1*
Tetrachloro-m-xylene	*61*		*56 - 114*	*11/08/21 15:15*	*11/18/21 22:51*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**690**	**B**	1.0	0.27	mg/Kg		11/02/21 06:55	11/02/21 19:17	1
Arsenic	**6.1**		2.0	1.3	mg/Kg		11/02/21 06:55	11/02/21 19:17	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3/AOC8-S6E-2
Date Collected: 10/28/21 08:42
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-8
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.22	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
4,4'-DDT	ND		1.7	0.24	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
Aldrin	ND		1.7	0.14	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
Chlordane (technical)	ND		20	9.2	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
Endrin	ND		1.7	0.20	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
Endrin ketone	ND		1.7	0.26	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
Methoxychlor	**7.9**		3.3	0.55	ug/Kg		11/08/21 15:14	11/24/21 19:23	1
Toxaphene	ND		66	22	ug/Kg		11/08/21 15:14	11/24/21 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*35*	*S1-*	*46 - 109*	*11/08/21 15:14*	*11/24/21 19:23*	*1*
DCB Decachlorobiphenyl	*44*	*S1-*	*46 - 109*	*11/08/21 15:14*	*11/24/21 19:23*	*1*
Tetrachloro-m-xylene	*62*		*47 - 107*	*11/08/21 15:14*	*11/24/21 19:23*	*1*
Tetrachloro-m-xylene	*59*		*47 - 107*	*11/08/21 15:14*	*11/24/21 19:23*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S8E-0.5

Date Collected: 10/28/21 08:58
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-9

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
Aldrin	ND		16	1.3	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
alpha-BHC	ND		16	1.5	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
beta-BHC	ND		16	2.1	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
Chlordane (technical)	ND		190	89	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
delta-BHC	ND		16	3.3	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
Dieldrin	ND		16	1.9	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
Endosulfan I	ND		16	1.7	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
Endosulfan II	ND		16	1.7	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
Endosulfan sulfate	ND		16	3.3	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
Endrin	ND		16	1.9	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
Endrin aldehyde	ND		16	5.4	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
Endrin ketone	ND		16	2.6	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
trans-Chlordane	ND		16	5.7	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
Heptachlor	ND		16	1.4	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
Methoxychlor	ND		32	5.3	ug/Kg		11/08/21 15:14	11/24/21 19:42	10
Toxaphene	ND		640	210	ug/Kg		11/08/21 15:14	11/24/21 19:42	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*64*		*46 - 109*	*11/08/21 15:14*	*11/24/21 19:42*	*10*
DCB Decachlorobiphenyl	*59*		*46 - 109*	*11/08/21 15:14*	*11/24/21 19:42*	*10*
Tetrachloro-m-xylene	*89*		*47 - 107*	*11/08/21 15:14*	*11/24/21 19:42*	*10*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/08/21 15:14*	*11/24/21 19:42*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/08/21 15:15	11/18/21 23:12	1
PCB-1221	ND		31	3.4	ug/Kg		11/08/21 15:15	11/18/21 23:12	1
PCB-1232	ND		31	4.5	ug/Kg		11/08/21 15:15	11/18/21 23:12	1
PCB-1242	ND		31	5.6	ug/Kg		11/08/21 15:15	11/18/21 23:12	1
PCB-1248	ND		31	2.3	ug/Kg		11/08/21 15:15	11/18/21 23:12	1
PCB-1254	ND		31	3.6	ug/Kg		11/08/21 15:15	11/18/21 23:12	1
PCB-1260	ND		31	2.6	ug/Kg		11/08/21 15:15	11/18/21 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*59*		*52 - 138*	*11/08/21 15:15*	*11/18/21 23:12*	*1*
Tetrachloro-m-xylene	*77*		*56 - 114*	*11/08/21 15:15*	*11/18/21 23:12*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**220**	**B**	1.0	0.26	mg/Kg		11/02/21 06:55	11/02/21 19:21	1
Arsenic	**12**		2.0	1.3	mg/Kg		11/02/21 06:55	11/02/21 19:21	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S8E-2
Date Collected: 10/28/21 08:59
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-10
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.4	1.1	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
4,4'-DDE	ND		8.4	1.0	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
4,4'-DDT	ND		8.4	1.2	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
Aldrin	ND		8.4	0.69	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
alpha-BHC	ND		8.4	0.79	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
cis-Chlordane	ND		8.4	0.88	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
beta-BHC	ND		8.4	1.1	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
Chlordane (technical)	ND		98	46	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
delta-BHC	ND		8.4	1.7	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
Dieldrin	ND		8.4	0.98	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
Endosulfan I	ND		8.4	0.88	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
Endosulfan II	ND		8.4	0.88	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
Endosulfan sulfate	ND		8.4	1.7	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
Endrin	ND		8.4	0.98	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
Endrin aldehyde	ND		8.4	2.8	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
Endrin ketone	ND		8.4	1.3	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
trans-Chlordane	ND		8.4	2.9	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
gamma-BHC (Lindane)	ND		8.4	0.69	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
Heptachlor	ND		8.4	0.74	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
Heptachlor epoxide	ND		8.4	0.88	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
Methoxychlor	ND		17	2.8	ug/Kg		11/08/21 15:14	11/24/21 20:01	5
Toxaphene	ND		330	110	ug/Kg		11/08/21 15:14	11/24/21 20:01	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*46 - 109*	*11/08/21 15:14*	*11/24/21 20:01*	*5*
DCB Decachlorobiphenyl	*44*	*S1-*	*46 - 109*	*11/08/21 15:14*	*11/24/21 20:01*	*5*
Tetrachloro-m-xylene	*76*		*47 - 107*	*11/08/21 15:14*	*11/24/21 20:01*	*5*
Tetrachloro-m-xylene	*67*		*47 - 107*	*11/08/21 15:14*	*11/24/21 20:01*	*5*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S7E-2
Date Collected: 10/28/21 09:01
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-11
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.22	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
4,4'-DDE	ND		1.7	0.20	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
4,4'-DDT	ND		1.7	0.24	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
Aldrin	ND		1.7	0.14	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
beta-BHC	ND		1.7	0.21	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
Chlordane (technical)	ND		20	9.2	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
Endrin	ND		1.7	0.20	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
Endrin ketone	ND		1.7	0.26	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
Methoxychlor	ND		3.3	0.55	ug/Kg		11/08/21 15:14	11/24/21 20:20	1
Toxaphene	ND		65	22	ug/Kg		11/08/21 15:14	11/24/21 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*34*	*S1-*	*46 - 109*	*11/08/21 15:14*	*11/24/21 20:20*	*1*
DCB Decachlorobiphenyl	*47*		*46 - 109*	*11/08/21 15:14*	*11/24/21 20:20*	*1*
Tetrachloro-m-xylene	*60*		*47 - 107*	*11/08/21 15:14*	*11/24/21 20:20*	*1*
Tetrachloro-m-xylene	*57*		*47 - 107*	*11/08/21 15:14*	*11/24/21 20:20*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S9E-0.5

Date Collected: 10/28/21 09:00
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-12

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.5	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
4,4'-DDE	ND		33	4.1	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
4,4'-DDT	ND		33	4.9	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
Aldrin	ND		33	2.7	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
alpha-BHC	ND		33	3.1	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
beta-BHC	ND		33	4.3	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
Chlordane (technical)	ND		390	180	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
delta-BHC	ND		33	6.9	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
Dieldrin	ND		33	3.9	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
Endosulfan I	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
Endosulfan II	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
Endosulfan sulfate	ND		33	6.9	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
Endrin	ND		33	3.9	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
Endrin aldehyde	ND		33	11	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
Endrin ketone	ND		33	5.3	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
trans-Chlordane	ND		33	12	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
Heptachlor	ND		33	2.9	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
Methoxychlor	ND		67	11	ug/Kg		11/08/21 15:14	11/24/21 20:39	20
Toxaphene	ND		1300	440	ug/Kg		11/08/21 15:14	11/24/21 20:39	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*51*		*46 - 109*	*11/08/21 15:14*	*11/24/21 20:39*	*20*
DCB Decachlorobiphenyl	*67*		*46 - 109*	*11/08/21 15:14*	*11/24/21 20:39*	*20*
Tetrachloro-m-xylene	*106*		*47 - 107*	*11/08/21 15:14*	*11/24/21 20:39*	*20*
Tetrachloro-m-xylene	*66*		*47 - 107*	*11/08/21 15:14*	*11/24/21 20:39*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/08/21 15:15	11/18/21 23:33	1
PCB-1221	ND		32	3.5	ug/Kg		11/08/21 15:15	11/18/21 23:33	1
PCB-1232	ND		32	4.7	ug/Kg		11/08/21 15:15	11/18/21 23:33	1
PCB-1242	ND		32	5.8	ug/Kg		11/08/21 15:15	11/18/21 23:33	1
PCB-1248	ND		32	2.4	ug/Kg		11/08/21 15:15	11/18/21 23:33	1
PCB-1254	ND		32	3.7	ug/Kg		11/08/21 15:15	11/18/21 23:33	1
PCB-1260	ND		32	2.6	ug/Kg		11/08/21 15:15	11/18/21 23:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*60*		*52 - 138*	*11/08/21 15:15*	*11/18/21 23:33*	*1*
Tetrachloro-m-xylene	*79*		*56 - 114*	*11/08/21 15:15*	*11/18/21 23:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**130**	**B**	0.99	0.26	mg/Kg		11/02/21 06:55	11/02/21 19:25	1
Arsenic	**7.4**		2.0	1.3	mg/Kg		11/02/21 06:55	11/02/21 19:25	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S9E-0.5 DUP

Date Collected: 10/28/21 09:01
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-13

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.5	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
4,4'-DDE	ND		33	4.1	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
4,4'-DDT	ND		33	4.9	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
Aldrin	ND		33	2.8	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
alpha-BHC	ND		33	3.1	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
beta-BHC	ND		33	4.3	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
Chlordane (technical)	ND		390	190	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
delta-BHC	ND		33	6.9	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
Dieldrin	ND		33	3.9	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
Endosulfan I	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
Endosulfan II	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
Endosulfan sulfate	ND		33	6.9	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
Endrin	ND		33	3.9	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
Endrin aldehyde	ND		33	11	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
Endrin ketone	ND		33	5.3	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
trans-Chlordane	ND		33	12	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
gamma-BHC (Lindane)	ND		33	2.8	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
Heptachlor	ND		33	3.0	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
Methoxychlor	ND		67	11	ug/Kg		11/08/21 15:14	11/24/21 20:58	20
Toxaphene	ND		1300	440	ug/Kg		11/08/21 15:14	11/24/21 20:58	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*69*		*46 - 109*	*11/08/21 15:14*	*11/24/21 20:58*	*20*
DCB Decachlorobiphenyl	*58*		*46 - 109*	*11/08/21 15:14*	*11/24/21 20:58*	*20*
Tetrachloro-m-xylene	*116*	*S1+*	*47 - 107*	*11/08/21 15:14*	*11/24/21 20:58*	*20*
Tetrachloro-m-xylene	*67*		*47 - 107*	*11/08/21 15:14*	*11/24/21 20:58*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/08/21 15:15	11/18/21 23:53	1
PCB-1221	ND		32	3.6	ug/Kg		11/08/21 15:15	11/18/21 23:53	1
PCB-1232	ND		32	4.7	ug/Kg		11/08/21 15:15	11/18/21 23:53	1
PCB-1242	ND		32	5.8	ug/Kg		11/08/21 15:15	11/18/21 23:53	1
PCB-1248	ND		32	2.4	ug/Kg		11/08/21 15:15	11/18/21 23:53	1
PCB-1254	ND		32	3.8	ug/Kg		11/08/21 15:15	11/18/21 23:53	1
PCB-1260	ND		32	2.7	ug/Kg		11/08/21 15:15	11/18/21 23:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*53*		*52 - 138*	*11/08/21 15:15*	*11/18/21 23:53*	*1*
Tetrachloro-m-xylene	*69*		*56 - 114*	*11/08/21 15:15*	*11/18/21 23:53*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**49**	**B**	0.96	0.25	mg/Kg		11/02/21 06:55	11/02/21 19:29	1
Arsenic	**2.8**		1.9	1.3	mg/Kg		11/02/21 06:55	11/02/21 19:29	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S9E-2
Date Collected: 10/28/21 09:02
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-14
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
Aldrin	ND		1.7	0.14	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
Chlordane (technical)	ND		20	9.2	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
Endrin	ND		1.7	0.20	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
Methoxychlor	ND		3.3	0.55	ug/Kg		11/08/21 15:14	11/24/21 21:16	1
Toxaphene	ND		66	22	ug/Kg		11/08/21 15:14	11/24/21 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*37*	*S1-*	*46 - 109*	*11/08/21 15:14*	*11/24/21 21:16*	*1*
DCB Decachlorobiphenyl	*45*	*S1-*	*46 - 109*	*11/08/21 15:14*	*11/24/21 21:16*	*1*
Tetrachloro-m-xylene	*62*		*47 - 107*	*11/08/21 15:14*	*11/24/21 21:16*	*1*
Tetrachloro-m-xylene	*60*		*47 - 107*	*11/08/21 15:14*	*11/24/21 21:16*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S7E-0.5

Date Collected: 10/28/21 09:12
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-15

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		34	4.5	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
4,4'-DDE	ND		34	4.1	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
4,4'-DDT	ND		34	4.9	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
Aldrin	ND		34	2.8	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
alpha-BHC	ND		34	3.2	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
cis-Chlordane	ND		34	3.6	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
beta-BHC	ND		34	4.3	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
Chlordane (technical)	ND		390	190	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
delta-BHC	ND		34	6.9	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
Dieldrin	ND		34	3.9	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
Endosulfan I	ND		34	3.6	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
Endosulfan II	ND		34	3.6	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
Endosulfan sulfate	ND		34	6.9	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
Endrin	ND		34	3.9	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
Endrin aldehyde	ND		34	11	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
Endrin ketone	ND		34	5.3	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
trans-Chlordane	ND		34	12	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
gamma-BHC (Lindane)	ND		34	2.8	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
Heptachlor	ND		34	3.0	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
Heptachlor epoxide	ND		34	3.6	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
Methoxychlor	ND		67	11	ug/Kg		11/08/21 15:14	11/24/21 21:35	20
Toxaphene	ND		1300	440	ug/Kg		11/08/21 15:14	11/24/21 21:35	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*46 - 109*	*11/08/21 15:14*	*11/24/21 21:35*	*20*
DCB Decachlorobiphenyl	*50*		*46 - 109*	*11/08/21 15:14*	*11/24/21 21:35*	*20*
Tetrachloro-m-xylene	*112*	*S1+*	*47 - 107*	*11/08/21 15:14*	*11/24/21 21:35*	*20*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/08/21 15:14*	*11/24/21 21:35*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/08/21 15:15	11/19/21 00:14	1
PCB-1221	ND		33	3.6	ug/Kg		11/08/21 15:15	11/19/21 00:14	1
PCB-1232	ND		33	4.7	ug/Kg		11/08/21 15:15	11/19/21 00:14	1
PCB-1242	ND		33	5.8	ug/Kg		11/08/21 15:15	11/19/21 00:14	1
PCB-1248	ND		33	2.4	ug/Kg		11/08/21 15:15	11/19/21 00:14	1
PCB-1254	ND		33	3.8	ug/Kg		11/08/21 15:15	11/19/21 00:14	1
PCB-1260	ND		33	2.7	ug/Kg		11/08/21 15:15	11/19/21 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*43*	*S1-*	*52 - 138*	*11/08/21 15:15*	*11/19/21 00:14*	*1*
Tetrachloro-m-xylene	*60*		*56 - 114*	*11/08/21 15:15*	*11/19/21 00:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**120**	**B**	1.0	0.26	mg/Kg		11/02/21 06:55	11/02/21 19:32	1
Arsenic	**3.2**		2.0	1.3	mg/Kg		11/02/21 06:55	11/02/21 19:32	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S6F-0.5

Date Collected: 10/28/21 09:10
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-16

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	F1	33	4.5	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
4,4'-DDE	ND	F1	33	4.1	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
4,4'-DDT	ND	F1	33	4.8	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
Aldrin	ND		33	2.7	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
alpha-BHC	ND		33	3.1	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
cis-Chlordane	ND	F1	33	3.5	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
beta-BHC	ND		33	4.3	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
Chlordane (technical)	ND		390	180	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
delta-BHC	ND		33	6.8	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
Dieldrin	ND	F1	33	3.9	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
Endosulfan I	ND	F1	33	3.5	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
Endosulfan II	ND	F1	33	3.5	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
Endosulfan sulfate	ND	F1	33	6.8	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
Endrin	ND	F1	33	3.9	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
Endrin aldehyde	ND	F1	33	11	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
Endrin ketone	ND	F1 F2	33	5.2	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
trans-Chlordane	ND	F1	33	12	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
Heptachlor	ND		33	2.9	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
Heptachlor epoxide	ND	F1	33	3.5	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
Methoxychlor	ND	F1	66	11	ug/Kg		11/08/21 15:14	11/24/21 21:54	20
Toxaphene	ND		1300	430	ug/Kg		11/08/21 15:14	11/24/21 21:54	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*79*		*46 - 109*	*11/08/21 15:14*	*11/24/21 21:54*	*20*
DCB Decachlorobiphenyl	*65*		*46 - 109*	*11/08/21 15:14*	*11/24/21 21:54*	*20*
Tetrachloro-m-xylene	*116*	*S1+*	*47 - 107*	*11/08/21 15:14*	*11/24/21 21:54*	*20*
Tetrachloro-m-xylene	*72*		*47 - 107*	*11/08/21 15:14*	*11/24/21 21:54*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/08/21 15:15	11/22/21 17:44	1
PCB-1221	ND		32	3.5	ug/Kg		11/08/21 15:15	11/22/21 17:44	1
PCB-1232	ND		32	4.6	ug/Kg		11/08/21 15:15	11/22/21 17:44	1
PCB-1242	ND		32	5.7	ug/Kg		11/08/21 15:15	11/22/21 17:44	1
PCB-1248	ND		32	2.4	ug/Kg		11/08/21 15:15	11/22/21 17:44	1
PCB-1254	ND		32	3.7	ug/Kg		11/08/21 15:15	11/22/21 17:44	1
PCB-1260	ND		32	2.6	ug/Kg		11/08/21 15:15	11/22/21 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*53*		*52 - 138*	*11/08/21 15:15*	*11/22/21 17:44*	*1*
Tetrachloro-m-xylene	*60*		*56 - 114*	*11/08/21 15:15*	*11/22/21 17:44*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**170**	**B**	1.0	0.27	mg/Kg		11/02/21 06:55	11/02/21 19:36	1
Arsenic	**4.0**		2.0	1.3	mg/Kg		11/02/21 06:55	11/02/21 19:36	1

Client Sample ID: AOC3-S6F-2

Date Collected: 10/28/21 09:12
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-17

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.4	0.46	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
4,4'-DDE	ND		3.4	0.42	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
4,4'-DDT	ND		3.4	0.50	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
Aldrin	ND		3.4	0.28	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
alpha-BHC	ND		3.4	0.32	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
cis-Chlordane	ND		3.4	0.36	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
beta-BHC	ND		3.4	0.44	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
Chlordane (technical)	ND		40	19	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
delta-BHC	ND		3.4	0.70	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
Dieldrin	ND		3.4	0.40	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
Endosulfan I	ND		3.4	0.36	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
Endosulfan II	ND		3.4	0.36	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
Endosulfan sulfate	ND		3.4	0.70	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
Endrin	ND		3.4	0.40	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
Endrin aldehyde	ND		3.4	1.1	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
Endrin ketone	ND		3.4	0.54	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
trans-Chlordane	ND		3.4	1.2	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
gamma-BHC (Lindane)	ND		3.4	0.28	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
Heptachlor	ND		3.4	0.30	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
Heptachlor epoxide	ND		3.4	0.36	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
Methoxychlor	ND		6.8	1.1	ug/Kg		11/08/21 15:14	11/24/21 22:51	2
Toxaphene	ND		130	45	ug/Kg		11/08/21 15:14	11/24/21 22:51	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*41*	*S1-*	*46 - 109*	*11/08/21 15:14*	*11/24/21 22:51*	*2*
DCB Decachlorobiphenyl	*42*	*S1-*	*46 - 109*	*11/08/21 15:14*	*11/24/21 22:51*	*2*
Tetrachloro-m-xylene	*75*		*47 - 107*	*11/08/21 15:14*	*11/24/21 22:51*	*2*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/08/21 15:14*	*11/24/21 22:51*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S6G-0.5

Date Collected: 10/28/21 09:56
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-18

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.4	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
4,4'-DDE	ND	F1	33	4.1	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
4,4'-DDT	ND	F2	33	4.8	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
Aldrin	ND	F2	33	2.7	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
alpha-BHC	ND		33	3.1	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
cis-Chlordane	ND	F2	33	3.5	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
beta-BHC	ND		33	4.3	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
Chlordane (technical)	ND		390	180	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
delta-BHC	ND		33	6.8	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
Dieldrin	ND	F2	33	3.9	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
Endosulfan I	ND		33	3.5	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
Endosulfan II	ND		33	3.5	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
Endosulfan sulfate	ND	F1	33	6.8	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
Endrin	ND	F2	33	3.9	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
Endrin aldehyde	ND	F1	33	11	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
Endrin ketone	ND		33	5.2	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
trans-Chlordane	ND	F1	33	12	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
Heptachlor	ND		33	2.9	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
Methoxychlor	ND	F1	66	11	ug/Kg		11/09/21 08:55	11/26/21 15:41	20
Toxaphene	ND		1300	430	ug/Kg		11/09/21 08:55	11/26/21 15:41	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 15:41*	*20*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 15:41*	*20*
Tetrachloro-m-xylene	*80*		*47 - 107*	*11/09/21 08:55*	*11/26/21 15:41*	*20*
Tetrachloro-m-xylene	*39*	*S1-*	*47 - 107*	*11/09/21 08:55*	*11/26/21 15:41*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		160	12	ug/Kg		11/09/21 09:03	11/19/21 23:25	5
PCB-1221	ND		160	18	ug/Kg		11/09/21 09:03	11/19/21 23:25	5
PCB-1232	ND		160	23	ug/Kg		11/09/21 09:03	11/19/21 23:25	5
PCB-1242	ND		160	29	ug/Kg		11/09/21 09:03	11/19/21 23:25	5
PCB-1248	ND		160	12	ug/Kg		11/09/21 09:03	11/19/21 23:25	5
PCB-1254	ND		160	18	ug/Kg		11/09/21 09:03	11/19/21 23:25	5
PCB-1260	ND		160	13	ug/Kg		11/09/21 09:03	11/19/21 23:25	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*82*		*52 - 138*	*11/09/21 09:03*	*11/19/21 23:25*	*5*
Tetrachloro-m-xylene	*83*		*56 - 114*	*11/09/21 09:03*	*11/19/21 23:25*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.12**	**J**	0.50	0.090	mg/Kg		11/02/21 06:55	11/02/21 19:48	1
Arsenic	**3.9**		2.0	1.3	mg/Kg		11/02/21 06:55	11/02/21 19:48	1
Barium	**130**		1.0	0.12	mg/Kg		11/02/21 06:55	11/02/21 19:48	1
Beryllium	**0.46**		0.20	0.030	mg/Kg		11/02/21 06:55	11/02/21 19:48	1
Cadmium	**0.45**		0.20	0.030	mg/Kg		11/02/21 06:55	11/02/21 19:48	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S6G-0.5
Date Collected: 10/28/21 09:56
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-18
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	4.6		0.50	0.25	mg/Kg		11/02/21 06:55	11/02/21 19:48	1
Chromium	27		0.50	0.14	mg/Kg		11/02/21 06:55	11/02/21 19:48	1
Copper	31		1.5	0.22	mg/Kg		11/02/21 06:55	11/02/21 19:48	1
Molybdenum	ND		2.0	0.75	mg/Kg		11/02/21 06:55	11/02/21 19:48	1
Nickel	18		1.0	0.24	mg/Kg		11/02/21 06:55	11/02/21 19:48	1
Lead	200	B	1.0	0.26	mg/Kg		11/02/21 06:55	11/02/21 19:48	1
Selenium	ND		2.0	1.4	mg/Kg		11/02/21 06:55	11/02/21 19:48	1
Antimony	8.7		2.0	0.94	mg/Kg		11/02/21 06:55	11/02/21 19:48	1
Thallium	ND		2.0	0.84	mg/Kg		11/02/21 06:55	11/02/21 19:48	1
Vanadium	24		0.50	0.19	mg/Kg		11/02/21 06:55	11/02/21 19:48	1
Zinc	260		2.0	0.19	mg/Kg		11/02/21 06:55	11/03/21 17:10	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.082	0.013	mg/Kg		11/12/21 05:53	11/12/21 11:41	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S6G-2
Date Collected: 10/28/21 09:58
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-19
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.5	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
4,4'-DDE	ND		33	4.1	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
4,4'-DDT	ND		33	4.9	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
Aldrin	ND		33	2.7	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
alpha-BHC	ND		33	3.1	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
beta-BHC	ND		33	4.3	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
Chlordane (technical)	ND		390	180	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
delta-BHC	ND		33	6.8	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
Dieldrin	ND		33	3.9	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
Endosulfan I	ND		33	3.5	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
Endosulfan II	ND		33	3.5	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
Endosulfan sulfate	ND		33	6.8	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
Endrin	ND		33	3.9	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
Endrin aldehyde	ND		33	11	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
Endrin ketone	ND		33	5.3	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
trans-Chlordane	ND		33	12	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
Heptachlor	ND		33	2.9	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
Methoxychlor	ND		66	11	ug/Kg		11/09/21 08:55	11/26/21 16:38	20
Toxaphene	ND		1300	440	ug/Kg		11/09/21 08:55	11/26/21 16:38	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 16:38*	*20*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 16:38*	*20*
Tetrachloro-m-xylene	*85*		*47 - 107*	*11/09/21 08:55*	*11/26/21 16:38*	*20*
Tetrachloro-m-xylene	*44*	*S1-*	*47 - 107*	*11/09/21 08:55*	*11/26/21 16:38*	*20*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S5F-0.5

Date Collected: 10/28/21 09:58
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-20

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		34	4.6	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
4,4'-DDE	ND		34	4.2	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
4,4'-DDT	ND		34	5.0	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
Aldrin	ND		34	2.8	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
alpha-BHC	ND		34	3.2	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
cis-Chlordane	ND		34	3.6	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
beta-BHC	ND		34	4.4	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
Chlordane (technical)	ND		400	190	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
delta-BHC	ND		34	6.9	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
Dieldrin	ND		34	4.0	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
Endosulfan I	ND		34	3.6	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
Endosulfan II	ND		34	3.6	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
Endosulfan sulfate	ND		34	6.9	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
Endrin	ND		34	4.0	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
Endrin aldehyde	ND		34	11	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
Endrin ketone	ND		34	5.4	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
trans-Chlordane	ND		34	12	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
gamma-BHC (Lindane)	ND		34	2.8	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
Heptachlor	ND		34	3.0	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
Heptachlor epoxide	ND		34	3.6	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
Methoxychlor	ND		67	11	ug/Kg		11/09/21 08:55	11/26/21 16:57	20
Toxaphene	ND		1300	440	ug/Kg		11/09/21 08:55	11/26/21 16:57	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 16:57*	*20*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 16:57*	*20*
Tetrachloro-m-xylene	*77*		*47 - 107*	*11/09/21 08:55*	*11/26/21 16:57*	*20*
Tetrachloro-m-xylene	*32*	*S1-*	*47 - 107*	*11/09/21 08:55*	*11/26/21 16:57*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		160	13	ug/Kg		11/09/21 09:03	11/19/21 23:45	5
PCB-1221	ND		160	18	ug/Kg		11/09/21 09:03	11/19/21 23:45	5
PCB-1232	ND		160	24	ug/Kg		11/09/21 09:03	11/19/21 23:45	5
PCB-1242	ND		160	29	ug/Kg		11/09/21 09:03	11/19/21 23:45	5
PCB-1248	ND		160	12	ug/Kg		11/09/21 09:03	11/19/21 23:45	5
PCB-1254	ND		160	19	ug/Kg		11/09/21 09:03	11/19/21 23:45	5
PCB-1260	ND		160	13	ug/Kg		11/09/21 09:03	11/19/21 23:45	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*65*		*52 - 138*	*11/09/21 09:03*	*11/19/21 23:45*	*5*
Tetrachloro-m-xylene	*73*		*56 - 114*	*11/09/21 09:03*	*11/19/21 23:45*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**200**	**B**	0.97	0.25	mg/Kg		11/02/21 06:55	11/02/21 19:51	1
Arsenic	**3.9**		1.9	1.3	mg/Kg		11/02/21 06:55	11/02/21 19:51	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S5F-2
Date Collected: 10/28/21 09:59
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-21
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.3	0.45	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
4,4'-DDE	ND		3.3	0.41	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
4,4'-DDT	ND		3.3	0.48	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
Aldrin	ND		3.3	0.27	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
alpha-BHC	ND		3.3	0.31	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
cis-Chlordane	ND		3.3	0.35	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
beta-BHC	ND		3.3	0.43	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
Chlordane (technical)	ND		39	18	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
delta-BHC	ND		3.3	0.68	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
Dieldrin	ND		3.3	0.39	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
Endosulfan I	ND		3.3	0.35	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
Endosulfan II	ND		3.3	0.35	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
Endosulfan sulfate	ND		3.3	0.68	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
Endrin	ND		3.3	0.39	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
Endrin aldehyde	ND		3.3	1.1	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
Endrin ketone	ND		3.3	0.52	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
trans-Chlordane	ND		3.3	1.2	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
gamma-BHC (Lindane)	ND		3.3	0.27	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
Heptachlor	ND		3.3	0.29	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
Heptachlor epoxide	ND		3.3	0.35	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
Methoxychlor	ND		6.6	1.1	ug/Kg		11/09/21 08:55	11/26/21 17:16	2
Toxaphene	ND		130	43	ug/Kg		11/09/21 08:55	11/26/21 17:16	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*46 - 109*	*11/09/21 08:55*	*11/26/21 17:16*	*2*
DCB Decachlorobiphenyl	*51*		*46 - 109*	*11/09/21 08:55*	*11/26/21 17:16*	*2*
Tetrachloro-m-xylene	*59*		*47 - 107*	*11/09/21 08:55*	*11/26/21 17:16*	*2*
Tetrachloro-m-xylene	*51*		*47 - 107*	*11/09/21 08:55*	*11/26/21 17:16*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S4F-0.5

Date Collected: 10/28/21 10:02
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-22

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		34	4.5	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
4,4'-DDE	ND		34	4.1	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
4,4'-DDT	ND		34	4.9	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
Aldrin	ND		34	2.8	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
alpha-BHC	ND		34	3.2	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
cis-Chlordane	ND		34	3.6	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
beta-BHC	ND		34	4.3	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
Chlordane (technical)	ND		390	190	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
delta-BHC	ND		34	6.9	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
Dieldrin	ND		34	3.9	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
Endosulfan I	ND		34	3.6	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
Endosulfan II	ND		34	3.6	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
Endosulfan sulfate	ND		34	6.9	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
Endrin	ND		34	3.9	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
Endrin aldehyde	ND		34	11	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
Endrin ketone	ND		34	5.3	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
trans-Chlordane	ND		34	12	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
gamma-BHC (Lindane)	ND		34	2.8	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
Heptachlor	ND		34	3.0	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
Heptachlor epoxide	ND		34	3.6	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
Methoxychlor	ND		67	11	ug/Kg		11/09/21 08:55	11/26/21 17:35	20
Toxaphene	ND		1300	440	ug/Kg		11/09/21 08:55	11/26/21 17:35	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 17:35*	*20*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 17:35*	*20*
Tetrachloro-m-xylene	*80*		*47 - 107*	*11/09/21 08:55*	*11/26/21 17:35*	*20*
Tetrachloro-m-xylene	*29*	*S1-*	*47 - 107*	*11/09/21 08:55*	*11/26/21 17:35*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		160	13	ug/Kg		11/09/21 09:03	11/20/21 00:05	5
PCB-1221	ND		160	18	ug/Kg		11/09/21 09:03	11/20/21 00:05	5
PCB-1232	ND		160	24	ug/Kg		11/09/21 09:03	11/20/21 00:05	5
PCB-1242	ND		160	29	ug/Kg		11/09/21 09:03	11/20/21 00:05	5
PCB-1248	ND		160	12	ug/Kg		11/09/21 09:03	11/20/21 00:05	5
PCB-1254	ND		160	19	ug/Kg		11/09/21 09:03	11/20/21 00:05	5
PCB-1260	ND		160	13	ug/Kg		11/09/21 09:03	11/20/21 00:05	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*74*		*52 - 138*	*11/09/21 09:03*	*11/20/21 00:05*	*5*
Tetrachloro-m-xylene	*82*		*56 - 114*	*11/09/21 09:03*	*11/20/21 00:05*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**96**	**B**	0.98	0.25	mg/Kg		11/02/21 06:55	11/02/21 19:55	1
Arsenic	**4.1**		2.0	1.3	mg/Kg		11/02/21 06:55	11/02/21 19:55	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S4F-2
Date Collected: 10/28/21 10:04
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-23
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.2	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
4,4'-DDE	ND		17	2.0	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
4,4'-DDT	ND		17	2.4	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
Aldrin	ND		17	1.4	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
alpha-BHC	ND		17	1.6	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
cis-Chlordane	ND		17	1.7	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
beta-BHC	ND		17	2.1	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
Chlordane (technical)	ND		190	91	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
delta-BHC	ND		17	3.4	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
Dieldrin	ND		17	1.9	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
Endosulfan I	ND		17	1.7	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
Endosulfan II	ND		17	1.7	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
Endosulfan sulfate	ND		17	3.4	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
Endrin	ND		17	1.9	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
Endrin aldehyde	ND		17	5.5	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
Endrin ketone	ND		17	2.6	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
trans-Chlordane	ND		17	5.8	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
Heptachlor	ND		17	1.5	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
Heptachlor epoxide	ND		17	1.7	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
Methoxychlor	ND		33	5.4	ug/Kg		11/09/21 08:55	11/26/21 17:53	10
Toxaphene	ND		650	220	ug/Kg		11/09/21 08:55	11/26/21 17:53	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*121*	*S1+*	*46 - 109*	*11/09/21 08:55*	*11/26/21 17:53*	*10*
DCB Decachlorobiphenyl	*44*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 17:53*	*10*
Tetrachloro-m-xylene	*94*		*47 - 107*	*11/09/21 08:55*	*11/26/21 17:53*	*10*
Tetrachloro-m-xylene	*60*		*47 - 107*	*11/09/21 08:55*	*11/26/21 17:53*	*10*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S3F-0.5

Date Collected: 10/28/21 10:05
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-24

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		83	11	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
4,4'-DDE	ND		83	10	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
4,4'-DDT	ND		83	12	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
Aldrin	ND		83	6.8	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
alpha-BHC	ND		83	7.8	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
cis-Chlordane	ND		83	8.8	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
beta-BHC	ND		83	11	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
Chlordane (technical)	ND		970	460	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
delta-BHC	ND		83	17	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
Dieldrin	ND		83	9.7	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
Endosulfan I	ND		83	8.8	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
Endosulfan II	ND		83	8.8	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
Endosulfan sulfate	ND		83	17	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
Endrin	ND		83	9.7	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
Endrin aldehyde	ND		83	28	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
Endrin ketone	ND		83	13	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
trans-Chlordane	ND		83	29	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
gamma-BHC (Lindane)	ND		83	6.8	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
Heptachlor	ND		83	7.3	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
Heptachlor epoxide	ND		83	8.8	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
Methoxychlor	ND		170	27	ug/Kg		11/09/21 08:55	11/26/21 18:12	50
Toxaphene	ND		3300	1100	ug/Kg		11/09/21 08:55	11/26/21 18:12	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 18:12*	*50*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 18:12*	*50*
Tetrachloro-m-xylene	*0*	*S1-*	*47 - 107*	*11/09/21 08:55*	*11/26/21 18:12*	*50*
Tetrachloro-m-xylene	*0*	*S1-*	*47 - 107*	*11/09/21 08:55*	*11/26/21 18:12*	*50*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		160	12	ug/Kg		11/09/21 09:03	11/20/21 00:25	5
PCB-1221	ND		160	18	ug/Kg		11/09/21 09:03	11/20/21 00:25	5
PCB-1232	ND		160	23	ug/Kg		11/09/21 09:03	11/20/21 00:25	5
PCB-1242	ND		160	29	ug/Kg		11/09/21 09:03	11/20/21 00:25	5
PCB-1248	ND		160	12	ug/Kg		11/09/21 09:03	11/20/21 00:25	5
PCB-1254	ND		160	19	ug/Kg		11/09/21 09:03	11/20/21 00:25	5
PCB-1260	ND		160	13	ug/Kg		11/09/21 09:03	11/20/21 00:25	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*52 - 138*	*11/09/21 09:03*	*11/20/21 00:25*	*5*
Tetrachloro-m-xylene	*98*		*56 - 114*	*11/09/21 09:03*	*11/20/21 00:25*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**180**	**B**	0.98	0.25	mg/Kg		11/02/21 06:55	11/02/21 19:59	1
Arsenic	**6.4**		2.0	1.3	mg/Kg		11/02/21 06:55	11/02/21 19:59	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S3F-2
Date Collected: 10/28/21 10:07
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-25
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.4	0.46	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
4,4'-DDE	ND		3.4	0.42	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
4,4'-DDT	ND		3.4	0.50	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
Aldrin	ND		3.4	0.28	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
alpha-BHC	ND		3.4	0.32	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
cis-Chlordane	ND		3.4	0.36	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
beta-BHC	ND		3.4	0.44	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
Chlordane (technical)	ND		40	19	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
delta-BHC	ND		3.4	0.70	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
Dieldrin	ND		3.4	0.40	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
Endosulfan I	ND		3.4	0.36	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
Endosulfan II	ND		3.4	0.36	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
Endosulfan sulfate	ND		3.4	0.70	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
Endrin	ND		3.4	0.40	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
Endrin aldehyde	ND		3.4	1.1	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
Endrin ketone	ND		3.4	0.54	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
trans-Chlordane	ND		3.4	1.2	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
gamma-BHC (Lindane)	ND		3.4	0.28	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
Heptachlor	ND		3.4	0.30	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
Heptachlor epoxide	ND		3.4	0.36	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
Methoxychlor	ND		6.8	1.1	ug/Kg		11/09/21 08:55	11/26/21 18:31	2
Toxaphene	ND		130	45	ug/Kg		11/09/21 08:55	11/26/21 18:31	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*59*		*46 - 109*	*11/09/21 08:55*	*11/26/21 18:31*	*2*
DCB Decachlorobiphenyl	*54*		*46 - 109*	*11/09/21 08:55*	*11/26/21 18:31*	*2*
Tetrachloro-m-xylene	*72*		*47 - 107*	*11/09/21 08:55*	*11/26/21 18:31*	*2*
Tetrachloro-m-xylene	*60*		*47 - 107*	*11/09/21 08:55*	*11/26/21 18:31*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3/AOC8-S3G-0.5

Date Collected: 10/28/21 10:11
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-26

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.4	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
4,4'-DDE	ND		33	4.1	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
4,4'-DDT	ND		33	4.8	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
Aldrin	ND		33	2.7	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
alpha-BHC	ND		33	3.1	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
beta-BHC	ND		33	4.2	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
Chlordane (technical)	ND		390	180	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
delta-BHC	ND		33	6.8	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
Dieldrin	ND		33	3.9	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
Endosulfan I	ND		33	3.5	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
Endosulfan II	ND		33	3.5	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
Endosulfan sulfate	ND		33	6.8	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
Endrin	ND		33	3.9	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
Endrin aldehyde	ND		33	11	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
Endrin ketone	ND		33	5.2	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
trans-Chlordane	ND		33	12	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
Heptachlor	ND		33	2.9	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
Methoxychlor	ND		66	11	ug/Kg		11/09/21 08:55	11/26/21 18:50	20
Toxaphene	ND		1300	430	ug/Kg		11/09/21 08:55	11/26/21 18:50	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 18:50*	*20*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 18:50*	*20*
Tetrachloro-m-xylene	*82*		*47 - 107*	*11/09/21 08:55*	*11/26/21 18:50*	*20*
Tetrachloro-m-xylene	*46*	*S1-*	*47 - 107*	*11/09/21 08:55*	*11/26/21 18:50*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		160	12	ug/Kg		11/09/21 09:03	11/20/21 00:45	5
PCB-1221	ND		160	17	ug/Kg		11/09/21 09:03	11/20/21 00:45	5
PCB-1232	ND		160	23	ug/Kg		11/09/21 09:03	11/20/21 00:45	5
PCB-1242	ND		160	28	ug/Kg		11/09/21 09:03	11/20/21 00:45	5
PCB-1248	ND		160	12	ug/Kg		11/09/21 09:03	11/20/21 00:45	5
PCB-1254	ND		160	18	ug/Kg		11/09/21 09:03	11/20/21 00:45	5
PCB-1260	ND		160	13	ug/Kg		11/09/21 09:03	11/20/21 00:45	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*90*		*52 - 138*	*11/09/21 09:03*	*11/20/21 00:45*	*5*
Tetrachloro-m-xylene	*100*		*56 - 114*	*11/09/21 09:03*	*11/20/21 00:45*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**88**	**B**	1.0	0.26	mg/Kg		11/02/21 06:55	11/02/21 20:03	1
Arsenic	**14**		2.0	1.3	mg/Kg		11/02/21 06:55	11/02/21 20:03	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3/AOC8-S3G-2
Date Collected: 10/28/21 10:19
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-27
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.3	1.1	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
4,4'-DDE	ND		8.3	1.0	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
4,4'-DDT	ND		8.3	1.2	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
Aldrin	ND		8.3	0.68	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
alpha-BHC	ND		8.3	0.78	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
cis-Chlordane	ND		8.3	0.88	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
beta-BHC	ND		8.3	1.1	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
Chlordane (technical)	ND		97	46	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
delta-BHC	ND		8.3	1.7	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
Dieldrin	ND		8.3	0.97	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
Endosulfan I	ND		8.3	0.88	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
Endosulfan II	ND		8.3	0.88	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
Endosulfan sulfate	ND		8.3	1.7	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
Endrin	ND		8.3	0.97	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
Endrin aldehyde	ND		8.3	2.8	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
Endrin ketone	ND		8.3	1.3	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
trans-Chlordane	ND		8.3	2.9	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
gamma-BHC (Lindane)	ND		8.3	0.68	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
Heptachlor	ND		8.3	0.73	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
Heptachlor epoxide	ND		8.3	0.88	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
Methoxychlor	ND		17	2.7	ug/Kg		11/09/21 08:55	11/26/21 19:09	5
Toxaphene	ND		330	110	ug/Kg		11/09/21 08:55	11/26/21 19:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*46 - 109*	*11/09/21 08:55*	*11/26/21 19:09*	*5*
DCB Decachlorobiphenyl	*40*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 19:09*	*5*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/09/21 08:55*	*11/26/21 19:09*	*5*
Tetrachloro-m-xylene	*46*	*S1-*	*47 - 107*	*11/09/21 08:55*	*11/26/21 19:09*	*5*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S4G-0.5

Date Collected: 10/28/21 10:22
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-28

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		85	11	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
4,4'-DDE	ND		85	10	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
4,4'-DDT	ND		85	12	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
Aldrin	ND		85	7.0	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
alpha-BHC	ND		85	8.0	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
cis-Chlordane	ND		85	9.0	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
beta-BHC	ND		85	11	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
Chlordane (technical)	ND		1000	470	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
delta-BHC	ND		85	17	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
Dieldrin	ND		85	10	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
Endosulfan I	ND		85	9.0	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
Endosulfan II	ND		85	9.0	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
Endosulfan sulfate	ND		85	17	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
Endrin	ND		85	10	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
Endrin aldehyde	ND		85	28	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
Endrin ketone	ND		85	13	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
trans-Chlordane	ND		85	30	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
gamma-BHC (Lindane)	ND		85	7.0	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
Heptachlor	ND		85	7.5	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
Heptachlor epoxide	ND		85	9.0	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
Methoxychlor	ND		170	28	ug/Kg		11/09/21 08:55	11/26/21 19:28	50
Toxaphene	ND		3300	1100	ug/Kg		11/09/21 08:55	11/26/21 19:28	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 19:28*	*50*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 19:28*	*50*
Tetrachloro-m-xylene	*0*	*S1-*	*47 - 107*	*11/09/21 08:55*	*11/26/21 19:28*	*50*
Tetrachloro-m-xylene	*0*	*S1-*	*47 - 107*	*11/09/21 08:55*	*11/26/21 19:28*	*50*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		160	13	ug/Kg		11/09/21 09:03	11/20/21 01:05	5
PCB-1221	ND		160	18	ug/Kg		11/09/21 09:03	11/20/21 01:05	5
PCB-1232	ND		160	24	ug/Kg		11/09/21 09:03	11/20/21 01:05	5
PCB-1242	ND		160	29	ug/Kg		11/09/21 09:03	11/20/21 01:05	5
PCB-1248	ND		160	12	ug/Kg		11/09/21 09:03	11/20/21 01:05	5
PCB-1254	ND		160	19	ug/Kg		11/09/21 09:03	11/20/21 01:05	5
PCB-1260	ND		160	13	ug/Kg		11/09/21 09:03	11/20/21 01:05	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*52 - 138*	*11/09/21 09:03*	*11/20/21 01:05*	*5*
Tetrachloro-m-xylene	*90*		*56 - 114*	*11/09/21 09:03*	*11/20/21 01:05*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**130**	**B**	1.0	0.26	mg/Kg		11/02/21 06:55	11/02/21 20:07	1
Arsenic	**4.5**		2.0	1.3	mg/Kg		11/02/21 06:55	11/02/21 20:07	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S4G-2
Date Collected: 10/28/21 10:24
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-29
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.3	0.45	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
4,4'-DDE	ND		3.3	0.41	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
4,4'-DDT	ND		3.3	0.49	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
Aldrin	ND		3.3	0.28	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
alpha-BHC	ND		3.3	0.31	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
cis-Chlordane	ND		3.3	0.35	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
beta-BHC	ND		3.3	0.43	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
Chlordane (technical)	ND		39	18	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
delta-BHC	ND		3.3	0.69	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
Dieldrin	ND		3.3	0.39	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
Endosulfan I	ND		3.3	0.35	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
Endosulfan II	ND		3.3	0.35	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
Endosulfan sulfate	ND		3.3	0.69	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
Endrin	ND		3.3	0.39	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
Endrin aldehyde	ND		3.3	1.1	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
Endrin ketone	ND		3.3	0.53	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
trans-Chlordane	ND		3.3	1.2	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
gamma-BHC (Lindane)	ND		3.3	0.28	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
Heptachlor	ND		3.3	0.29	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
Heptachlor epoxide	ND		3.3	0.35	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
Methoxychlor	ND		6.7	1.1	ug/Kg		11/09/21 08:55	11/26/21 19:47	2
Toxaphene	ND		130	44	ug/Kg		11/09/21 08:55	11/26/21 19:47	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*69*		*46 - 109*	*11/09/21 08:55*	*11/26/21 19:47*	*2*
DCB Decachlorobiphenyl	*47*		*46 - 109*	*11/09/21 08:55*	*11/26/21 19:47*	*2*
Tetrachloro-m-xylene	*65*		*47 - 107*	*11/09/21 08:55*	*11/26/21 19:47*	*2*
Tetrachloro-m-xylene	*53*		*47 - 107*	*11/09/21 08:55*	*11/26/21 19:47*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S5G-0.5

Date Collected: 10/28/21 10:31
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-30

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		82	11	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
4,4'-DDE	ND		82	10	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
4,4'-DDT	ND		82	12	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
Aldrin	ND		82	6.8	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
alpha-BHC	ND		82	7.7	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
cis-Chlordane	ND		82	8.7	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
beta-BHC	ND		82	11	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
Chlordane (technical)	ND		970	450	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
delta-BHC	ND		82	17	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
Dieldrin	ND		82	9.7	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
Endosulfan I	ND		82	8.7	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
Endosulfan II	ND		82	8.7	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
Endosulfan sulfate	ND		82	17	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
Endrin	ND		82	9.7	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
Endrin aldehyde	ND		82	28	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
Endrin ketone	ND		82	13	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
trans-Chlordane	ND		82	29	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
gamma-BHC (Lindane)	ND		82	6.8	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
Heptachlor	ND		82	7.2	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
Heptachlor epoxide	ND		82	8.7	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
Methoxychlor	ND		160	27	ug/Kg		11/09/21 08:55	11/26/21 20:06	50
Toxaphene	ND		3200	1100	ug/Kg		11/09/21 08:55	11/26/21 20:06	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 20:06*	*50*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 20:06*	*50*
Tetrachloro-m-xylene	*0*	*S1-*	*47 - 107*	*11/09/21 08:55*	*11/26/21 20:06*	*50*
Tetrachloro-m-xylene	*0*	*S1-*	*47 - 107*	*11/09/21 08:55*	*11/26/21 20:06*	*50*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		160	12	ug/Kg		11/09/21 09:03	11/20/21 01:25	5
PCB-1221	ND		160	17	ug/Kg		11/09/21 09:03	11/20/21 01:25	5
PCB-1232	ND		160	23	ug/Kg		11/09/21 09:03	11/20/21 01:25	5
PCB-1242	ND		160	28	ug/Kg		11/09/21 09:03	11/20/21 01:25	5
PCB-1248	ND		160	12	ug/Kg		11/09/21 09:03	11/20/21 01:25	5
PCB-1254	ND		160	18	ug/Kg		11/09/21 09:03	11/20/21 01:25	5
PCB-1260	ND		160	13	ug/Kg		11/09/21 09:03	11/20/21 01:25	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*52 - 138*	*11/09/21 09:03*	*11/20/21 01:25*	*5*
Tetrachloro-m-xylene	*94*		*56 - 114*	*11/09/21 09:03*	*11/20/21 01:25*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**17**	**B**	0.99	0.26	mg/Kg		11/02/21 06:55	11/02/21 20:10	1
Arsenic	**45**		2.0	1.3	mg/Kg		11/02/21 06:55	11/02/21 20:10	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S5G-2
Date Collected: 10/28/21 10:32
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-31
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.3	0.44	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
4,4'-DDE	ND		3.3	0.40	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
4,4'-DDT	ND		3.3	0.48	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
Aldrin	ND		3.3	0.27	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
alpha-BHC	ND		3.3	0.31	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
cis-Chlordane	ND		3.3	0.34	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
beta-BHC	ND		3.3	0.42	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
Chlordane (technical)	ND		38	18	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
delta-BHC	ND		3.3	0.67	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
Dieldrin	ND		3.3	0.38	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
Endosulfan I	ND		3.3	0.34	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
Endosulfan II	ND		3.3	0.34	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
Endosulfan sulfate	ND		3.3	0.67	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
Endrin	ND		3.3	0.38	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
Endrin aldehyde	ND		3.3	1.1	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
Endrin ketone	ND		3.3	0.52	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
trans-Chlordane	ND		3.3	1.1	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
gamma-BHC (Lindane)	ND		3.3	0.27	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
Heptachlor	ND		3.3	0.29	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
Heptachlor epoxide	ND		3.3	0.34	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
Methoxychlor	ND		6.5	1.1	ug/Kg		11/09/21 08:55	11/26/21 20:25	2
Toxaphene	ND		130	43	ug/Kg		11/09/21 08:55	11/26/21 20:25	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*74*		*46 - 109*	*11/09/21 08:55*	*11/26/21 20:25*	*2*
DCB Decachlorobiphenyl	*51*		*46 - 109*	*11/09/21 08:55*	*11/26/21 20:25*	*2*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/09/21 08:55*	*11/26/21 20:25*	*2*
Tetrachloro-m-xylene	*53*		*47 - 107*	*11/09/21 08:55*	*11/26/21 20:25*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S5G-2 DUP
Date Collected: 10/28/21 10:32
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-32
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.3	0.44	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
4,4'-DDE	ND		3.3	0.40	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
4,4'-DDT	ND		3.3	0.48	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
Aldrin	ND		3.3	0.27	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
alpha-BHC	ND		3.3	0.31	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
cis-Chlordane	ND		3.3	0.35	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
beta-BHC	ND		3.3	0.42	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
Chlordane (technical)	ND		38	18	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
delta-BHC	ND		3.3	0.67	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
Dieldrin	ND		3.3	0.38	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
Endosulfan I	ND		3.3	0.35	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
Endosulfan II	ND		3.3	0.35	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
Endosulfan sulfate	ND		3.3	0.67	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
Endrin	ND		3.3	0.38	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
Endrin aldehyde	ND		3.3	1.1	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
Endrin ketone	ND		3.3	0.52	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
trans-Chlordane	ND		3.3	1.2	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
gamma-BHC (Lindane)	ND		3.3	0.27	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
Heptachlor	ND		3.3	0.29	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
Heptachlor epoxide	ND		3.3	0.35	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
Methoxychlor	ND		6.5	1.1	ug/Kg		11/09/21 08:55	11/26/21 20:44	2
Toxaphene	ND		130	43	ug/Kg		11/09/21 08:55	11/26/21 20:44	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*46 - 109*	*11/09/21 08:55*	*11/26/21 20:44*	*2*
DCB Decachlorobiphenyl	*47*		*46 - 109*	*11/09/21 08:55*	*11/26/21 20:44*	*2*
Tetrachloro-m-xylene	*59*		*47 - 107*	*11/09/21 08:55*	*11/26/21 20:44*	*2*
Tetrachloro-m-xylene	*50*		*47 - 107*	*11/09/21 08:55*	*11/26/21 20:44*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S2G-0.5

Date Collected: 10/28/21 11:02
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-33

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		34	4.5	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
4,4'-DDE	ND		34	4.2	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
4,4'-DDT	ND		34	4.9	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
Aldrin	ND		34	2.8	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
alpha-BHC	ND		34	3.2	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
cis-Chlordane	ND		34	3.6	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
beta-BHC	ND		34	4.3	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
Chlordane (technical)	ND		400	190	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
delta-BHC	ND		34	6.9	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
Dieldrin	ND		34	4.0	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
Endosulfan I	ND		34	3.6	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
Endosulfan II	ND		34	3.6	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
Endosulfan sulfate	ND		34	6.9	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
Endrin	ND		34	4.0	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
Endrin aldehyde	ND		34	11	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
Endrin ketone	ND		34	5.3	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
trans-Chlordane	ND		34	12	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
gamma-BHC (Lindane)	ND		34	2.8	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
Heptachlor	ND		34	3.0	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
Heptachlor epoxide	ND		34	3.6	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
Methoxychlor	ND		67	11	ug/Kg		11/09/21 08:55	11/26/21 21:02	20
Toxaphene	ND		1300	440	ug/Kg		11/09/21 08:55	11/26/21 21:02	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 21:02*	*20*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/09/21 08:55*	*11/26/21 21:02*	*20*
Tetrachloro-m-xylene	*86*		*47 - 107*	*11/09/21 08:55*	*11/26/21 21:02*	*20*
Tetrachloro-m-xylene	*40*	*S1-*	*47 - 107*	*11/09/21 08:55*	*11/26/21 21:02*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/09/21 09:03	11/20/21 01:45	1
PCB-1221	ND		33	3.6	ug/Kg		11/09/21 09:03	11/20/21 01:45	1
PCB-1232	ND		33	4.7	ug/Kg		11/09/21 09:03	11/20/21 01:45	1
PCB-1242	ND		33	5.8	ug/Kg		11/09/21 09:03	11/20/21 01:45	1
PCB-1248	ND		33	2.4	ug/Kg		11/09/21 09:03	11/20/21 01:45	1
PCB-1254	ND		33	3.8	ug/Kg		11/09/21 09:03	11/20/21 01:45	1
PCB-1260	ND		33	2.7	ug/Kg		11/09/21 09:03	11/20/21 01:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*78*		*52 - 138*	*11/09/21 09:03*	*11/20/21 01:45*	*1*
Tetrachloro-m-xylene	*81*		*56 - 114*	*11/09/21 09:03*	*11/20/21 01:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**13**	**B**	1.0	0.27	mg/Kg		11/02/21 06:55	11/02/21 20:14	1
Arsenic	**16**		2.1	1.4	mg/Kg		11/02/21 06:55	11/02/21 20:14	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S2G-2
Date Collected: 10/28/21 11:03
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-34
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.4	0.46	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
4,4'-DDE	ND		3.4	0.42	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
4,4'-DDT	ND		3.4	0.50	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
Aldrin	ND		3.4	0.28	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
alpha-BHC	ND		3.4	0.32	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
cis-Chlordane	ND		3.4	0.36	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
beta-BHC	ND		3.4	0.44	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
Chlordane (technical)	ND		40	19	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
delta-BHC	ND		3.4	0.70	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
Dieldrin	ND		3.4	0.40	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
Endosulfan I	ND		3.4	0.36	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
Endosulfan II	ND		3.4	0.36	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
Endosulfan sulfate	ND		3.4	0.70	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
Endrin	ND		3.4	0.40	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
Endrin aldehyde	ND		3.4	1.1	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
Endrin ketone	ND		3.4	0.54	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
trans-Chlordane	ND		3.4	1.2	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
gamma-BHC (Lindane)	ND		3.4	0.28	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
Heptachlor	ND		3.4	0.30	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
Heptachlor epoxide	ND		3.4	0.36	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
Methoxychlor	ND		6.8	1.1	ug/Kg		11/09/21 08:55	11/26/21 21:21	2
Toxaphene	ND		130	45	ug/Kg		11/09/21 08:55	11/26/21 21:21	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*63*		*46 - 109*	*11/09/21 08:55*	*11/26/21 21:21*	*2*
DCB Decachlorobiphenyl	*61*		*46 - 109*	*11/09/21 08:55*	*11/26/21 21:21*	*2*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/09/21 08:55*	*11/26/21 21:21*	*2*
Tetrachloro-m-xylene	*57*		*47 - 107*	*11/09/21 08:55*	*11/26/21 21:21*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S2H-0.5

Date Collected: 10/28/21 11:01
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-35

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.5	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
4,4'-DDE	ND		33	4.1	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
4,4'-DDT	ND		33	4.9	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
Aldrin	ND		33	2.8	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
alpha-BHC	ND		33	3.2	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
beta-BHC	ND		33	4.3	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
Chlordane (technical)	ND		390	190	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
delta-BHC	ND		33	6.9	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
Dieldrin	ND		33	3.9	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
Endosulfan I	ND		33	3.5	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
Endosulfan II	ND		33	3.5	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
Endosulfan sulfate	ND		33	6.9	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
Endrin	ND		33	3.9	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
Endrin aldehyde	ND		33	11	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
Endrin ketone	ND		33	5.3	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
trans-Chlordane	ND		33	12	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
gamma-BHC (Lindane)	ND		33	2.8	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
Heptachlor	ND		33	3.0	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
Methoxychlor	ND		67	11	ug/Kg		11/09/21 09:28	11/26/21 22:18	20
Toxaphene	ND		1300	440	ug/Kg		11/09/21 09:28	11/26/21 22:18	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*295*	*S1+*	*46 - 109*	*11/09/21 09:28*	*11/26/21 22:18*	*20*
DCB Decachlorobiphenyl	*3*	*S1-*	*46 - 109*	*11/09/21 09:28*	*11/26/21 22:18*	*20*
Tetrachloro-m-xylene	*89*		*47 - 107*	*11/09/21 09:28*	*11/26/21 22:18*	*20*
Tetrachloro-m-xylene	*31*	*S1-*	*47 - 107*	*11/09/21 09:28*	*11/26/21 22:18*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/09/21 09:41	11/19/21 19:46	1
PCB-1221	ND		33	3.6	ug/Kg		11/09/21 09:41	11/19/21 19:46	1
PCB-1232	ND		33	4.7	ug/Kg		11/09/21 09:41	11/19/21 19:46	1
PCB-1242	ND		33	5.8	ug/Kg		11/09/21 09:41	11/19/21 19:46	1
PCB-1248	ND		33	2.4	ug/Kg		11/09/21 09:41	11/19/21 19:46	1
PCB-1254	ND		33	3.8	ug/Kg		11/09/21 09:41	11/19/21 19:46	1
PCB-1260	ND		33	2.7	ug/Kg		11/09/21 09:41	11/19/21 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*46*	*S1-*	*52 - 138*	*11/09/21 09:41*	*11/19/21 19:46*	*1*
Tetrachloro-m-xylene	*50*	*S1-*	*56 - 114*	*11/09/21 09:41*	*11/19/21 19:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**71**	**B**	1.0	0.27	mg/Kg		11/02/21 06:55	11/02/21 20:18	1
Arsenic	**10**		2.0	1.3	mg/Kg		11/02/21 06:55	11/02/21 20:18	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S2H-2
Date Collected: 10/28/21 11:03
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-36
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.2	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
4,4'-DDE	ND	F1	17	2.0	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
4,4'-DDT	ND	F1	17	2.4	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
Aldrin	ND		17	1.4	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
alpha-BHC	ND		17	1.6	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
beta-BHC	ND		17	2.1	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
Chlordane (technical)	ND		190	92	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
delta-BHC	ND		17	3.4	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
Dieldrin	ND		17	1.9	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
Endosulfan I	ND	F2	17	1.8	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
Endosulfan II	ND		17	1.8	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
Endosulfan sulfate	ND	F1	17	3.4	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
Endrin	ND	F1	17	1.9	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
Endrin aldehyde	ND		17	5.6	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
Endrin ketone	ND		17	2.6	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
trans-Chlordane	ND	F1	17	5.8	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
Heptachlor	ND		17	1.5	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
Methoxychlor	ND	F1	33	5.5	ug/Kg		11/09/21 09:28	11/26/21 22:37	10
Toxaphene	ND		650	220	ug/Kg		11/09/21 09:28	11/26/21 22:37	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*81*		*46 - 109*	*11/09/21 09:28*	*11/26/21 22:37*	*10*
DCB Decachlorobiphenyl	*45*	*S1-*	*46 - 109*	*11/09/21 09:28*	*11/26/21 22:37*	*10*
Tetrachloro-m-xylene	*66*		*47 - 107*	*11/09/21 09:28*	*11/26/21 22:37*	*10*
Tetrachloro-m-xylene	*37*	*S1-*	*47 - 107*	*11/09/21 09:28*	*11/26/21 22:37*	*10*

Client Sample ID: AOC3-S2F-0.5

Date Collected: 10/28/21 11:08
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-37

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
Aldrin	ND		16	1.4	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
alpha-BHC	ND		16	1.5	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
beta-BHC	ND		16	2.1	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
Chlordane (technical)	ND		190	91	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
delta-BHC	ND		16	3.4	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
Dieldrin	ND		16	1.9	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
Endosulfan I	ND		16	1.7	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
Endosulfan II	ND		16	1.7	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
Endrin	ND		16	1.9	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
Endrin ketone	ND		16	2.6	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
gamma-BHC (Lindane)	ND		16	1.4	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
Heptachlor	ND		16	1.4	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
Methoxychlor	ND		33	5.4	ug/Kg		11/09/21 09:28	11/29/21 18:16	10
Toxaphene	ND		650	220	ug/Kg		11/09/21 09:28	11/29/21 18:16	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*31*	*S1-*	*46 - 109*	*11/09/21 09:28*	*11/29/21 18:16*	*10*
DCB Decachlorobiphenyl	*35*	*S1-*	*46 - 109*	*11/09/21 09:28*	*11/29/21 18:16*	*10*
Tetrachloro-m-xylene	*61*		*47 - 107*	*11/09/21 09:28*	*11/29/21 18:16*	*10*
Tetrachloro-m-xylene	*65*		*47 - 107*	*11/09/21 09:28*	*11/29/21 18:16*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/09/21 09:41	11/19/21 20:06	1
PCB-1221	ND		32	3.5	ug/Kg		11/09/21 09:41	11/19/21 20:06	1
PCB-1232	ND		32	4.6	ug/Kg		11/09/21 09:41	11/19/21 20:06	1
PCB-1242	ND		32	5.7	ug/Kg		11/09/21 09:41	11/19/21 20:06	1
PCB-1248	ND		32	2.4	ug/Kg		11/09/21 09:41	11/19/21 20:06	1
PCB-1254	ND		32	3.7	ug/Kg		11/09/21 09:41	11/19/21 20:06	1
PCB-1260	ND		32	2.6	ug/Kg		11/09/21 09:41	11/19/21 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*27*	*S1-*	*52 - 138*	*11/09/21 09:41*	*11/19/21 20:06*	*1*
Tetrachloro-m-xylene	*35*	*S1-*	*56 - 114*	*11/09/21 09:41*	*11/19/21 20:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.29	0.053	mg/Kg		11/02/21 06:55	11/02/21 20:22	1
Arsenic	**8.9**		1.2	0.76	mg/Kg		11/02/21 06:55	11/02/21 20:22	1
Barium	**84**		0.58	0.070	mg/Kg		11/02/21 06:55	11/02/21 20:22	1
Beryllium	**0.29**		0.12	0.018	mg/Kg		11/02/21 06:55	11/02/21 20:22	1
Cadmium	**0.11**	**J**	0.12	0.018	mg/Kg		11/02/21 06:55	11/02/21 20:22	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S2F-0.5
Date Collected: 10/28/21 11:08
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-37
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	6.6		0.29	0.15	mg/Kg		11/02/21 06:55	11/02/21 20:22	1
Chromium	8.8		0.29	0.082	mg/Kg		11/02/21 06:55	11/02/21 20:22	1
Copper	13		0.88	0.13	mg/Kg		11/02/21 06:55	11/02/21 20:22	1
Molybdenum	0.86	J	1.2	0.44	mg/Kg		11/02/21 06:55	11/02/21 20:22	1
Nickel	14		0.58	0.14	mg/Kg		11/02/21 06:55	11/02/21 20:22	1
Lead	5.9	B	0.58	0.15	mg/Kg		11/02/21 06:55	11/02/21 20:22	1
Selenium	ND		1.2	0.82	mg/Kg		11/02/21 06:55	11/02/21 20:22	1
Antimony	2.1		1.2	0.55	mg/Kg		11/02/21 06:55	11/02/21 20:22	1
Thallium	ND		1.2	0.49	mg/Kg		11/02/21 06:55	11/02/21 20:22	1
Vanadium	23		0.29	0.11	mg/Kg		11/02/21 06:55	11/02/21 20:22	1
Zinc	58		1.2	0.11	mg/Kg		11/02/21 06:55	11/03/21 17:21	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.083	0.014	mg/Kg		11/12/21 05:53	11/12/21 11:43	1

Client Sample ID: AOC3-S2F-2

Date Collected: 10/28/21 11:10
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-38

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
Aldrin	ND		1.6	0.13	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
Chlordane (technical)	ND		19	9.1	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
delta-BHC	ND		1.6	0.34	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
Endosulfan sulfate	ND		1.6	0.34	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
Endrin	ND		1.6	0.19	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
Endrin aldehyde	ND		1.6	0.55	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
trans-Chlordane	ND		1.6	0.58	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/09/21 09:28	11/29/21 18:35	1
Toxaphene	ND		65	22	ug/Kg		11/09/21 09:28	11/29/21 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*79*		*46 - 109*	*11/09/21 09:28*	*11/29/21 18:35*	*1*
DCB Decachlorobiphenyl	*94*		*46 - 109*	*11/09/21 09:28*	*11/29/21 18:35*	*1*
Tetrachloro-m-xylene	*111*	*S1+*	*47 - 107*	*11/09/21 09:28*	*11/29/21 18:35*	*1*
Tetrachloro-m-xylene	*107*		*47 - 107*	*11/09/21 09:28*	*11/29/21 18:35*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S2F-0.5 DUP

Date Collected: 10/28/21 11:08
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-39

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
Aldrin	ND		16	1.4	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
alpha-BHC	ND		16	1.6	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
beta-BHC	ND		16	2.1	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
Chlordane (technical)	ND		190	91	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
delta-BHC	ND		16	3.4	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
Dieldrin	ND		16	1.9	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
Endosulfan I	ND		16	1.7	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
Endosulfan II	ND		16	1.7	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
Endrin	ND		16	1.9	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
Endrin ketone	ND		16	2.6	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
gamma-BHC (Lindane)	ND		16	1.4	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
Heptachlor	ND		16	1.5	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
Methoxychlor	ND		33	5.4	ug/Kg		11/09/21 09:28	11/29/21 18:54	10
Toxaphene	ND		650	220	ug/Kg		11/09/21 09:28	11/29/21 18:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*49*		*46 - 109*	*11/09/21 09:28*	*11/29/21 18:54*	*10*
DCB Decachlorobiphenyl	*48*		*46 - 109*	*11/09/21 09:28*	*11/29/21 18:54*	*10*
Tetrachloro-m-xylene	*80*		*47 - 107*	*11/09/21 09:28*	*11/29/21 18:54*	*10*
Tetrachloro-m-xylene	*76*		*47 - 107*	*11/09/21 09:28*	*11/29/21 18:54*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/09/21 09:41	11/19/21 20:26	1
PCB-1221	ND		32	3.5	ug/Kg		11/09/21 09:41	11/19/21 20:26	1
PCB-1232	ND		32	4.6	ug/Kg		11/09/21 09:41	11/19/21 20:26	1
PCB-1242	ND		32	5.7	ug/Kg		11/09/21 09:41	11/19/21 20:26	1
PCB-1248	ND		32	2.4	ug/Kg		11/09/21 09:41	11/19/21 20:26	1
PCB-1254	ND		32	3.7	ug/Kg		11/09/21 09:41	11/19/21 20:26	1
PCB-1260	ND		32	2.6	ug/Kg		11/09/21 09:41	11/19/21 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*46*	*S1-*	*52 - 138*	*11/09/21 09:41*	*11/19/21 20:26*	*1*
Tetrachloro-m-xylene	*53*	*S1-*	*56 - 114*	*11/09/21 09:41*	*11/19/21 20:26*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.47	0.085	mg/Kg		11/02/21 06:55	11/02/21 20:33	1
Arsenic	**13**		1.9	1.2	mg/Kg		11/02/21 06:55	11/02/21 20:33	1
Barium	**140**		0.94	0.11	mg/Kg		11/02/21 06:55	11/02/21 20:33	1
Beryllium	**0.46**		0.19	0.028	mg/Kg		11/02/21 06:55	11/02/21 20:33	1
Cadmium	**0.20**		0.19	0.028	mg/Kg		11/02/21 06:55	11/02/21 20:33	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S2F-0.5 DUP
Date Collected: 10/28/21 11:08
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-39
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	11		0.47	0.24	mg/Kg		11/02/21 06:55	11/02/21 20:33	1
Chromium	12		0.47	0.13	mg/Kg		11/02/21 06:55	11/02/21 20:33	1
Copper	29		1.4	0.21	mg/Kg		11/02/21 06:55	11/02/21 20:33	1
Molybdenum	1.2	J	1.9	0.71	mg/Kg		11/02/21 06:55	11/02/21 20:33	1
Nickel	19		0.94	0.23	mg/Kg		11/02/21 06:55	11/02/21 20:33	1
Lead	12	B	0.94	0.25	mg/Kg		11/02/21 06:55	11/02/21 20:33	1
Selenium	ND		1.9	1.3	mg/Kg		11/02/21 06:55	11/02/21 20:33	1
Antimony	1.8	J	1.9	0.89	mg/Kg		11/02/21 06:55	11/02/21 20:33	1
Thallium	ND		1.9	0.79	mg/Kg		11/02/21 06:55	11/02/21 20:33	1
Vanadium	33		0.47	0.18	mg/Kg		11/02/21 06:55	11/02/21 20:33	1
Zinc	96		1.9	0.18	mg/Kg		11/02/21 06:55	11/03/21 17:25	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.085	0.014	mg/Kg		11/12/21 05:53	11/12/21 11:44	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S1F-0.5

Date Collected: 10/28/21 11:13
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-40

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.4	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
4,4'-DDE	ND		33	4.0	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
4,4'-DDT	ND		33	4.8	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
Aldrin	ND		33	2.7	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
alpha-BHC	ND		33	3.1	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
beta-BHC	ND		33	4.2	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
Chlordane (technical)	ND		380	180	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
delta-BHC	ND		33	6.7	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
Dieldrin	ND		33	3.8	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
Endosulfan I	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
Endosulfan II	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
Endosulfan sulfate	ND		33	6.7	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
Endrin	ND		33	3.8	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
Endrin aldehyde	ND		33	11	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
Endrin ketone	ND		33	5.2	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
trans-Chlordane	ND		33	12	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
Heptachlor	ND		33	2.9	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
Methoxychlor	ND		65	11	ug/Kg		11/09/21 09:28	11/29/21 19:12	20
Toxaphene	ND		1300	430	ug/Kg		11/09/21 09:28	11/29/21 19:12	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*67*		*46 - 109*	*11/09/21 09:28*	*11/29/21 19:12*	*20*
DCB Decachlorobiphenyl	*78*		*46 - 109*	*11/09/21 09:28*	*11/29/21 19:12*	*20*
Tetrachloro-m-xylene	*114*	*S1+*	*47 - 107*	*11/09/21 09:28*	*11/29/21 19:12*	*20*
Tetrachloro-m-xylene	*73*		*47 - 107*	*11/09/21 09:28*	*11/29/21 19:12*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.4	ug/Kg		11/09/21 09:41	11/19/21 20:46	1
PCB-1221	ND		32	3.5	ug/Kg		11/09/21 09:41	11/19/21 20:46	1
PCB-1232	ND		32	4.6	ug/Kg		11/09/21 09:41	11/19/21 20:46	1
PCB-1242	ND		32	5.7	ug/Kg		11/09/21 09:41	11/19/21 20:46	1
PCB-1248	ND		32	2.3	ug/Kg		11/09/21 09:41	11/19/21 20:46	1
PCB-1254	ND		32	3.7	ug/Kg		11/09/21 09:41	11/19/21 20:46	1
PCB-1260	ND		32	2.6	ug/Kg		11/09/21 09:41	11/19/21 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*49*	*S1-*	*52 - 138*	*11/09/21 09:41*	*11/19/21 20:46*	*1*
Tetrachloro-m-xylene	*57*		*56 - 114*	*11/09/21 09:41*	*11/19/21 20:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**7.2**		0.97	0.25	mg/Kg		11/03/21 13:32	11/04/21 11:03	1
Arsenic	**4.4**		1.9	1.3	mg/Kg		11/03/21 13:32	11/04/21 11:03	1

Client Sample ID: AOC3-S1F-2

Date Collected: 10/28/21 11:14
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-41

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
Aldrin	ND		1.7	0.14	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
Endrin	ND		1.7	0.20	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/09/21 09:28	11/29/21 19:31	1
Toxaphene	ND		66	22	ug/Kg		11/09/21 09:28	11/29/21 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*41*	*S1-*	*46 - 109*	*11/09/21 09:28*	*11/29/21 19:31*	*1*
DCB Decachlorobiphenyl	*43*	*S1-*	*46 - 109*	*11/09/21 09:28*	*11/29/21 19:31*	*1*
Tetrachloro-m-xylene	*57*		*47 - 107*	*11/09/21 09:28*	*11/29/21 19:31*	*1*
Tetrachloro-m-xylene	*56*		*47 - 107*	*11/09/21 09:28*	*11/29/21 19:31*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S1G-0.5

Date Collected: 10/28/21 11:21
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-42

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.5	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
4,4'-DDE	ND		33	4.1	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
4,4'-DDT	ND		33	4.8	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
Aldrin	ND		33	2.7	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
alpha-BHC	ND		33	3.1	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
beta-BHC	ND		33	4.3	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
Chlordane (technical)	ND		390	180	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
delta-BHC	ND		33	6.8	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
Dieldrin	ND		33	3.9	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
Endosulfan I	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
Endosulfan II	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
Endosulfan sulfate	ND		33	6.8	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
Endrin	ND		33	3.9	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
Endrin aldehyde	ND		33	11	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
Endrin ketone	ND		33	5.2	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
trans-Chlordane	ND		33	12	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
Heptachlor	ND		33	2.9	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
Methoxychlor	ND		66	11	ug/Kg		11/09/21 09:28	11/29/21 19:50	20
Toxaphene	ND		1300	430	ug/Kg		11/09/21 09:28	11/29/21 19:50	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*46 - 109*	*11/09/21 09:28*	*11/29/21 19:50*	*20*
DCB Decachlorobiphenyl	*49*		*46 - 109*	*11/09/21 09:28*	*11/29/21 19:50*	*20*
Tetrachloro-m-xylene	*100*		*47 - 107*	*11/09/21 09:28*	*11/29/21 19:50*	*20*
Tetrachloro-m-xylene	*57*		*47 - 107*	*11/09/21 09:28*	*11/29/21 19:50*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/09/21 09:41	11/19/21 21:05	1
PCB-1221	ND		32	3.5	ug/Kg		11/09/21 09:41	11/19/21 21:05	1
PCB-1232	ND		32	4.6	ug/Kg		11/09/21 09:41	11/19/21 21:05	1
PCB-1242	ND		32	5.7	ug/Kg		11/09/21 09:41	11/19/21 21:05	1
PCB-1248	ND		32	2.4	ug/Kg		11/09/21 09:41	11/19/21 21:05	1
PCB-1254	ND		32	3.7	ug/Kg		11/09/21 09:41	11/19/21 21:05	1
PCB-1260	ND		32	2.6	ug/Kg		11/09/21 09:41	11/19/21 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*35*	*S1-*	*52 - 138*	*11/09/21 09:41*	*11/19/21 21:05*	*1*
Tetrachloro-m-xylene	*40*	*S1-*	*56 - 114*	*11/09/21 09:41*	*11/19/21 21:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**13**		0.98	0.25	mg/Kg		11/03/21 13:32	11/04/21 11:07	1
Arsenic	**3.2**		2.0	1.3	mg/Kg		11/03/21 13:32	11/04/21 11:07	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S1G-2

Date Collected: 10/28/21 11:22
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-43

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
Aldrin	ND		1.6	0.13	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
Chlordane (technical)	ND		19	9.0	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
delta-BHC	ND		1.6	0.34	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
Endosulfan sulfate	ND		1.6	0.34	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
Endrin	ND		1.6	0.19	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
Endrin aldehyde	ND		1.6	0.55	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
trans-Chlordane	ND		1.6	0.58	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/09/21 09:28	11/29/21 20:09	1
Toxaphene	ND		64	22	ug/Kg		11/09/21 09:28	11/29/21 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*42*	*S1-*	*46 - 109*	*11/09/21 09:28*	*11/29/21 20:09*	*1*
DCB Decachlorobiphenyl	*42*	*S1-*	*46 - 109*	*11/09/21 09:28*	*11/29/21 20:09*	*1*
Tetrachloro-m-xylene	*66*		*47 - 107*	*11/09/21 09:28*	*11/29/21 20:09*	*1*
Tetrachloro-m-xylene	*66*		*47 - 107*	*11/09/21 09:28*	*11/29/21 20:09*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S1H-0.5

Date Collected: 10/28/21 11:24
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-44

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.4	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
4,4'-DDE	ND		33	4.0	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
4,4'-DDT	ND		33	4.8	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
Aldrin	ND		33	2.7	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
alpha-BHC	ND		33	3.1	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
beta-BHC	ND		33	4.2	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
Chlordane (technical)	ND		390	180	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
delta-BHC	ND		33	6.7	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
Dieldrin	ND		33	3.9	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
Endosulfan I	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
Endosulfan II	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
Endosulfan sulfate	ND		33	6.7	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
Endrin	ND		33	3.9	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
Endrin aldehyde	ND		33	11	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
Endrin ketone	ND		33	5.2	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
trans-Chlordane	ND		33	12	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
Heptachlor	ND		33	2.9	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
Methoxychlor	ND		65	11	ug/Kg		11/09/21 09:28	11/29/21 20:28	20
Toxaphene	ND		1300	430	ug/Kg		11/09/21 09:28	11/29/21 20:28	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*133*	*S1+*	*46 - 109*	*11/09/21 09:28*	*11/29/21 20:28*	*20*
DCB Decachlorobiphenyl	*56*		*46 - 109*	*11/09/21 09:28*	*11/29/21 20:28*	*20*
Tetrachloro-m-xylene	*112*	*S1+*	*47 - 107*	*11/09/21 09:28*	*11/29/21 20:28*	*20*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/09/21 09:28*	*11/29/21 20:28*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/09/21 09:41	11/19/21 21:25	1
PCB-1221	ND		32	3.5	ug/Kg		11/09/21 09:41	11/19/21 21:25	1
PCB-1232	ND		32	4.6	ug/Kg		11/09/21 09:41	11/19/21 21:25	1
PCB-1242	ND		32	5.7	ug/Kg		11/09/21 09:41	11/19/21 21:25	1
PCB-1248	ND		32	2.3	ug/Kg		11/09/21 09:41	11/19/21 21:25	1
PCB-1254	ND		32	3.7	ug/Kg		11/09/21 09:41	11/19/21 21:25	1
PCB-1260	ND		32	2.6	ug/Kg		11/09/21 09:41	11/19/21 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*47*	*S1-*	*52 - 138*	*11/09/21 09:41*	*11/19/21 21:25*	*1*
Tetrachloro-m-xylene	*52*	*S1-*	*56 - 114*	*11/09/21 09:41*	*11/19/21 21:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**79**		0.97	0.25	mg/Kg		11/03/21 13:32	11/04/21 11:20	1
Arsenic	**8.4**		1.9	1.3	mg/Kg		11/03/21 13:32	11/04/21 11:20	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S1H-2
Date Collected: 10/28/21 11:25
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-45
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
Aldrin	ND		1.6	0.13	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
Chlordane (technical)	ND		19	8.9	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
Endrin	ND		1.6	0.19	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
Endrin aldehyde	ND		1.6	0.54	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
trans-Chlordane	ND		1.6	0.57	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
Methoxychlor	ND		3.2	0.53	ug/Kg		11/09/21 09:28	11/29/21 20:47	1
Toxaphene	ND		63	21	ug/Kg		11/09/21 09:28	11/29/21 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*36*	*S1-*	*46 - 109*	*11/09/21 09:28*	*11/29/21 20:47*	*1*
DCB Decachlorobiphenyl	*35*	*S1-*	*46 - 109*	*11/09/21 09:28*	*11/29/21 20:47*	*1*
Tetrachloro-m-xylene	*55*		*47 - 107*	*11/09/21 09:28*	*11/29/21 20:47*	*1*
Tetrachloro-m-xylene	*55*		*47 - 107*	*11/09/21 09:28*	*11/29/21 20:47*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S5H-0.5

Date Collected: 10/28/21 11:57
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-46

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		32	4.3	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
4,4'-DDE	ND		32	3.9	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
4,4'-DDT	ND		32	4.7	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
Aldrin	ND		32	2.6	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
alpha-BHC	ND		32	3.0	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
cis-Chlordane	ND		32	3.4	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
beta-BHC	ND		32	4.1	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
Chlordane (technical)	ND		380	180	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
delta-BHC	ND		32	6.6	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
Dieldrin	ND		32	3.8	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
Endosulfan I	ND		32	3.4	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
Endosulfan II	ND		32	3.4	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
Endosulfan sulfate	ND		32	6.6	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
Endrin	ND		32	3.8	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
Endrin aldehyde	ND		32	11	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
Endrin ketone	ND		32	5.1	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
trans-Chlordane	ND		32	11	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
gamma-BHC (Lindane)	ND		32	2.6	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
Heptachlor	ND		32	2.8	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
Heptachlor epoxide	ND		32	3.4	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
Methoxychlor	ND		64	11	ug/Kg		11/09/21 09:28	11/29/21 21:06	20
Toxaphene	ND		1300	420	ug/Kg		11/09/21 09:28	11/29/21 21:06	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*46 - 109*	*11/09/21 09:28*	*11/29/21 21:06*	*20*
DCB Decachlorobiphenyl	*81*		*46 - 109*	*11/09/21 09:28*	*11/29/21 21:06*	*20*
Tetrachloro-m-xylene	*110*	*S1+*	*47 - 107*	*11/09/21 09:28*	*11/29/21 21:06*	*20*
Tetrachloro-m-xylene	*66*		*47 - 107*	*11/09/21 09:28*	*11/29/21 21:06*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/09/21 09:41	11/19/21 21:45	1
PCB-1221	ND		31	3.4	ug/Kg		11/09/21 09:41	11/19/21 21:45	1
PCB-1232	ND		31	4.5	ug/Kg		11/09/21 09:41	11/19/21 21:45	1
PCB-1242	ND		31	5.5	ug/Kg		11/09/21 09:41	11/19/21 21:45	1
PCB-1248	ND		31	2.3	ug/Kg		11/09/21 09:41	11/19/21 21:45	1
PCB-1254	ND		31	3.6	ug/Kg		11/09/21 09:41	11/19/21 21:45	1
PCB-1260	ND		31	2.5	ug/Kg		11/09/21 09:41	11/19/21 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*41*	*S1-*	*52 - 138*	*11/09/21 09:41*	*11/19/21 21:45*	*1*
Tetrachloro-m-xylene	*47*	*S1-*	*56 - 114*	*11/09/21 09:41*	*11/19/21 21:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**670**		0.97	0.25	mg/Kg		11/03/21 13:32	11/04/21 11:25	1
Arsenic	**9.1**		1.9	1.3	mg/Kg		11/03/21 13:32	11/04/21 11:25	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S5H-2
Date Collected: 10/28/21 11:59
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-47
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
Aldrin	ND		1.6	0.13	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
Chlordane (technical)	ND		19	8.9	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
Endrin	ND		1.6	0.19	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
Endrin aldehyde	ND		1.6	0.54	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
trans-Chlordane	ND		1.6	0.57	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
Methoxychlor	ND		3.2	0.53	ug/Kg		11/09/21 09:28	11/29/21 21:25	1
Toxaphene	ND		63	21	ug/Kg		11/09/21 09:28	11/29/21 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*51*		*46 - 109*	*11/09/21 09:28*	*11/29/21 21:25*	*1*
DCB Decachlorobiphenyl	*46*		*46 - 109*	*11/09/21 09:28*	*11/29/21 21:25*	*1*
Tetrachloro-m-xylene	*60*		*47 - 107*	*11/09/21 09:28*	*11/29/21 21:25*	*1*
Tetrachloro-m-xylene	*59*		*47 - 107*	*11/09/21 09:28*	*11/29/21 21:25*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S4H-0.5

Date Collected: 10/28/21 12:00
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-48

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.2	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
4,4'-DDE	ND		17	2.0	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
4,4'-DDT	ND		17	2.4	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
Aldrin	ND		17	1.4	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
alpha-BHC	ND		17	1.6	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
beta-BHC	ND		17	2.1	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
Chlordane (technical)	ND		190	91	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
delta-BHC	ND		17	3.4	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
Dieldrin	ND		17	1.9	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
Endosulfan I	ND		17	1.8	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
Endosulfan II	ND		17	1.8	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
Endosulfan sulfate	ND		17	3.4	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
Endrin	ND		17	1.9	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
Endrin aldehyde	ND		17	5.5	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
Endrin ketone	ND		17	2.6	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
trans-Chlordane	ND		17	5.8	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
Heptachlor	ND		17	1.5	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
Methoxychlor	ND		33	5.5	ug/Kg		11/09/21 09:28	11/29/21 21:43	10
Toxaphene	ND		650	220	ug/Kg		11/09/21 09:28	11/29/21 21:43	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*61*		*46 - 109*	*11/09/21 09:28*	*11/29/21 21:43*	*10*
DCB Decachlorobiphenyl	*53*		*46 - 109*	*11/09/21 09:28*	*11/29/21 21:43*	*10*
Tetrachloro-m-xylene	*82*		*47 - 107*	*11/09/21 09:28*	*11/29/21 21:43*	*10*
Tetrachloro-m-xylene	*65*		*47 - 107*	*11/09/21 09:28*	*11/29/21 21:43*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/09/21 09:41	11/19/21 22:05	1
PCB-1221	ND		32	3.5	ug/Kg		11/09/21 09:41	11/19/21 22:05	1
PCB-1232	ND		32	4.7	ug/Kg		11/09/21 09:41	11/19/21 22:05	1
PCB-1242	ND		32	5.7	ug/Kg		11/09/21 09:41	11/19/21 22:05	1
PCB-1248	ND		32	2.4	ug/Kg		11/09/21 09:41	11/19/21 22:05	1
PCB-1254	ND		32	3.7	ug/Kg		11/09/21 09:41	11/19/21 22:05	1
PCB-1260	ND		32	2.6	ug/Kg		11/09/21 09:41	11/19/21 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*43*	*S1-*	*52 - 138*	*11/09/21 09:41*	*11/19/21 22:05*	*1*
Tetrachloro-m-xylene	*48*	*S1-*	*56 - 114*	*11/09/21 09:41*	*11/19/21 22:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**94**		0.95	0.25	mg/Kg		11/03/21 13:32	11/04/21 11:29	1
Arsenic	**2.7**		1.9	1.2	mg/Kg		11/03/21 13:32	11/04/21 11:29	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S4H-2
Date Collected: 10/28/21 12:02
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-49
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
Aldrin	ND		1.7	0.14	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
Endrin	ND		1.7	0.20	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
Methoxychlor	ND		3.4	0.55	ug/Kg		11/09/21 09:28	11/29/21 22:02	1
Toxaphene	ND		66	22	ug/Kg		11/09/21 09:28	11/29/21 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*46 - 109*	*11/09/21 09:28*	*11/29/21 22:02*	*1*
DCB Decachlorobiphenyl	*56*		*46 - 109*	*11/09/21 09:28*	*11/29/21 22:02*	*1*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/09/21 09:28*	*11/29/21 22:02*	*1*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/09/21 09:28*	*11/29/21 22:02*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S3H-0.5

Date Collected: 10/28/21 12:04
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-50

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.5	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
4,4'-DDE	ND		33	4.1	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
4,4'-DDT	ND		33	4.9	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
Aldrin	ND		33	2.7	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
alpha-BHC	ND		33	3.1	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
beta-BHC	ND		33	4.3	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
Chlordane (technical)	ND		390	180	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
delta-BHC	ND		33	6.9	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
Dieldrin	ND		33	3.9	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
Endosulfan I	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
Endosulfan II	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
Endosulfan sulfate	ND		33	6.9	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
Endrin	ND		33	3.9	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
Endrin aldehyde	ND		33	11	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
Endrin ketone	ND		33	5.3	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
trans-Chlordane	ND		33	12	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
Heptachlor	ND		33	2.9	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
Methoxychlor	ND		67	11	ug/Kg		11/09/21 09:28	11/29/21 22:21	20
Toxaphene	ND		1300	440	ug/Kg		11/09/21 09:28	11/29/21 22:21	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*46 - 109*	*11/09/21 09:28*	*11/29/21 22:21*	*20*
DCB Decachlorobiphenyl	*32*	*S1-*	*46 - 109*	*11/09/21 09:28*	*11/29/21 22:21*	*20*
Tetrachloro-m-xylene	*102*		*47 - 107*	*11/09/21 09:28*	*11/29/21 22:21*	*20*
Tetrachloro-m-xylene	*59*		*47 - 107*	*11/09/21 09:28*	*11/29/21 22:21*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/09/21 09:41	11/19/21 22:25	1
PCB-1221	ND		32	3.6	ug/Kg		11/09/21 09:41	11/19/21 22:25	1
PCB-1232	ND		32	4.7	ug/Kg		11/09/21 09:41	11/19/21 22:25	1
PCB-1242	ND		32	5.8	ug/Kg		11/09/21 09:41	11/19/21 22:25	1
PCB-1248	ND		32	2.4	ug/Kg		11/09/21 09:41	11/19/21 22:25	1
PCB-1254	ND		32	3.7	ug/Kg		11/09/21 09:41	11/19/21 22:25	1
PCB-1260	ND		32	2.6	ug/Kg		11/09/21 09:41	11/19/21 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*36*	*S1-*	*52 - 138*	*11/09/21 09:41*	*11/19/21 22:25*	*1*
Tetrachloro-m-xylene	*40*	*S1-*	*56 - 114*	*11/09/21 09:41*	*11/19/21 22:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**150**		0.99	0.26	mg/Kg		11/03/21 13:32	11/04/21 11:33	1
Arsenic	**9.7**		2.0	1.3	mg/Kg		11/03/21 13:32	11/04/21 11:33	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S3H-2
Date Collected: 10/28/21 12:06
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-51
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
Aldrin	ND		1.6	0.13	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
Chlordane (technical)	ND		19	9.0	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
Endrin	ND		1.6	0.19	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
Endrin aldehyde	ND		1.6	0.55	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
trans-Chlordane	ND		1.6	0.57	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/09/21 09:28	11/29/21 22:40	1
Toxaphene	ND		64	21	ug/Kg		11/09/21 09:28	11/29/21 22:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*49*		*46 - 109*	*11/09/21 09:28*	*11/29/21 22:40*	*1*
DCB Decachlorobiphenyl	*51*		*46 - 109*	*11/09/21 09:28*	*11/29/21 22:40*	*1*
Tetrachloro-m-xylene	*72*		*47 - 107*	*11/09/21 09:28*	*11/29/21 22:40*	*1*
Tetrachloro-m-xylene	*65*		*47 - 107*	*11/09/21 09:28*	*11/29/21 22:40*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S4I-0.5

Date Collected: 10/28/21 12:15
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-52

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
Aldrin	ND		16	1.4	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
alpha-BHC	ND		16	1.5	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
beta-BHC	ND		16	2.1	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
Chlordane (technical)	ND		190	91	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
delta-BHC	ND		16	3.4	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
Dieldrin	ND		16	1.9	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
Endosulfan I	ND		16	1.7	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
Endosulfan II	ND		16	1.7	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
Endosulfan sulfate	ND		16	3.4	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
Endrin	ND		16	1.9	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
Endrin aldehyde	ND		16	5.5	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
Endrin ketone	ND		16	2.6	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
trans-Chlordane	ND		16	5.8	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
gamma-BHC (Lindane)	ND		16	1.4	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
Heptachlor	ND		16	1.4	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
Methoxychlor	ND		33	5.4	ug/Kg		11/09/21 11:27	11/24/21 23:47	10
Toxaphene	ND		650	220	ug/Kg		11/09/21 11:27	11/24/21 23:47	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*93*		*46 - 109*	*11/09/21 11:27*	*11/24/21 23:47*	*10*
DCB Decachlorobiphenyl	*45*	*S1-*	*46 - 109*	*11/09/21 11:27*	*11/24/21 23:47*	*10*
Tetrachloro-m-xylene	*113*	*S1+*	*47 - 107*	*11/09/21 11:27*	*11/24/21 23:47*	*10*
Tetrachloro-m-xylene	*82*		*47 - 107*	*11/09/21 11:27*	*11/24/21 23:47*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/09/21 11:44	11/18/21 20:25	1
PCB-1221	ND		32	3.5	ug/Kg		11/09/21 11:44	11/18/21 20:25	1
PCB-1232	ND		32	4.6	ug/Kg		11/09/21 11:44	11/18/21 20:25	1
PCB-1242	ND		32	5.7	ug/Kg		11/09/21 11:44	11/18/21 20:25	1
PCB-1248	ND		32	2.4	ug/Kg		11/09/21 11:44	11/18/21 20:25	1
PCB-1254	ND		32	3.7	ug/Kg		11/09/21 11:44	11/18/21 20:25	1
PCB-1260	ND		32	2.6	ug/Kg		11/09/21 11:44	11/18/21 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*39*	*S1-*	*52 - 138*	*11/09/21 11:44*	*11/18/21 20:25*	*1*
Tetrachloro-m-xylene	*46*	*S1-*	*56 - 114*	*11/09/21 11:44*	*11/18/21 20:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**16**		0.98	0.25	mg/Kg		11/03/21 13:32	11/04/21 11:38	1
Arsenic	**9.0**		2.0	1.3	mg/Kg		11/03/21 13:32	11/04/21 11:38	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S4I-2
Date Collected: 10/28/21 12:17
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-53
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.1	1.1	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
4,4'-DDE	ND		8.1	1.0	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
4,4'-DDT	ND		8.1	1.2	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
Aldrin	ND		8.1	0.67	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
alpha-BHC	ND		8.1	0.77	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
cis-Chlordane	ND		8.1	0.86	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
beta-BHC	ND		8.1	1.1	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
Chlordane (technical)	ND		96	45	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
delta-BHC	ND		8.1	1.7	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
Dieldrin	ND		8.1	0.96	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
Endosulfan I	ND		8.1	0.86	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
Endosulfan II	ND		8.1	0.86	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
Endosulfan sulfate	ND		8.1	1.7	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
Endrin	ND		8.1	0.96	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
Endrin aldehyde	ND		8.1	2.7	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
Endrin ketone	ND		8.1	1.3	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
trans-Chlordane	ND		8.1	2.9	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
gamma-BHC (Lindane)	ND		8.1	0.67	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
Heptachlor	ND		8.1	0.72	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
Heptachlor epoxide	ND		8.1	0.86	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
Methoxychlor	ND		16	2.7	ug/Kg		11/09/21 11:27	11/25/21 00:06	5
Toxaphene	ND		320	110	ug/Kg		11/09/21 11:27	11/25/21 00:06	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*65*		*46 - 109*	*11/09/21 11:27*	*11/25/21 00:06*	*5*
DCB Decachlorobiphenyl	*54*		*46 - 109*	*11/09/21 11:27*	*11/25/21 00:06*	*5*
Tetrachloro-m-xylene	*89*		*47 - 107*	*11/09/21 11:27*	*11/25/21 00:06*	*5*
Tetrachloro-m-xylene	*78*		*47 - 107*	*11/09/21 11:27*	*11/25/21 00:06*	*5*

Client Sample ID: AOC3-S5I-0.5

Date Collected: 10/28/21 12:26
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-54

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	F1 F2	16	2.2	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
4,4'-DDE	ND	F1 F2	16	2.0	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
4,4'-DDT	ND	F1 F2	16	2.4	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
Aldrin	ND	F1 F2	16	1.3	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
alpha-BHC	ND	F2	16	1.5	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
cis-Chlordane	ND	F1 F2	16	1.7	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
beta-BHC	ND	F2	16	2.1	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
Chlordane (technical)	ND		190	90	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
delta-BHC	ND	F2	16	3.3	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
Dieldrin	ND	F1	16	1.9	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
Endosulfan I	ND	F1	16	1.7	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
Endosulfan II	ND	F1 F2	16	1.7	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
Endosulfan sulfate	ND	F1 F2	16	3.3	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
Endrin	ND	F1 F2	16	1.9	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
Endrin aldehyde	ND	F1	16	5.4	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
Endrin ketone	ND		16	2.6	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
trans-Chlordane	ND	F1 F2	16	5.7	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
gamma-BHC (Lindane)	ND	F2	16	1.3	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
Heptachlor	ND	F2	16	1.4	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
Heptachlor epoxide	ND	F1 F2	16	1.7	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
Methoxychlor	ND	F1 F2	32	5.3	ug/Kg		11/09/21 11:27	11/25/21 00:25	10
Toxaphene	ND		640	210	ug/Kg		11/09/21 11:27	11/25/21 00:25	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*31*	*S1-*	*46 - 109*	*11/09/21 11:27*	*11/25/21 00:25*	*10*
DCB Decachlorobiphenyl	*48*		*46 - 109*	*11/09/21 11:27*	*11/25/21 00:25*	*10*
Tetrachloro-m-xylene	*98*		*47 - 107*	*11/09/21 11:27*	*11/25/21 00:25*	*10*
Tetrachloro-m-xylene	*76*		*47 - 107*	*11/09/21 11:27*	*11/25/21 00:25*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/09/21 11:44	11/18/21 20:45	1
PCB-1221	ND		31	3.5	ug/Kg		11/09/21 11:44	11/18/21 20:45	1
PCB-1232	ND		31	4.6	ug/Kg		11/09/21 11:44	11/18/21 20:45	1
PCB-1242	ND		31	5.6	ug/Kg		11/09/21 11:44	11/18/21 20:45	1
PCB-1248	ND		31	2.3	ug/Kg		11/09/21 11:44	11/18/21 20:45	1
PCB-1254	ND		31	3.6	ug/Kg		11/09/21 11:44	11/18/21 20:45	1
PCB-1260	ND		31	2.6	ug/Kg		11/09/21 11:44	11/18/21 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*44*	*S1-*	*52 - 138*	*11/09/21 11:44*	*11/18/21 20:45*	*1*
Tetrachloro-m-xylene	*51*	*S1-*	*56 - 114*	*11/09/21 11:44*	*11/18/21 20:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**80**		0.98	0.25	mg/Kg		11/03/21 13:32	11/04/21 11:42	1
Arsenic	**4.3**		2.0	1.3	mg/Kg		11/03/21 13:32	11/04/21 11:42	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S5I-2
Date Collected: 10/28/21 12:28
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-55
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.4	1.1	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
4,4'-DDE	ND		8.4	1.0	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
4,4'-DDT	ND		8.4	1.2	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
Aldrin	ND		8.4	0.69	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
alpha-BHC	ND		8.4	0.79	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
cis-Chlordane	ND		8.4	0.89	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
beta-BHC	ND		8.4	1.1	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
Chlordane (technical)	ND		98	46	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
delta-BHC	ND		8.4	1.7	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
Dieldrin	ND		8.4	0.98	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
Endosulfan I	ND		8.4	0.89	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
Endosulfan II	ND		8.4	0.89	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
Endosulfan sulfate	ND		8.4	1.7	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
Endrin	ND		8.4	0.98	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
Endrin aldehyde	ND		8.4	2.8	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
Endrin ketone	ND		8.4	1.3	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
trans-Chlordane	ND		8.4	3.0	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
gamma-BHC (Lindane)	ND		8.4	0.69	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
Heptachlor	ND		8.4	0.74	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
Heptachlor epoxide	ND		8.4	0.89	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
Methoxychlor	ND		17	2.8	ug/Kg		11/09/21 11:27	11/26/21 23:34	5
Toxaphene	ND		330	110	ug/Kg		11/09/21 11:27	11/26/21 23:34	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*46 - 109*	*11/09/21 11:27*	*11/26/21 23:34*	*5*
DCB Decachlorobiphenyl	*16*	*S1-*	*46 - 109*	*11/09/21 11:27*	*11/26/21 23:34*	*5*
Tetrachloro-m-xylene	*55*		*47 - 107*	*11/09/21 11:27*	*11/26/21 23:34*	*5*
Tetrachloro-m-xylene	*37*	*S1-*	*47 - 107*	*11/09/21 11:27*	*11/26/21 23:34*	*5*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: EB10282021

Date Collected: 10/28/21 12:50
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-56

Matrix: Water

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.024	0.0058	ug/L		11/04/21 13:37	11/13/21 01:19	1
4,4'-DDE	ND		0.024	0.0058	ug/L		11/04/21 13:37	11/13/21 01:19	1
4,4'-DDT	ND		0.024	0.0058	ug/L		11/04/21 13:37	11/13/21 01:19	1
Aldrin	ND		0.024	0.0029	ug/L		11/04/21 13:37	11/13/21 01:19	1
alpha-BHC	ND		0.024	0.0034	ug/L		11/04/21 13:37	11/13/21 01:19	1
beta-BHC	ND		0.024	0.0077	ug/L		11/04/21 13:37	11/13/21 01:19	1
gamma-BHC (Lindane)	ND		0.024	0.0063	ug/L		11/04/21 13:37	11/13/21 01:19	1
delta-BHC	ND		0.024	0.011	ug/L		11/04/21 13:37	11/13/21 01:19	1
cis-Chlordane	ND		0.024	0.011	ug/L		11/04/21 13:37	11/13/21 01:19	1
trans-Chlordane	ND		0.024	0.0058	ug/L		11/04/21 13:37	11/13/21 01:19	1
Dieldrin	ND		0.024	0.0058	ug/L		11/04/21 13:37	11/13/21 01:19	1
Endosulfan I	ND		0.024	0.0068	ug/L		11/04/21 13:37	11/13/21 01:19	1
Endosulfan II	ND		0.024	0.0058	ug/L		11/04/21 13:37	11/13/21 01:19	1
Endosulfan sulfate	ND		0.024	0.0058	ug/L		11/04/21 13:37	11/13/21 01:19	1
Endrin	ND		0.024	0.0058	ug/L		11/04/21 13:37	11/13/21 01:19	1
Endrin aldehyde	ND		0.048	0.012	ug/L		11/04/21 13:37	11/13/21 01:19	1
Endrin ketone	ND		0.048	0.0097	ug/L		11/04/21 13:37	11/13/21 01:19	1
Heptachlor	ND		0.024	0.0034	ug/L		11/04/21 13:37	11/13/21 01:19	1
Heptachlor epoxide	ND		0.024	0.0068	ug/L		11/04/21 13:37	11/13/21 01:19	1
Methoxychlor	ND		0.048	0.020	ug/L		11/04/21 13:37	11/13/21 01:19	1
Toxaphene	ND		0.97	0.25	ug/L		11/04/21 13:37	11/13/21 01:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*44 - 114*	*11/04/21 13:37*	*11/13/21 01:19*	*1*
Tetrachloro-m-xylene	*76*		*44 - 114*	*11/04/21 13:37*	*11/13/21 01:19*	*1*
DCB Decachlorobiphenyl	*51*		*12 - 131*	*11/04/21 13:37*	*11/13/21 01:19*	*1*
DCB Decachlorobiphenyl	*66*		*12 - 131*	*11/04/21 13:37*	*11/13/21 01:19*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.48	0.073	ug/L		11/04/21 13:35	11/15/21 18:25	1
PCB-1221	ND		0.48	0.26	ug/L		11/04/21 13:35	11/15/21 18:25	1
PCB-1232	ND		0.48	0.077	ug/L		11/04/21 13:35	11/15/21 18:25	1
PCB-1242	ND		0.48	0.12	ug/L		11/04/21 13:35	11/15/21 18:25	1
PCB-1248	ND		0.48	0.12	ug/L		11/04/21 13:35	11/15/21 18:25	1
PCB-1254	ND		0.48	0.092	ug/L		11/04/21 13:35	11/15/21 18:25	1
PCB-1260	ND		0.48	0.11	ug/L		11/04/21 13:35	11/15/21 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*65*		*29 - 128*	*11/04/21 13:35*	*11/15/21 18:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.010	0.0058	mg/L		11/10/21 14:08	11/12/21 17:25	1
Arsenic	ND		0.10	0.022	mg/L		11/10/21 14:08	11/12/21 17:25	1
Barium	ND		0.010	0.0016	mg/L		11/10/21 14:08	11/12/21 17:25	1
Beryllium	ND		0.010	0.0026	mg/L		11/10/21 14:08	11/12/21 17:25	1
Cadmium	ND		0.010	0.0012	mg/L		11/10/21 14:08	11/12/21 17:25	1
Cobalt	ND		0.050	0.0023	mg/L		11/10/21 14:08	11/12/21 17:25	1
Chromium	ND		0.050	0.0086	mg/L		11/10/21 14:08	11/12/21 17:25	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: EB10282021
Date Collected: 10/28/21 12:50
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-56
Matrix: Water

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.050	0.0085	mg/L		11/10/21 14:08	11/12/21 17:25	1
Molybdenum	ND		0.050	0.024	mg/L		11/10/21 14:08	11/12/21 17:25	1
Nickel	ND		0.050	0.0045	mg/L		11/10/21 14:08	11/12/21 17:25	1
Antimony	ND		0.10	0.021	mg/L		11/10/21 14:08	11/12/21 17:25	1
Selenium	ND		0.10	0.034	mg/L		11/10/21 14:08	11/12/21 17:25	1
Thallium	ND		0.050	0.019	mg/L		11/10/21 14:08	11/12/21 17:25	1
Vanadium	ND		0.010	0.0017	mg/L		11/10/21 14:08	11/12/21 17:25	1
Zinc	ND		0.25	0.014	mg/L		11/10/21 14:08	11/12/21 17:25	1
Lead	ND		0.050	0.0080	mg/L		11/10/21 14:08	11/12/21 17:25	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00050	0.00014	mg/L		11/12/21 06:21	11/12/21 12:52	1

Surrogate Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCBP1 (46-109)	DCBP2 (46-109)	TCX1 (47-107)	TCX2 (47-107)
320-81042-1	AOC3-S6D-0.5	70	50	113 S1+	68
320-81042-2	AOC3-S6D-2	54	53	80	72
320-81042-3	AOC3-S5D--0.5	70	55	115 S1+	73
320-81042-4	AOC3-S5D-2	50	55	78	62
320-81042-5	AOC3-S5E-0.5	58	49	97	57
320-81042-6	AOC3-S5E-2	50	42 S1-	70	68
320-81042-7	AOC3/AOC8-S6E-0.5	78	54	111 S1+	70
320-81042-8	AOC3/AOC8-S6E-2	35 S1-	44 S1-	62	59
320-81042-9	AOC3-S8E-0.5	64	59	89	64
320-81042-10	AOC3-S8E-2	56	44 S1-	76	67
320-81042-11	AOC3-S7E-2	34 S1-	47	60	57
320-81042-12	AOC3-S9E-0.5	51	67	106	66
320-81042-13	AOC3-S9E-0.5 DUP	69	58	116 S1+	67
320-81042-14	AOC3-S9E-2	37 S1-	45 S1-	62	60
320-81042-15	AOC3-S7E-0.5	55	50	112 S1+	64
320-81042-16	AOC3-S6F-0.5	79	65	116 S1+	72
320-81042-16 MS	AOC3-S6F-0.5	73		93	
320-81042-16 MSD	AOC3-S6F-0.5	88		105	
320-81042-17	AOC3-S6F-2	41 S1-	42 S1-	75	69
320-81042-18	AOC3-S6G-0.5	0 S1-	0 S1-	80	39 S1-
320-81042-18 MS	AOC3-S6G-0.5	0 S1-		79	
320-81042-18 MSD	AOC3-S6G-0.5	307 S1+		80	
320-81042-19	AOC3-S6G-2	0 S1-	0 S1-	85	44 S1-
320-81042-20	AOC3-S5F-0.5	0 S1-	0 S1-	77	32 S1-
320-81042-21	AOC3-S5F-2	66	51	59	51
320-81042-22	AOC3-S4F-0.5	0 S1-	0 S1-	80	29 S1-
320-81042-23	AOC3-S4F-2	121 S1+	44 S1-	94	60
320-81042-24	AOC3-S3F-0.5	0 S1-	0 S1-	0 S1-	0 S1-
320-81042-25	AOC3-S3F-2	59	54	72	60
320-81042-26	AOC3/AOC8-S3G-0.5	0 S1-	0 S1-	82	46 S1-
320-81042-27	AOC3/AOC8-S3G-2	66	40 S1-	68	46 S1-
320-81042-28	AOC3-S4G-0.5	0 S1-	0 S1-	0 S1-	0 S1-
320-81042-29	AOC3-S4G-2	69	47	65	53
320-81042-30	AOC3-S5G-0.5	0 S1-	0 S1-	0 S1-	0 S1-
320-81042-31	AOC3-S5G-2	74	51	64	53
320-81042-32	AOC3-S5G-2 DUP	85	47	59	50
320-81042-33	AOC3-S2G-0.5	0 S1-	0 S1-	86	40 S1-
320-81042-34	AOC3-S2G-2	63	61	68	57
320-81042-35	AOC3-S2H-0.5	295 S1+	3 S1-	89	31 S1-
320-81042-36	AOC3-S2H-2	81	45 S1-	66	37 S1-
320-81042-36 MS	AOC3-S2H-2	74		69	
320-81042-36 MSD	AOC3-S2H-2	68		61	
320-81042-37	AOC3-S2F-0.5	31 S1-	35 S1-	61	65
320-81042-38	AOC3-S2F-2	79	94	111 S1+	107
320-81042-39	AOC3-S2F-0.5 DUP	49	48	80	76
320-81042-40	AOC3-S1F-0.5	67	78	114 S1+	73
320-81042-41	AOC3-S1F-2	41 S1-	43 S1-	57	56
320-81042-42	AOC3-S1G-0.5	72	49	100	57
320-81042-43	AOC3-S1G-2	42 S1-	42 S1-	66	66

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(46-109)	(46-109)	(47-107)	(47-107)
320-81042-44	AOC3-S1H-0.5	133 S1+	56	112 S1+	68
320-81042-45	AOC3-S1H-2	36 S1-	35 S1-	55	55
320-81042-46	AOC3-S5H-0.5	94	81	110 S1+	66
320-81042-47	AOC3-S5H-2	51	46	60	59
320-81042-48	AOC3-S4H-0.5	61	53	82	65
320-81042-49	AOC3-S4H-2	57	56	64	64
320-81042-50	AOC3-S3H-0.5	56	32 S1-	102	59
320-81042-51	AOC3-S3H-2	49	51	72	65
320-81042-52	AOC3-S4I-0.5	93	45 S1-	113 S1+	82
320-81042-53	AOC3-S4I-2	65	54	89	78
320-81042-54	AOC3-S5I-0.5	31 S1-	48	98	76
320-81042-54 MS	AOC3-S5I-0.5	172 S1+		132 S1+	
320-81042-54 MSD	AOC3-S5I-0.5	100		89	
320-81042-55	AOC3-S5I-2	56	16 S1-	55	37 S1-
LCS 320-541017/2-A	Lab Control Sample	56		75	
LCS 320-541214/2-A	Lab Control Sample	59		63	
LCS 320-541224/2-A	Lab Control Sample	56		64	
LCS 320-541292/2-A	Lab Control Sample	47		73	
MB 320-541017/1-A	Method Blank	55	78	75	76
MB 320-541214/1-A	Method Blank	55	61	58	54
MB 320-541224/1-A	Method Blank	71	63	70	58
MB 320-541292/1-A	Method Blank	80	85	80	74

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCBP1	DCBP2
Lab Sample ID	Client Sample ID	(44-114)	(44-114)	(12-131)	(12-131)
320-81042-56	EB10282021	73	76	51	66
LCS 320-539998/2-A	Lab Control Sample	64		42	
LCSD 320-539998/3-A	Lab Control Sample Dup	69		52	
MB 320-539998/1-A	Method Blank	69	71	48	69

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX2
Lab Sample ID	Client Sample ID	(52-138)	(56-114)
320-81042-1	AOC3-S6D-0.5	53	68
320-81042-3	AOC3-S5D--0.5	59	75
320-81042-5	AOC3-S5E-0.5	48 S1-	63
320-81042-7	AOC3/AOC8-S6E-0.5	47 S1-	61

Surrogate Summary

Client: Ninyo & Moore
Job ID: 320-81042-1
Project/Site: Cole School PEA

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	DCBP2 (52-138)	TCX2 (56-114)							
320-81042-9	AOC3-S8E-0.5	59	77							
320-81042-12	AOC3-S9E-0.5	60	79							
320-81042-13	AOC3-S9E-0.5 DUP	53	69							
320-81042-15	AOC3-S7E-0.5	43 S1-	60							
320-81042-15 MS	AOC3-S7E-0.5	49 S1-	69							
320-81042-15 MSD	AOC3-S7E-0.5	48 S1-	69							
320-81042-16	AOC3-S6F-0.5	53	60							
320-81042-18	AOC3-S6G-0.5	82	83							
320-81042-20	AOC3-S5F-0.5	65	73							
320-81042-22	AOC3-S4F-0.5	74	82							
320-81042-24	AOC3-S3F-0.5	94	98							
320-81042-26	AOC3/AOC8-S3G-0.5	90	100							
320-81042-28	AOC3-S4G-0.5	87	90							
320-81042-30	AOC3-S5G-0.5	83	94							
320-81042-33	AOC3-S2G-0.5	78	81							
320-81042-35	AOC3-S2H-0.5	46 S1-	50 S1-							
320-81042-37	AOC3-S2F-0.5	27 S1-	35 S1-							
320-81042-39	AOC3-S2F-0.5 DUP	46 S1-	53 S1-							
320-81042-40	AOC3-S1F-0.5	49 S1-	57							
320-81042-42	AOC3-S1G-0.5	35 S1-	40 S1-							
320-81042-44	AOC3-S1H-0.5	47 S1-	52 S1-							
320-81042-46	AOC3-S5H-0.5	41 S1-	47 S1-							
320-81042-48	AOC3-S4H-0.5	43 S1-	48 S1-							
320-81042-50	AOC3-S3H-0.5	36 S1-	40 S1-							
320-81042-52	AOC3-S4I-0.5	39 S1-	46 S1-							
320-81042-54	AOC3-S5I-0.5	44 S1-	51 S1-							
LCS 320-541026/2-A	Lab Control Sample	69	82							
LCS 320-541215/2-A	Lab Control Sample	80	80							
LCS 320-541228/2-A	Lab Control Sample	80	76							
LCS 320-541298/2-A	Lab Control Sample	65	67							
MB 320-541026/1-A	Method Blank	60	81							
MB 320-541215/1-A	Method Blank	75	78							
MB 320-541228/1-A	Method Blank	70	73							
MB 320-541298/1-A	Method Blank	60	66							

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	DCBP1 (29-128)								
320-81042-56	EB10282021	65								
LCS 320-539996/2-A	Lab Control Sample	69								
LCSD 320-539996/3-A	Lab Control Sample Dup	70								
MB 320-539996/1-A	Method Blank	64								

Surrogate Legend

Surrogate Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

DCBP = DCB Decachlorobiphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 320-539998/1-A
Matrix: Water
Analysis Batch: 542188

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.025	0.0060	ug/L		11/04/21 13:37	11/13/21 00:22	1
4,4'-DDE	ND		0.025	0.0060	ug/L		11/04/21 13:37	11/13/21 00:22	1
4,4'-DDT	ND		0.025	0.0060	ug/L		11/04/21 13:37	11/13/21 00:22	1
Aldrin	ND		0.025	0.0030	ug/L		11/04/21 13:37	11/13/21 00:22	1
alpha-BHC	ND		0.025	0.0035	ug/L		11/04/21 13:37	11/13/21 00:22	1
beta-BHC	ND		0.025	0.0080	ug/L		11/04/21 13:37	11/13/21 00:22	1
cis-Chlordane	ND		0.025	0.011	ug/L		11/04/21 13:37	11/13/21 00:22	1
delta-BHC	ND		0.025	0.012	ug/L		11/04/21 13:37	11/13/21 00:22	1
Dieldrin	ND		0.025	0.0060	ug/L		11/04/21 13:37	11/13/21 00:22	1
Endosulfan I	ND		0.025	0.0070	ug/L		11/04/21 13:37	11/13/21 00:22	1
Endosulfan II	ND		0.025	0.0060	ug/L		11/04/21 13:37	11/13/21 00:22	1
Endosulfan sulfate	ND		0.025	0.0060	ug/L		11/04/21 13:37	11/13/21 00:22	1
Endrin	ND		0.025	0.0060	ug/L		11/04/21 13:37	11/13/21 00:22	1
Endrin aldehyde	ND		0.050	0.013	ug/L		11/04/21 13:37	11/13/21 00:22	1
Endrin ketone	ND		0.050	0.010	ug/L		11/04/21 13:37	11/13/21 00:22	1
trans-Chlordane	ND		0.025	0.0060	ug/L		11/04/21 13:37	11/13/21 00:22	1
gamma-BHC (Lindane)	ND		0.025	0.0065	ug/L		11/04/21 13:37	11/13/21 00:22	1
Heptachlor	ND		0.025	0.0035	ug/L		11/04/21 13:37	11/13/21 00:22	1
Heptachlor epoxide	ND		0.025	0.0070	ug/L		11/04/21 13:37	11/13/21 00:22	1
Methoxychlor	ND		0.050	0.021	ug/L		11/04/21 13:37	11/13/21 00:22	1
Toxaphene	ND		1.0	0.26	ug/L		11/04/21 13:37	11/13/21 00:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*48*		*12 - 131*	*11/04/21 13:37*	*11/13/21 00:22*	*1*
DCB Decachlorobiphenyl	*69*		*12 - 131*	*11/04/21 13:37*	*11/13/21 00:22*	*1*
Tetrachloro-m-xylene	*69*		*44 - 114*	*11/04/21 13:37*	*11/13/21 00:22*	*1*
Tetrachloro-m-xylene	*71*		*44 - 114*	*11/04/21 13:37*	*11/13/21 00:22*	*1*

Lab Sample ID: LCS 320-539998/2-A
Matrix: Water
Analysis Batch: 542188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539998

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.500	0.386		ug/L		77	65 - 141
4,4'-DDE	0.500	0.371		ug/L		74	60 - 134
4,4'-DDT	0.500	0.376		ug/L		75	69 - 127
Aldrin	0.500	0.333		ug/L		67	56 - 119
alpha-BHC	0.500	0.355		ug/L		71	63 - 137
beta-BHC	0.500	0.373		ug/L		75	64 - 125
cis-Chlordane	0.500	0.364		ug/L		73	63 - 127
delta-BHC	0.500	0.373		ug/L		75	61 - 140
Dieldrin	0.500	0.375		ug/L		75	63 - 135
Endosulfan I	0.500	0.301		ug/L		60	37 - 133
Endosulfan II	0.500	0.350		ug/L		70	54 - 126
Endosulfan sulfate	0.500	0.381		ug/L		76	59 - 124
Endrin	0.500	0.372		ug/L		74	67 - 136
Endrin aldehyde	0.500	0.352		ug/L		70	41 - 112
Endrin ketone	0.500	0.367		ug/L		73	57 - 128

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 320-539998/2-A
Matrix: Water
Analysis Batch: 542188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539998

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-Chlordane	0.500	0.346		ug/L		69	59 - 128
gamma-BHC (Lindane)	0.500	0.363		ug/L		73	68 - 135
Heptachlor	0.500	0.329		ug/L		66	63 - 126
Heptachlor epoxide	0.500	0.357		ug/L		71	67 - 129
Methoxychlor	0.500	0.370		ug/L		74	71 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*42*		*12 - 131*
Tetrachloro-m-xylene	*64*		*44 - 114*

Lab Sample ID: LCSD 320-539998/3-A
Matrix: Water
Analysis Batch: 542188

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 539998

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.500	0.421		ug/L		84	65 - 141	9	30
4,4'-DDE	0.500	0.401		ug/L		80	60 - 134	8	30
4,4'-DDT	0.500	0.409		ug/L		82	69 - 127	8	30
Aldrin	0.500	0.362		ug/L		72	56 - 119	8	30
alpha-BHC	0.500	0.390		ug/L		78	63 - 137	9	30
beta-BHC	0.500	0.400		ug/L		80	64 - 125	7	30
cis-Chlordane	0.500	0.393		ug/L		79	63 - 127	8	30
delta-BHC	0.500	0.401		ug/L		80	61 - 140	7	30
Dieldrin	0.500	0.404		ug/L		81	63 - 135	7	30
Endosulfan I	0.500	0.326		ug/L		65	37 - 133	8	30
Endosulfan II	0.500	0.380		ug/L		76	54 - 126	8	30
Endosulfan sulfate	0.500	0.422		ug/L		84	59 - 124	10	30
Endrin	0.500	0.401		ug/L		80	67 - 136	8	30
Endrin aldehyde	0.500	0.389		ug/L		78	41 - 112	10	30
Endrin ketone	0.500	0.401		ug/L		80	57 - 128	9	30
trans-Chlordane	0.500	0.370		ug/L		74	59 - 128	7	30
gamma-BHC (Lindane)	0.500	0.396		ug/L		79	68 - 135	9	30
Heptachlor	0.500	0.358		ug/L		72	63 - 126	8	30
Heptachlor epoxide	0.500	0.385		ug/L		77	67 - 129	8	30
Methoxychlor	0.500	0.406		ug/L		81	71 - 125	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*52*		*12 - 131*
Tetrachloro-m-xylene	*69*		*44 - 114*

Lab Sample ID: MB 320-541017/1-A
Matrix: Solid
Analysis Batch: 545685

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541017

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/08/21 15:14	11/24/21 16:08	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 320-541017/1-A
Matrix: Solid
Analysis Batch: 545685

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541017

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.7	0.14	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
Endrin	ND		1.7	0.20	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/08/21 15:14	11/24/21 16:08	1
Toxaphene	ND		67	22	ug/Kg		11/08/21 15:14	11/24/21 16:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*46 - 109*	*11/08/21 15:14*	*11/24/21 16:08*	*1*
DCB Decachlorobiphenyl	*78*		*46 - 109*	*11/08/21 15:14*	*11/24/21 16:08*	*1*
Tetrachloro-m-xylene	*75*		*47 - 107*	*11/08/21 15:14*	*11/24/21 16:08*	*1*
Tetrachloro-m-xylene	*76*		*47 - 107*	*11/08/21 15:14*	*11/24/21 16:08*	*1*

Lab Sample ID: LCS 320-541017/2-A
Matrix: Solid
Analysis Batch: 545685

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541017

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	14.0		ug/Kg		84	53 - 117
4,4'-DDE	16.7	13.6		ug/Kg		82	58 - 115
4,4'-DDT	16.7	14.5		ug/Kg		87	53 - 128
Aldrin	16.7	12.9		ug/Kg		77	55 - 109
alpha-BHC	16.7	13.4		ug/Kg		80	54 - 111
beta-BHC	16.7	13.4		ug/Kg		81	53 - 115
cis-Chlordane	16.7	13.2		ug/Kg		79	54 - 113
delta-BHC	16.7	13.4		ug/Kg		81	39 - 124
Dieldrin	16.7	13.6		ug/Kg		82	54 - 117
Endosulfan I	16.7	11.2		ug/Kg		67	42 - 118
Endosulfan II	16.7	13.1		ug/Kg		78	48 - 118
Endosulfan sulfate	16.7	14.4		ug/Kg		86	51 - 113
Endrin	16.7	13.5		ug/Kg		81	58 - 115
Endrin aldehyde	16.7	13.0		ug/Kg		78	40 - 100
Endrin ketone	16.7	13.8		ug/Kg		83	51 - 118
trans-Chlordane	16.7	12.8		ug/Kg		77	55 - 114
gamma-BHC (Lindane)	16.7	13.8		ug/Kg		83	54 - 112

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 320-541017/2-A
Matrix: Solid
Analysis Batch: 545685

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541017

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Heptachlor	16.7	14.2		ug/Kg		85	50 - 118
Heptachlor epoxide	16.7	13.0		ug/Kg		78	56 - 113
Methoxychlor	16.7	13.9		ug/Kg		84	52 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*56*		*46 - 109*
Tetrachloro-m-xylene	*75*		*47 - 107*

Lab Sample ID: 320-81042-16 MS
Matrix: Solid
Analysis Batch: 545685

Client Sample ID: AOC3-S6F-0.5
Prep Type: Total/NA
Prep Batch: 541017

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND	F1	16.6	6.73	J F1	ug/Kg		40	53 - 117
4,4'-DDE	ND	F1	16.6	8.46	J F1	ug/Kg		51	58 - 115
4,4'-DDT	ND	F1	16.6	8.45	J F1	ug/Kg		51	53 - 128
Aldrin	ND		16.6	10.3	J	ug/Kg		62	55 - 109
alpha-BHC	ND		16.6	10.6	J	ug/Kg		64	54 - 111
beta-BHC	ND		16.6	9.60	J	ug/Kg		58	53 - 115
cis-Chlordane	ND	F1	16.6	7.13	J F1	ug/Kg		43	54 - 113
delta-BHC	ND		16.6	8.25	J	ug/Kg		50	39 - 124
Dieldrin	ND	F1	16.6	7.34	J F1	ug/Kg		44	54 - 117
Endosulfan I	ND	F1	16.6	6.07	J F1	ug/Kg		36	42 - 118
Endosulfan II	ND	F1	16.6	5.75	J F1	ug/Kg		35	48 - 118
Endosulfan sulfate	ND	F1	16.6	ND	F1	ug/Kg		0	51 - 113
Endrin	ND	F1	16.6	7.31	J F1	ug/Kg		44	58 - 115
Endrin aldehyde	ND	F1	16.6	ND	F1	ug/Kg		0	40 - 100
Endrin ketone	ND	F1 F2	16.6	ND	F1	ug/Kg		0	51 - 118
trans-Chlordane	ND	F1	16.6	ND	F1	ug/Kg		0	55 - 114
gamma-BHC (Lindane)	ND		16.6	9.56	J	ug/Kg		57	54 - 112
Heptachlor	ND		16.6	13.5	J	ug/Kg		81	50 - 118
Heptachlor epoxide	ND		16.6	7.87	J F1	ug/Kg		47	56 - 113
Methoxychlor	ND	F1	16.6	ND	F1	ug/Kg		0	52 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*73*		*46 - 109*
Tetrachloro-m-xylene	*93*		*47 - 107*

Lab Sample ID: 320-81042-16 MSD
Matrix: Solid
Analysis Batch: 545685

Client Sample ID: AOC3-S6F-0.5
Prep Type: Total/NA
Prep Batch: 541017

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND	F1	15.7	6.58	J F1	ug/Kg		42	53 - 117	2	30
4,4'-DDE	ND	F1	15.7	7.86	J F1	ug/Kg		50	58 - 115	16	30
4,4'-DDT	ND	F1	15.7	6.84	J F1	ug/Kg		43	53 - 128	21	30
Aldrin	ND		15.7	9.75	J	ug/Kg		62	55 - 109	13	30
alpha-BHC	ND		15.7	10.6	J	ug/Kg		68	54 - 111	0	30

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-81042-16 MSD
Matrix: Solid
Analysis Batch: 545685

Client Sample ID: AOC3-S6F-0.5
Prep Type: Total/NA
Prep Batch: 541017

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
beta-BHC	ND		15.7	9.92	J	ug/Kg		63	53 - 115	3	30
cis-Chlordane	ND	F1	15.7	6.91	J F1	ug/Kg		44	54 - 113	3	30
delta-BHC	ND		15.7	8.03	J	ug/Kg		51	39 - 124	3	30
Dieldrin	ND	F1	15.7	7.34	J F1	ug/Kg		47	54 - 117	3	30
Endosulfan I	ND	F1	15.7	6.21	J F1	ug/Kg		39	42 - 118	16	30
Endosulfan II	ND	F1	15.7	5.99	J F1	ug/Kg		38	48 - 118	4	30
Endosulfan sulfate	ND	F1	15.7	ND	F1	ug/Kg		0	51 - 113	NC	30
Endrin	ND	F1	15.7	6.97	J F1	ug/Kg		44	58 - 115	5	30
Endrin aldehyde	ND	F1	15.7	ND	F1	ug/Kg		0	40 - 100	NC	30
Endrin ketone	ND	F1	15.7	9.69	J F2	ug/Kg		62	51 - 118	53	30
trans-Chlordane	ND	F1	15.7	ND	F1	ug/Kg		0	55 - 114	NC	30
gamma-BHC (Lindane)	ND		15.7	9.55	J	ug/Kg		61	54 - 112	0	30
Heptachlor	ND		15.7	12.4	J	ug/Kg		79	50 - 118	9	30
Heptachlor epoxide	ND		15.7	7.67	J F1	ug/Kg		49	56 - 113	3	30
Methoxychlor	ND	F1	15.7	ND	F1	ug/Kg		0	52 - 123	NC	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*88*		*46 - 109*
Tetrachloro-m-xylene	*105*		*47 - 107*

Lab Sample ID: MB 320-541214/1-A
Matrix: Solid
Analysis Batch: 546025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541214

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
Aldrin	ND		1.7	0.14	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
Endrin	ND		1.7	0.20	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/09/21 08:55	11/26/21 14:32	1
Toxaphene	ND		67	22	ug/Kg		11/09/21 08:55	11/26/21 14:32	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 320-541214/1-A
Matrix: Solid
Analysis Batch: 546025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541214

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	55		46 - 109	11/09/21 08:55	11/26/21 14:32	1
DCB Decachlorobiphenyl	61		46 - 109	11/09/21 08:55	11/26/21 14:32	1
Tetrachloro-m-xylene	58		47 - 107	11/09/21 08:55	11/26/21 14:32	1
Tetrachloro-m-xylene	54		47 - 107	11/09/21 08:55	11/26/21 14:32	1

Lab Sample ID: LCS 320-541214/2-A
Matrix: Solid
Analysis Batch: 546025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541214

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	12.4		ug/Kg		74	53 - 117
4,4'-DDE	16.7	12.5		ug/Kg		75	58 - 115
4,4'-DDT	16.7	13.5		ug/Kg		81	53 - 128
Aldrin	16.7	10.6		ug/Kg		64	55 - 109
alpha-BHC	16.7	12.4		ug/Kg		75	54 - 111
beta-BHC	16.7	12.2		ug/Kg		73	53 - 115
cis-Chlordane	16.7	12.0		ug/Kg		72	54 - 113
delta-BHC	16.7	12.3		ug/Kg		74	39 - 124
Dieldrin	16.7	12.6		ug/Kg		76	54 - 117
Endosulfan I	16.7	10.3		ug/Kg		62	42 - 118
Endosulfan II	16.7	11.8		ug/Kg		71	48 - 118
Endosulfan sulfate	16.7	13.2		ug/Kg		79	51 - 113
Endrin	16.7	12.6		ug/Kg		76	58 - 115
Endrin aldehyde	16.7	12.5		ug/Kg		75	40 - 100
Endrin ketone	16.7	12.2		ug/Kg		73	51 - 118
trans-Chlordane	16.7	11.7		ug/Kg		70	55 - 114
gamma-BHC (Lindane)	16.7	12.3		ug/Kg		74	54 - 112
Heptachlor	16.7	11.5		ug/Kg		69	50 - 118
Heptachlor epoxide	16.7	11.8		ug/Kg		71	56 - 113
Methoxychlor	16.7	13.4		ug/Kg		80	52 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	59		46 - 109
Tetrachloro-m-xylene	63		47 - 107

Lab Sample ID: 320-81042-18 MS
Matrix: Solid
Analysis Batch: 546025

Client Sample ID: AOC3-S6G-0.5
Prep Type: Total/NA
Prep Batch: 541214

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.2	8.82	J	ug/Kg		54	53 - 117
4,4'-DDE	ND	F1	16.2	9.14	J F1	ug/Kg		56	58 - 115
4,4'-DDT	ND	F2	16.2	9.90	J	ug/Kg		61	53 - 128
Aldrin	ND	F2	16.2	12.2	J	ug/Kg		75	55 - 109
alpha-BHC	ND		16.2	10.8	J	ug/Kg		67	54 - 111
beta-BHC	ND		16.2	16.3	J	ug/Kg		101	53 - 115
cis-Chlordane	ND	F2	16.2	10.3	J	ug/Kg		64	54 - 113
delta-BHC	ND		16.2	9.27	J	ug/Kg		57	39 - 124

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-81042-18 MS
Matrix: Solid
Analysis Batch: 546025

Client Sample ID: AOC3-S6G-0.5
Prep Type: Total/NA
Prep Batch: 541214

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dieldrin	ND	F2	16.2	10.6	J	ug/Kg		65	54 - 117
Endosulfan I	ND	F1	16.2	9.16	J	ug/Kg		56	42 - 118
Endosulfan II	ND	F1	16.2	9.47	J	ug/Kg		58	48 - 118
Endosulfan sulfate	ND	F1	16.2	ND	F1	ug/Kg		0	51 - 113
Endrin	ND	F2	16.2	11.0	J	ug/Kg		68	58 - 115
Endrin aldehyde	ND	F1	16.2	ND	F1	ug/Kg		0	40 - 100
Endrin ketone	ND	F1	16.2	13.7	J	ug/Kg		85	51 - 118
trans-Chlordane	ND	F1	16.2	ND	F1	ug/Kg		0	55 - 114
gamma-BHC (Lindane)	ND		16.2	11.9	J	ug/Kg		74	54 - 112
Heptachlor	ND		16.2	13.5	J	ug/Kg		83	50 - 118
Heptachlor epoxide	ND		16.2	11.6	J	ug/Kg		72	56 - 113
Methoxychlor	ND	F1	16.2	ND	F1	ug/Kg		0	52 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*
Tetrachloro-m-xylene	*79*		*47 - 107*

Lab Sample ID: 320-81042-18 MSD
Matrix: Solid
Analysis Batch: 546025

Client Sample ID: AOC3-S6G-0.5
Prep Type: Total/NA
Prep Batch: 541214

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.7	10.7	J	ug/Kg		64	53 - 117	4	30
4,4'-DDE	ND	F1	16.7	11.0	J	ug/Kg		66	58 - 115	18	30
4,4'-DDT	ND	F1 F2	16.7	12.0	J F2	ug/Kg		72	53 - 128	42	30
Aldrin	ND	F1 F2	16.7	13.9	J F2	ug/Kg		84	55 - 109	40	30
alpha-BHC	ND		16.7	11.3	J	ug/Kg		68	54 - 111	4	30
beta-BHC	ND	F1	16.7	13.9	J	ug/Kg		84	53 - 115	2	30
cis-Chlordane	ND	F1	16.7	12.8	J F2	ug/Kg		77	54 - 113	43	30
delta-BHC	ND		16.7	9.36	J	ug/Kg		56	39 - 124	1	30
Dieldrin	ND	F1	16.7	12.5	J F2	ug/Kg		75	54 - 117	41	30
Endosulfan I	ND	F1	16.7	11.4	J	ug/Kg		69	42 - 118	22	30
Endosulfan II	ND	F1	16.7	11.1	J	ug/Kg		67	48 - 118	16	30
Endosulfan sulfate	ND	F1	16.7	ND	F1	ug/Kg		0	51 - 113	NC	30
Endrin	ND	F1 F2	16.7	12.6	J F2	ug/Kg		76	58 - 115	42	30
Endrin aldehyde	ND	F1	16.7	ND	F1	ug/Kg		0	40 - 100	NC	30
Endrin ketone	ND	F1	16.7	11.6	J	ug/Kg		69	51 - 118	17	30
trans-Chlordane	ND	F1	16.7	ND	F1	ug/Kg		0	55 - 114	NC	30
gamma-BHC (Lindane)	ND		16.7	11.7	J	ug/Kg		70	54 - 112	2	30
Heptachlor	ND		16.7	14.4	J	ug/Kg		86	50 - 118	6	30
Heptachlor epoxide	ND		16.7	12.8	J	ug/Kg		77	56 - 113	10	30
Methoxychlor	ND	F1	16.7	ND	F1	ug/Kg		0	52 - 123	NC	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*307*	*S1+*	*46 - 109*
Tetrachloro-m-xylene	*80*		*47 - 107*

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 320-541224/1-A
Matrix: Solid
Analysis Batch: 546025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541224

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
Aldrin	ND		1.7	0.14	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
Endrin	ND		1.7	0.20	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/09/21 09:28	11/26/21 21:40	1
Toxaphene	ND		67	22	ug/Kg		11/09/21 09:28	11/26/21 21:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*71*		*46 - 109*	*11/09/21 09:28*	*11/26/21 21:40*	*1*
DCB Decachlorobiphenyl	*63*		*46 - 109*	*11/09/21 09:28*	*11/26/21 21:40*	*1*
Tetrachloro-m-xylene	*70*		*47 - 107*	*11/09/21 09:28*	*11/26/21 21:40*	*1*
Tetrachloro-m-xylene	*58*		*47 - 107*	*11/09/21 09:28*	*11/26/21 21:40*	*1*

Lab Sample ID: LCS 320-541224/2-A
Matrix: Solid
Analysis Batch: 546025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541224

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	12.8		ug/Kg		77	53 - 117
4,4'-DDE	16.7	12.5		ug/Kg		75	58 - 115
4,4'-DDT	16.7	12.9		ug/Kg		78	53 - 128
Aldrin	16.7	10.7		ug/Kg		64	55 - 109
alpha-BHC	16.7	12.5		ug/Kg		75	54 - 111
beta-BHC	16.7	12.3		ug/Kg		74	53 - 115
cis-Chlordane	16.7	12.0		ug/Kg		72	54 - 113
delta-BHC	16.7	12.4		ug/Kg		74	39 - 124
Dieldrin	16.7	12.3		ug/Kg		74	54 - 117
Endosulfan I	16.7	10.1		ug/Kg		61	42 - 118
Endosulfan II	16.7	11.6		ug/Kg		70	48 - 118
Endosulfan sulfate	16.7	12.7		ug/Kg		76	51 - 113
Endrin	16.7	12.5		ug/Kg		75	58 - 115
Endrin aldehyde	16.7	11.6		ug/Kg		70	40 - 100

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 320-541224/2-A
Matrix: Solid
Analysis Batch: 546025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541224

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Endrin ketone	16.7	12.1		ug/Kg		73	51 - 118
trans-Chlordane	16.7	11.7		ug/Kg		70	55 - 114
gamma-BHC (Lindane)	16.7	12.4		ug/Kg		74	54 - 112
Heptachlor	16.7	11.5		ug/Kg		69	50 - 118
Heptachlor epoxide	16.7	11.8		ug/Kg		71	56 - 113
Methoxychlor	16.7	13.0		ug/Kg		78	52 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*56*		*46 - 109*
Tetrachloro-m-xylene	*64*		*47 - 107*

Lab Sample ID: 320-81042-36 MS
Matrix: Solid
Analysis Batch: 546025

Client Sample ID: AOC3-S2H-2
Prep Type: Total/NA
Prep Batch: 541224

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND	F1	16.0	9.24	J	ug/Kg		58	53 - 117
4,4'-DDE	ND	F1	16.0	9.26	J	ug/Kg		58	58 - 115
4,4'-DDT	ND	F1	16.0	8.44	J	ug/Kg		53	53 - 128
Aldrin	ND		16.0	10.1	J	ug/Kg		63	55 - 109
alpha-BHC	ND		16.0	9.77	J	ug/Kg		61	54 - 111
beta-BHC	ND		16.0	11.1	J	ug/Kg		69	53 - 115
cis-Chlordane	ND		16.0	9.67	J	ug/Kg		60	54 - 113
delta-BHC	ND		16.0	8.61	J	ug/Kg		54	39 - 124
Dieldrin	ND		16.0	9.77	J	ug/Kg		61	54 - 117
Endosulfan I	ND	F1 F2	16.0	8.15	J	ug/Kg		51	42 - 118
Endosulfan II	ND		16.0	8.66	J	ug/Kg		54	48 - 118
Endosulfan sulfate	ND	F1	16.0	7.25	J F1	ug/Kg		45	51 - 113
Endrin	ND	F1	16.0	10.4	J	ug/Kg		65	58 - 115
Endrin aldehyde	ND	F1	16.0	7.56	J	ug/Kg		47	40 - 100
Endrin ketone	ND		16.0	9.49	J	ug/Kg		59	51 - 118
trans-Chlordane	ND	F1	16.0	9.22	J	ug/Kg		58	55 - 114
gamma-BHC (Lindane)	ND		16.0	9.88	J	ug/Kg		62	54 - 112
Heptachlor	ND	F1	16.0	11.8	J	ug/Kg		74	50 - 118
Heptachlor epoxide	ND		16.0	10.2	J	ug/Kg		63	56 - 113
Methoxychlor	ND	F1	16.0	8.45	J	ug/Kg		53	52 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*74*		*46 - 109*
Tetrachloro-m-xylene	*69*		*47 - 107*

Lab Sample ID: 320-81042-36 MSD
Matrix: Solid
Analysis Batch: 546025

Client Sample ID: AOC3-S2H-2
Prep Type: Total/NA
Prep Batch: 541224

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		15.9	8.58	J	ug/Kg		54	53 - 117	8	30
4,4'-DDE	ND	F1	15.9	7.88	J F1	ug/Kg		50	58 - 115	16	30

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-81042-36 MSD
Matrix: Solid
Analysis Batch: 546025

Client Sample ID: AOC3-S2H-2
Prep Type: Total/NA
Prep Batch: 541224

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDT	ND	F1	15.9	8.09	J F1	ug/Kg		51	53 - 128	4	30
Aldrin	ND		15.9	8.97	J	ug/Kg		56	55 - 109	12	30
alpha-BHC	ND		15.9	9.02	J	ug/Kg		57	54 - 111	8	30
beta-BHC	ND		15.9	10.4	J	ug/Kg		65	53 - 115	7	30
cis-Chlordane	ND		15.9	8.55	J	ug/Kg		54	54 - 113	12	30
delta-BHC	ND		15.9	8.05	J	ug/Kg		51	39 - 124	7	30
Dieldrin	ND		15.9	9.40	J	ug/Kg		59	54 - 117	4	30
Endosulfan I	ND	F2	15.9	6.83	J F2	ug/Kg		43	42 - 118	31	30
Endosulfan II	ND		15.9	8.40	J	ug/Kg		53	48 - 118	3	30
Endosulfan sulfate	ND	F1	15.9	7.36	J F1	ug/Kg		46	51 - 113	2	30
Endrin	ND	F1	15.9	8.77	J F1	ug/Kg		55	58 - 115	17	30
Endrin aldehyde	ND	F1	15.9	6.75	J	ug/Kg		42	40 - 100	11	30
Endrin ketone	ND		15.9	9.15	J	ug/Kg		58	51 - 118	4	30
trans-Chlordane	ND	F1	15.9	8.07	J F1	ug/Kg		51	55 - 114	13	30
gamma-BHC (Lindane)	ND		15.9	8.88	J	ug/Kg		56	54 - 112	11	30
Heptachlor	ND	F1	15.9	9.85	J	ug/Kg		62	50 - 118	18	30
Heptachlor epoxide	ND		15.9	8.83	J	ug/Kg		56	56 - 113	14	30
Methoxychlor	ND	F1	15.9	7.95	J F1	ug/Kg		50	52 - 123	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*68*		*46 - 109*
Tetrachloro-m-xylene	*61*		*47 - 107*

Lab Sample ID: MB 320-541292/1-A
Matrix: Solid
Analysis Batch: 546025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541292

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
Aldrin	ND		1.7	0.14	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
Endrin	ND		1.7	0.20	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
Heptachlor	1.22	J P	1.7	0.15	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/09/21 11:27	11/26/21 14:13	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 320-541292/1-A
Matrix: Solid
Analysis Batch: 546025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541292

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxychlor	ND		3.4	0.56	ug/Kg		11/09/21 11:27	11/26/21 14:13	1
Toxaphene	ND		67	22	ug/Kg		11/09/21 11:27	11/26/21 14:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*46 - 109*	*11/09/21 11:27*	*11/26/21 14:13*	*1*
DCB Decachlorobiphenyl	*85*		*46 - 109*	*11/09/21 11:27*	*11/26/21 14:13*	*1*
Tetrachloro-m-xylene	*80*		*47 - 107*	*11/09/21 11:27*	*11/26/21 14:13*	*1*
Tetrachloro-m-xylene	*74*		*47 - 107*	*11/09/21 11:27*	*11/26/21 14:13*	*1*

Lab Sample ID: LCS 320-541292/2-A
Matrix: Solid
Analysis Batch: 545685

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541292

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	13.7		ug/Kg		82	53 - 117
4,4'-DDE	16.7	13.2		ug/Kg		79	58 - 115
4,4'-DDT	16.7	12.8		ug/Kg		77	53 - 128
Aldrin	16.7	13.0		ug/Kg		78	55 - 109
alpha-BHC	16.7	13.3		ug/Kg		80	54 - 111
beta-BHC	16.7	13.5		ug/Kg		81	53 - 115
cis-Chlordane	16.7	13.1		ug/Kg		79	54 - 113
delta-BHC	16.7	13.4		ug/Kg		80	39 - 124
Dieldrin	16.7	13.1		ug/Kg		78	54 - 117
Endosulfan I	16.7	10.8		ug/Kg		65	42 - 118
Endosulfan II	16.7	12.4		ug/Kg		74	48 - 118
Endosulfan sulfate	16.7	13.9		ug/Kg		83	51 - 113
Endrin	16.7	13.0		ug/Kg		78	58 - 115
Endrin aldehyde	16.7	9.44		ug/Kg		57	40 - 100
Endrin ketone	16.7	13.2		ug/Kg		79	51 - 118
trans-Chlordane	16.7	12.5		ug/Kg		75	55 - 114
gamma-BHC (Lindane)	16.7	13.7		ug/Kg		82	54 - 112
Heptachlor	16.7	14.2	B	ug/Kg		85	50 - 118
Heptachlor epoxide	16.7	12.8		ug/Kg		77	56 - 113
Methoxychlor	16.7	13.2		ug/Kg		79	52 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*47*		*46 - 109*
Tetrachloro-m-xylene	*73*		*47 - 107*

Lab Sample ID: 320-81042-54 MS
Matrix: Solid
Analysis Batch: 545685

Client Sample ID: AOC3-S5I-0.5
Prep Type: Total/NA
Prep Batch: 541292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND	F1 F2	16.5	9.93	J	ug/Kg		60	53 - 117
4,4'-DDE	ND	F1 F2	16.5	11.1	J	ug/Kg		68	58 - 115
4,4'-DDT	ND	F1 F2	16.5	10.3	J	ug/Kg		63	53 - 128
Aldrin	ND	F1 F2	16.5	13.4	J	ug/Kg		82	55 - 109

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-81042-54 MS
Matrix: Solid
Analysis Batch: 545685

Client Sample ID: AOC3-S5I-0.5
Prep Type: Total/NA
Prep Batch: 541292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
alpha-BHC	ND	F2	16.5	15.7	J	ug/Kg		95	54 - 111
beta-BHC	ND	F2	16.5	12.7	J	ug/Kg		77	53 - 115
cis-Chlordane	ND	F1 F2	16.5	10.6	J	ug/Kg		64	54 - 113
delta-BHC	ND	F2	16.5	11.2	J	ug/Kg		68	39 - 124
Dieldrin	ND	F1	16.5	9.98	J	ug/Kg		61	54 - 117
Endosulfan I	ND	F1	16.5	7.94	J	ug/Kg		48	42 - 118
Endosulfan II	ND	F1 F2	16.5	8.12	J	ug/Kg		49	48 - 118
Endosulfan sulfate	ND	F1 F2	16.5	7.24	J F1	ug/Kg		44	51 - 113
Endrin	ND	F1 F2	16.5	10.4	J	ug/Kg		63	58 - 115
Endrin aldehyde	ND	F1	16.5	8.11	J	ug/Kg		49	40 - 100
Endrin ketone	ND		16.5	8.42	J	ug/Kg		51	51 - 118
trans-Chlordane	ND	F1 F2	16.5	13.4	J	ug/Kg		81	55 - 114
gamma-BHC (Lindane)	ND	F2	16.5	14.1	J	ug/Kg		86	54 - 112
Heptachlor	ND	F2	16.5	17.4	B	ug/Kg		105	50 - 118
Heptachlor epoxide	ND	F1 F2	16.5	10.8	J	ug/Kg		66	56 - 113
Methoxychlor	ND	F1 F2	16.5	10.9	J	ug/Kg		66	52 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*172*	*S1+*	*46 - 109*
Tetrachloro-m-xylene	*132*	*S1+*	*47 - 107*

Lab Sample ID: 320-81042-54 MSD
Matrix: Solid
Analysis Batch: 545685

Client Sample ID: AOC3-S5I-0.5
Prep Type: Total/NA
Prep Batch: 541292

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND	F1 F2	16.4	6.55	J F1 F2	ug/Kg		40	53 - 117	41	30
4,4'-DDE	ND	F1 F2	16.4	7.87	J F1 F2	ug/Kg		48	58 - 115	34	30
4,4'-DDT	ND	F1 F2	16.4	5.74	J F1 F2	ug/Kg		35	53 - 128	57	30
Aldrin	ND	F1 F2	16.4	8.87	J F1 F2	ug/Kg		54	55 - 109	41	30
alpha-BHC	ND	F2	16.4	10.4	J F2	ug/Kg		64	54 - 111	40	30
beta-BHC	ND	F2	16.4	8.99	J F2	ug/Kg		55	53 - 115	34	30
cis-Chlordane	ND	F1 F2	16.4	7.30	J F1 F2	ug/Kg		45	54 - 113	37	30
delta-BHC	ND	F2	16.4	7.69	J F2	ug/Kg		47	39 - 124	37	30
Dieldrin	ND	F1	16.4	8.06	J F1	ug/Kg		49	54 - 117	21	30
Endosulfan I	ND	F1	16.4	6.73	J F1	ug/Kg		41	42 - 118	16	30
Endosulfan II	ND	F1 F2	16.4	5.48	J F1 F2	ug/Kg		33	48 - 118	39	30
Endosulfan sulfate	ND	F1 F2	16.4	4.95	J F1 F2	ug/Kg		30	51 - 113	37	30
Endrin	ND	F1 F2	16.4	7.38	J F1 F2	ug/Kg		45	58 - 115	34	30
Endrin aldehyde	ND	F1	16.4	ND	F1	ug/Kg		0	40 - 100	NC	30
Endrin ketone	ND		16.4	9.09	J	ug/Kg		55	51 - 118	8	30
trans-Chlordane	ND	F1 F2	16.4	8.54	J F1 F2	ug/Kg		52	55 - 114	44	30
gamma-BHC (Lindane)	ND	F2	16.4	9.32	J F2	ug/Kg		57	54 - 112	41	30
Heptachlor	ND	F2	16.4	11.5	J F2 B	ug/Kg		70	50 - 118	41	30
Heptachlor epoxide	ND	F1 F2	16.4	7.27	J F1 F2	ug/Kg		44	56 - 113	40	30
Methoxychlor	ND	F1 F2	16.4	7.55	J F1 F2	ug/Kg		46	52 - 123	36	30

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-81042-54 MSD
Matrix: Solid
Analysis Batch: 545685

Client Sample ID: AOC3-S5I-0.5
Prep Type: Total/NA
Prep Batch: 541292

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	100		46 - 109
Tetrachloro-m-xylene	89		47 - 107

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 320-539996/1-A
Matrix: Water
Analysis Batch: 542927

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539996

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.075	ug/L		11/04/21 13:35	11/15/21 17:23	1
PCB-1221	ND		0.50	0.27	ug/L		11/04/21 13:35	11/15/21 17:23	1
PCB-1232	ND		0.50	0.080	ug/L		11/04/21 13:35	11/15/21 17:23	1
PCB-1242	ND		0.50	0.13	ug/L		11/04/21 13:35	11/15/21 17:23	1
PCB-1248	ND		0.50	0.12	ug/L		11/04/21 13:35	11/15/21 17:23	1
PCB-1254	ND		0.50	0.095	ug/L		11/04/21 13:35	11/15/21 17:23	1
PCB-1260	ND		0.50	0.11	ug/L		11/04/21 13:35	11/15/21 17:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	64		29 - 128	11/04/21 13:35	11/15/21 17:23	1

Lab Sample ID: LCS 320-539996/2-A
Matrix: Water
Analysis Batch: 542927

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539996

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			2.00	1.59		ug/L		80	63 - 114		
PCB-1260			2.00	1.62		ug/L		81	64 - 114		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	69		29 - 128

Lab Sample ID: LCSD 320-539996/3-A
Matrix: Water
Analysis Batch: 542927

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 539996

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			2.00	1.67		ug/L		83	63 - 114	4	30
PCB-1260			2.00	1.67		ug/L		83	64 - 114	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	70		29 - 128

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 320-541026/1-A
Matrix: Solid
Analysis Batch: 543943

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541026

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.6	ug/Kg		11/08/21 15:15	11/18/21 21:08	1
PCB-1221	ND		33	3.6	ug/Kg		11/08/21 15:15	11/18/21 21:08	1
PCB-1232	ND		33	4.8	ug/Kg		11/08/21 15:15	11/18/21 21:08	1
PCB-1242	ND		33	5.9	ug/Kg		11/08/21 15:15	11/18/21 21:08	1
PCB-1248	ND		33	2.4	ug/Kg		11/08/21 15:15	11/18/21 21:08	1
PCB-1254	ND		33	3.8	ug/Kg		11/08/21 15:15	11/18/21 21:08	1
PCB-1260	ND		33	2.7	ug/Kg		11/08/21 15:15	11/18/21 21:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*60*		*52 - 138*	*11/08/21 15:15*	*11/18/21 21:08*	*1*
Tetrachloro-m-xylene	*81*		*56 - 114*	*11/08/21 15:15*	*11/18/21 21:08*	*1*

Lab Sample ID: LCS 320-541026/2-A
Matrix: Solid
Analysis Batch: 543943

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541026

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			66.7	59.6		ug/Kg		89	58 - 124		
PCB-1260			66.7	54.4		ug/Kg		82	55 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*69*		*52 - 138*
Tetrachloro-m-xylene	*82*		*56 - 114*

Lab Sample ID: 320-81042-15 MS
Matrix: Solid
Analysis Batch: 543943

Client Sample ID: AOC3-S7E-0.5
Prep Type: Total/NA
Prep Batch: 541026

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND		66.4	45.7		ug/Kg		69	58 - 124		
PCB-1260	ND		66.4	36.4		ug/Kg		55	55 - 138		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*49*	*S1-*	*52 - 138*
Tetrachloro-m-xylene	*69*		*56 - 114*

Lab Sample ID: 320-81042-15 MSD
Matrix: Solid
Analysis Batch: 543943

Client Sample ID: AOC3-S7E-0.5
Prep Type: Total/NA
Prep Batch: 541026

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		66.6	48.8		ug/Kg		73	58 - 124	7	20
PCB-1260	ND		66.6	38.2		ug/Kg		57	55 - 138	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*48*	*S1-*	*52 - 138*
Tetrachloro-m-xylene	*69*		*56 - 114*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 320-541215/1-A
Matrix: Solid
Analysis Batch: 544372

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541215

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.6	ug/Kg		11/09/21 09:03	11/19/21 22:45	1
PCB-1221	ND		33	3.6	ug/Kg		11/09/21 09:03	11/19/21 22:45	1
PCB-1232	ND		33	4.8	ug/Kg		11/09/21 09:03	11/19/21 22:45	1
PCB-1242	ND		33	5.9	ug/Kg		11/09/21 09:03	11/19/21 22:45	1
PCB-1248	ND		33	2.4	ug/Kg		11/09/21 09:03	11/19/21 22:45	1
PCB-1254	ND		33	3.8	ug/Kg		11/09/21 09:03	11/19/21 22:45	1
PCB-1260	ND		33	2.7	ug/Kg		11/09/21 09:03	11/19/21 22:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*75*		*52 - 138*	*11/09/21 09:03*	*11/19/21 22:45*	*1*
Tetrachloro-m-xylene	*78*		*56 - 114*	*11/09/21 09:03*	*11/19/21 22:45*	*1*

Lab Sample ID: LCS 320-541215/2-A
Matrix: Solid
Analysis Batch: 544372

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541215

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	66.7	56.0		ug/Kg		84	58 - 124
PCB-1260	66.7	51.4		ug/Kg		77	55 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*80*		*52 - 138*
Tetrachloro-m-xylene	*80*		*56 - 114*

Lab Sample ID: MB 320-541228/1-A
Matrix: Solid
Analysis Batch: 544372

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541228

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.6	ug/Kg		11/09/21 09:41	11/19/21 19:06	1
PCB-1221	ND		33	3.6	ug/Kg		11/09/21 09:41	11/19/21 19:06	1
PCB-1232	ND		33	4.8	ug/Kg		11/09/21 09:41	11/19/21 19:06	1
PCB-1242	ND		33	5.9	ug/Kg		11/09/21 09:41	11/19/21 19:06	1
PCB-1248	ND		33	2.4	ug/Kg		11/09/21 09:41	11/19/21 19:06	1
PCB-1254	ND		33	3.8	ug/Kg		11/09/21 09:41	11/19/21 19:06	1
PCB-1260	ND		33	2.7	ug/Kg		11/09/21 09:41	11/19/21 19:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*70*		*52 - 138*	*11/09/21 09:41*	*11/19/21 19:06*	*1*
Tetrachloro-m-xylene	*73*		*56 - 114*	*11/09/21 09:41*	*11/19/21 19:06*	*1*

Lab Sample ID: LCS 320-541228/2-A
Matrix: Solid
Analysis Batch: 544372

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541228

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	66.7	58.4		ug/Kg		88	58 - 124
PCB-1260	66.7	55.7		ug/Kg		84	55 - 138

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	80		52 - 138
Tetrachloro-m-xylene	76		56 - 114

Lab Sample ID: MB 320-541298/1-A
Matrix: Solid
Analysis Batch: 543860

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541298

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.6	ug/Kg		11/09/21 11:44	11/18/21 19:45	1
PCB-1221	ND		33	3.6	ug/Kg		11/09/21 11:44	11/18/21 19:45	1
PCB-1232	ND		33	4.8	ug/Kg		11/09/21 11:44	11/18/21 19:45	1
PCB-1242	ND		33	5.9	ug/Kg		11/09/21 11:44	11/18/21 19:45	1
PCB-1248	ND		33	2.4	ug/Kg		11/09/21 11:44	11/18/21 19:45	1
PCB-1254	ND		33	3.8	ug/Kg		11/09/21 11:44	11/18/21 19:45	1
PCB-1260	ND		33	2.7	ug/Kg		11/09/21 11:44	11/18/21 19:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	60		52 - 138	11/09/21 11:44	11/18/21 19:45	1
Tetrachloro-m-xylene	66		56 - 114	11/09/21 11:44	11/18/21 19:45	1

Lab Sample ID: LCS 320-541298/2-A
Matrix: Solid
Analysis Batch: 543860

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541298

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	66.7	51.9		ug/Kg		78	58 - 124
PCB-1260	66.7	45.7		ug/Kg		68	55 - 138

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	65		52 - 138
Tetrachloro-m-xylene	67		56 - 114

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 570-193286/1-A
Matrix: Water
Analysis Batch: 193607

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 193286

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.010	0.0058	mg/L		11/10/21 14:08	11/11/21 11:19	1
Arsenic	ND		0.10	0.022	mg/L		11/10/21 14:08	11/11/21 11:19	1
Barium	ND		0.010	0.0016	mg/L		11/10/21 14:08	11/11/21 11:19	1
Beryllium	ND		0.010	0.0026	mg/L		11/10/21 14:08	11/11/21 11:19	1
Cadmium	ND		0.010	0.0012	mg/L		11/10/21 14:08	11/11/21 11:19	1
Cobalt	ND		0.050	0.0023	mg/L		11/10/21 14:08	11/11/21 11:19	1
Chromium	ND		0.050	0.0086	mg/L		11/10/21 14:08	11/11/21 11:19	1
Copper	ND		0.050	0.0085	mg/L		11/10/21 14:08	11/11/21 11:19	1
Molybdenum	ND		0.050	0.024	mg/L		11/10/21 14:08	11/11/21 11:19	1
Nickel	ND		0.050	0.0045	mg/L		11/10/21 14:08	11/11/21 11:19	1
Antimony	ND		0.10	0.021	mg/L		11/10/21 14:08	11/11/21 11:19	1
Selenium	ND		0.10	0.034	mg/L		11/10/21 14:08	11/11/21 11:19	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 570-193286/1-A
Matrix: Water
Analysis Batch: 193607

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 193286

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.050	0.019	mg/L		11/10/21 14:08	11/11/21 11:19	1
Vanadium	ND		0.010	0.0017	mg/L		11/10/21 14:08	11/11/21 11:19	1
Zinc	ND		0.25	0.014	mg/L		11/10/21 14:08	11/11/21 11:19	1
Lead	ND		0.050	0.0080	mg/L		11/10/21 14:08	11/11/21 11:19	1

Lab Sample ID: LCS 570-193286/2-A
Matrix: Water
Analysis Batch: 193607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 193286

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.250	0.230		mg/L		92	80 - 120
Arsenic	0.500	0.442		mg/L		88	80 - 120
Barium	0.500	0.547		mg/L		109	80 - 120
Beryllium	0.500	0.498		mg/L		100	80 - 120
Cadmium	0.500	0.525		mg/L		105	80 - 120
Cobalt	0.500	0.519		mg/L		104	80 - 120
Chromium	0.500	0.512		mg/L		102	80 - 120
Copper	0.500	0.538		mg/L		108	80 - 120
Molybdenum	0.501	0.493		mg/L		98	80 - 120
Nickel	0.500	0.531		mg/L		106	80 - 120
Antimony	0.500	0.512		mg/L		102	80 - 120
Selenium	0.500	0.482		mg/L		96	80 - 120
Thallium	0.500	0.498		mg/L		100	80 - 120
Vanadium	0.500	0.513		mg/L		103	80 - 120
Zinc	0.500	0.520		mg/L		104	80 - 120
Lead	0.500	0.531		mg/L		106	80 - 120

Lab Sample ID: LCSD 570-193286/3-A
Matrix: Water
Analysis Batch: 193607

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 193286

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.250	0.231		mg/L		92	80 - 120	0	20
Arsenic	0.500	0.436		mg/L		87	80 - 120	1	20
Barium	0.500	0.548		mg/L		110	80 - 120	0	20
Beryllium	0.500	0.498		mg/L		100	80 - 120	0	20
Cadmium	0.500	0.521		mg/L		104	80 - 120	1	20
Cobalt	0.500	0.516		mg/L		103	80 - 120	1	20
Chromium	0.500	0.512		mg/L		102	80 - 120	0	20
Copper	0.500	0.541		mg/L		108	80 - 120	1	20
Molybdenum	0.501	0.501		mg/L		100	80 - 120	2	20
Nickel	0.500	0.527		mg/L		105	80 - 120	1	20
Antimony	0.500	0.506		mg/L		101	80 - 120	1	20
Selenium	0.500	0.500		mg/L		100	80 - 120	4	20
Thallium	0.500	0.491		mg/L		98	80 - 120	1	20
Vanadium	0.500	0.515		mg/L		103	80 - 120	0	20
Zinc	0.500	0.515		mg/L		103	80 - 120	1	20
Lead	0.500	0.526		mg/L		105	80 - 120	1	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 320-539068/1-A
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539068

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.50	0.090	mg/Kg		11/02/21 06:55	11/02/21 18:35	1
Barium	ND		1.0	0.12	mg/Kg		11/02/21 06:55	11/02/21 18:35	1
Beryllium	ND		0.20	0.030	mg/Kg		11/02/21 06:55	11/02/21 18:35	1
Cadmium	ND		0.20	0.030	mg/Kg		11/02/21 06:55	11/02/21 18:35	1
Cobalt	ND		0.50	0.25	mg/Kg		11/02/21 06:55	11/02/21 18:35	1
Chromium	ND		0.50	0.14	mg/Kg		11/02/21 06:55	11/02/21 18:35	1
Copper	ND		1.5	0.22	mg/Kg		11/02/21 06:55	11/02/21 18:35	1
Molybdenum	ND		2.0	0.75	mg/Kg		11/02/21 06:55	11/02/21 18:35	1
Nickel	ND		1.0	0.24	mg/Kg		11/02/21 06:55	11/02/21 18:35	1
Lead	0.299	J	1.0	0.26	mg/Kg		11/02/21 06:55	11/02/21 18:35	1
Selenium	ND		2.0	1.4	mg/Kg		11/02/21 06:55	11/02/21 18:35	1
Antimony	ND		2.0	0.94	mg/Kg		11/02/21 06:55	11/02/21 18:35	1
Thallium	ND		2.0	0.84	mg/Kg		11/02/21 06:55	11/02/21 18:35	1
Vanadium	ND		0.50	0.19	mg/Kg		11/02/21 06:55	11/02/21 18:35	1
Arsenic	ND		2.0	1.3	mg/Kg		11/02/21 06:55	11/02/21 18:35	1

Lab Sample ID: MB 320-539068/1-A
Matrix: Solid
Analysis Batch: 539835

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539068

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		2.0	0.19	mg/Kg		11/02/21 06:55	11/03/21 16:39	1

Lab Sample ID: LCS 320-539068/2-A
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539068

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.05	4.73		mg/Kg		94	80 - 120
Barium	50.0	47.6		mg/Kg		95	80 - 120
Beryllium	25.0	24.4		mg/Kg		98	80 - 120
Cadmium	25.0	24.5		mg/Kg		98	80 - 120
Cobalt	25.0	23.7		mg/Kg		95	80 - 120
Chromium	25.0	24.3		mg/Kg		97	80 - 120
Copper	25.0	23.0		mg/Kg		92	80 - 120
Molybdenum	25.0	24.0		mg/Kg		96	80 - 120
Nickel	25.0	23.5		mg/Kg		94	80 - 120
Lead	25.0	23.7		mg/Kg		95	80 - 120
Selenium	50.0	46.7		mg/Kg		93	80 - 120
Antimony	50.0	46.9		mg/Kg		94	80 - 120
Thallium	50.0	48.6		mg/Kg		97	80 - 120
Vanadium	25.0	23.9		mg/Kg		96	80 - 120
Arsenic	50.0	46.3		mg/Kg		93	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 320-539068/2-A
Matrix: Solid
Analysis Batch: 539835

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539068

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Zinc			49.9	49.3		mg/Kg		99	80 - 120		

Lab Sample ID: 320-81042-1 MS
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: AOC3-S6D-0.5
Prep Type: Total/NA
Prep Batch: 539068

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silver	0.12	J	5.00	4.70		mg/Kg		91	80 - 120		
Barium	110	F1	49.5	208	F1	mg/Kg		198	80 - 120		
Beryllium	0.40		24.8	24.4		mg/Kg		97	80 - 120		
Cadmium	0.19	J	24.8	24.3		mg/Kg		97	80 - 120		
Cobalt	5.5		24.8	31.2		mg/Kg		104	80 - 120		
Chromium	21		24.8	47.4		mg/Kg		107	80 - 120		
Copper	36	F1	24.7	61.5		mg/Kg		105	80 - 120		
Molybdenum	ND		24.8	23.6		mg/Kg		95	80 - 120		
Nickel	20		24.8	47.1		mg/Kg		109	80 - 120		
Lead	110	B	24.8	183	4	mg/Kg		278	80 - 120		
Selenium	ND		49.5	43.7		mg/Kg		88	80 - 120		
Antimony	8.0	F1	49.5	34.3	F1	mg/Kg		53	80 - 120		
Thallium	ND		49.5	47.0		mg/Kg		95	80 - 120		
Vanadium	23	F1	24.8	53.5	F1	mg/Kg		124	80 - 120		
Arsenic	4.6		49.5	50.0		mg/Kg		92	80 - 120		

Lab Sample ID: 320-81042-1 MS
Matrix: Solid
Analysis Batch: 539835

Client Sample ID: AOC3-S6D-0.5
Prep Type: Total/NA
Prep Batch: 539068

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Zinc	110	F1	49.4	198	F1	mg/Kg		181	80 - 120		

Lab Sample ID: 320-81042-1 MSD
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: AOC3-S6D-0.5
Prep Type: Total/NA
Prep Batch: 539068

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.12	J	4.86	4.61		mg/Kg		92	80 - 120	2	35
Barium	110	F1	48.1	199	F1	mg/Kg		185	80 - 120	4	35
Beryllium	0.40		24.0	23.6		mg/Kg		97	80 - 120	3	35
Cadmium	0.19	J	24.0	23.2		mg/Kg		96	80 - 120	5	35
Cobalt	5.5		24.0	30.6		mg/Kg		104	80 - 120	2	35
Chromium	21		24.0	49.0		mg/Kg		117	80 - 120	3	35
Copper	36	F1	24.0	54.6	F1	mg/Kg		79	80 - 120	12	35
Molybdenum	ND		24.0	22.6		mg/Kg		94	80 - 120	4	35
Nickel	20		24.0	45.3		mg/Kg		105	80 - 120	4	35
Lead	110	B	24.0	165	4	mg/Kg		210	80 - 120	10	35
Selenium	ND		48.1	42.3		mg/Kg		88	80 - 120	3	35
Antimony	8.0	F1	48.0	29.3	F1	mg/Kg		44	80 - 120	16	35
Thallium	ND		48.1	44.1		mg/Kg		92	80 - 120	6	35
Vanadium	23	F1	24.0	54.4	F1	mg/Kg		132	80 - 120	2	35

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 320-81042-1 MSD
Matrix: Solid
Analysis Batch: 539464

Client Sample ID: AOC3-S6D-0.5
Prep Type: Total/NA
Prep Batch: 539068

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.6		48.1	49.0		mg/Kg		92	80 - 120	2	35

Lab Sample ID: 320-81042-1 MSD
Matrix: Solid
Analysis Batch: 539835

Client Sample ID: AOC3-S6D-0.5
Prep Type: Total/NA
Prep Batch: 539068

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc	110	F1	48.0	176	F1	mg/Kg		141	80 - 120	12	35

Lab Sample ID: MB 320-539628/1-A
Matrix: Solid
Analysis Batch: 540178

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539628

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.26	mg/Kg		11/03/21 13:32	11/04/21 09:36	1
Arsenic	ND		2.0	1.3	mg/Kg		11/03/21 13:32	11/04/21 09:36	1

Lab Sample ID: LCS 320-539628/2-A
Matrix: Solid
Analysis Batch: 540178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539628

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	25.0	22.7		mg/Kg		91	80 - 120
Arsenic	50.0	42.7		mg/Kg		85	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 570-193769/1-A
Matrix: Water
Analysis Batch: 193866

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 193769

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00050	0.00014	mg/L		11/12/21 06:21	11/12/21 12:30	1

Lab Sample ID: LCS 570-193769/2-A
Matrix: Water
Analysis Batch: 193866

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 193769

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0100	0.00993		mg/L		99	80 - 120

Lab Sample ID: LCSD 570-193769/3-A
Matrix: Water
Analysis Batch: 193866

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 193769

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0100	0.00986		mg/L		99	80 - 120	1	20

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 570-193755/1-A
Matrix: Solid
Analysis Batch: 193866

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 193755

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.083	0.014	mg/Kg		11/12/21 05:53	11/12/21 11:15	1

Lab Sample ID: LCS 570-193755/2-A
Matrix: Solid
Analysis Batch: 193866

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 193755

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.820	0.781		mg/Kg		95	85 - 121		

Lab Sample ID: LCSD 570-193755/3-A
Matrix: Solid
Analysis Batch: 193866

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 193755

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.833	0.811		mg/Kg		97	85 - 121	4	10

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Prep Batch: 539996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-56	EB10282021	Total/NA	Water	3510C	
MB 320-539996/1-A	Method Blank	Total/NA	Water	3510C	
LCS 320-539996/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 320-539996/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 539998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-56	EB10282021	Total/NA	Water	3510C	
MB 320-539998/1-A	Method Blank	Total/NA	Water	3510C	
LCS 320-539998/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 320-539998/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 541017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-1	AOC3-S6D-0.5	Total/NA	Solid	3546	
320-81042-2	AOC3-S6D-2	Total/NA	Solid	3546	
320-81042-3	AOC3-S5D--0.5	Total/NA	Solid	3546	
320-81042-4	AOC3-S5D-2	Total/NA	Solid	3546	
320-81042-5	AOC3-S5E-0.5	Total/NA	Solid	3546	
320-81042-6	AOC3-S5E-2	Total/NA	Solid	3546	
320-81042-7	AOC3/AOC8-S6E-0.5	Total/NA	Solid	3546	
320-81042-8	AOC3/AOC8-S6E-2	Total/NA	Solid	3546	
320-81042-9	AOC3-S8E-0.5	Total/NA	Solid	3546	
320-81042-10	AOC3-S8E-2	Total/NA	Solid	3546	
320-81042-11	AOC3-S7E-2	Total/NA	Solid	3546	
320-81042-12	AOC3-S9E-0.5	Total/NA	Solid	3546	
320-81042-13	AOC3-S9E-0.5 DUP	Total/NA	Solid	3546	
320-81042-14	AOC3-S9E-2	Total/NA	Solid	3546	
320-81042-15	AOC3-S7E-0.5	Total/NA	Solid	3546	
320-81042-16	AOC3-S6F-0.5	Total/NA	Solid	3546	
320-81042-17	AOC3-S6F-2	Total/NA	Solid	3546	
MB 320-541017/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-541017/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-81042-16 MS	AOC3-S6F-0.5	Total/NA	Solid	3546	
320-81042-16 MSD	AOC3-S6F-0.5	Total/NA	Solid	3546	

Prep Batch: 541026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-1	AOC3-S6D-0.5	Total/NA	Solid	3546	
320-81042-3	AOC3-S5D--0.5	Total/NA	Solid	3546	
320-81042-5	AOC3-S5E-0.5	Total/NA	Solid	3546	
320-81042-7	AOC3/AOC8-S6E-0.5	Total/NA	Solid	3546	
320-81042-9	AOC3-S8E-0.5	Total/NA	Solid	3546	
320-81042-12	AOC3-S9E-0.5	Total/NA	Solid	3546	
320-81042-13	AOC3-S9E-0.5 DUP	Total/NA	Solid	3546	
320-81042-15	AOC3-S7E-0.5	Total/NA	Solid	3546	
320-81042-16	AOC3-S6F-0.5	Total/NA	Solid	3546	
MB 320-541026/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-541026/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-81042-15 MS	AOC3-S7E-0.5	Total/NA	Solid	3546	
320-81042-15 MSD	AOC3-S7E-0.5	Total/NA	Solid	3546	

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Prep Batch: 541214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-18	AOC3-S6G-0.5	Total/NA	Solid	3546	
320-81042-19	AOC3-S6G-2	Total/NA	Solid	3546	
320-81042-20	AOC3-S5F-0.5	Total/NA	Solid	3546	
320-81042-21	AOC3-S5F-2	Total/NA	Solid	3546	
320-81042-22	AOC3-S4F-0.5	Total/NA	Solid	3546	
320-81042-23	AOC3-S4F-2	Total/NA	Solid	3546	
320-81042-24	AOC3-S3F-0.5	Total/NA	Solid	3546	
320-81042-25	AOC3-S3F-2	Total/NA	Solid	3546	
320-81042-26	AOC3/AOC8-S3G-0.5	Total/NA	Solid	3546	
320-81042-27	AOC3/AOC8-S3G-2	Total/NA	Solid	3546	
320-81042-28	AOC3-S4G-0.5	Total/NA	Solid	3546	
320-81042-29	AOC3-S4G-2	Total/NA	Solid	3546	
320-81042-30	AOC3-S5G-0.5	Total/NA	Solid	3546	
320-81042-31	AOC3-S5G-2	Total/NA	Solid	3546	
320-81042-32	AOC3-S5G-2 DUP	Total/NA	Solid	3546	
320-81042-33	AOC3-S2G-0.5	Total/NA	Solid	3546	
320-81042-34	AOC3-S2G-2	Total/NA	Solid	3546	
MB 320-541214/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-541214/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-81042-18 MS	AOC3-S6G-0.5	Total/NA	Solid	3546	
320-81042-18 MSD	AOC3-S6G-0.5	Total/NA	Solid	3546	

Prep Batch: 541215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-18	AOC3-S6G-0.5	Total/NA	Solid	3546	
320-81042-20	AOC3-S5F-0.5	Total/NA	Solid	3546	
320-81042-22	AOC3-S4F-0.5	Total/NA	Solid	3546	
320-81042-24	AOC3-S3F-0.5	Total/NA	Solid	3546	
320-81042-26	AOC3/AOC8-S3G-0.5	Total/NA	Solid	3546	
320-81042-28	AOC3-S4G-0.5	Total/NA	Solid	3546	
320-81042-30	AOC3-S5G-0.5	Total/NA	Solid	3546	
320-81042-33	AOC3-S2G-0.5	Total/NA	Solid	3546	
MB 320-541215/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-541215/2-A	Lab Control Sample	Total/NA	Solid	3546	

Prep Batch: 541224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-35	AOC3-S2H-0.5	Total/NA	Solid	3546	
320-81042-36	AOC3-S2H-2	Total/NA	Solid	3546	
320-81042-37	AOC3-S2F-0.5	Total/NA	Solid	3546	
320-81042-38	AOC3-S2F-2	Total/NA	Solid	3546	
320-81042-39	AOC3-S2F-0.5 DUP	Total/NA	Solid	3546	
320-81042-40	AOC3-S1F-0.5	Total/NA	Solid	3546	
320-81042-41	AOC3-S1F-2	Total/NA	Solid	3546	
320-81042-42	AOC3-S1G-0.5	Total/NA	Solid	3546	
320-81042-43	AOC3-S1G-2	Total/NA	Solid	3546	
320-81042-44	AOC3-S1H-0.5	Total/NA	Solid	3546	
320-81042-45	AOC3-S1H-2	Total/NA	Solid	3546	
320-81042-46	AOC3-S5H-0.5	Total/NA	Solid	3546	
320-81042-47	AOC3-S5H-2	Total/NA	Solid	3546	
320-81042-48	AOC3-S4H-0.5	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 541224 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-49	AOC3-S4H-2	Total/NA	Solid	3546	
320-81042-50	AOC3-S3H-0.5	Total/NA	Solid	3546	
320-81042-51	AOC3-S3H-2	Total/NA	Solid	3546	
MB 320-541224/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-541224/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-81042-36 MS	AOC3-S2H-2	Total/NA	Solid	3546	
320-81042-36 MSD	AOC3-S2H-2	Total/NA	Solid	3546	

Prep Batch: 541228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-35	AOC3-S2H-0.5	Total/NA	Solid	3546	
320-81042-37	AOC3-S2F-0.5	Total/NA	Solid	3546	
320-81042-39	AOC3-S2F-0.5 DUP	Total/NA	Solid	3546	
320-81042-40	AOC3-S1F-0.5	Total/NA	Solid	3546	
320-81042-42	AOC3-S1G-0.5	Total/NA	Solid	3546	
320-81042-44	AOC3-S1H-0.5	Total/NA	Solid	3546	
320-81042-46	AOC3-S5H-0.5	Total/NA	Solid	3546	
320-81042-48	AOC3-S4H-0.5	Total/NA	Solid	3546	
320-81042-50	AOC3-S3H-0.5	Total/NA	Solid	3546	
MB 320-541228/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-541228/2-A	Lab Control Sample	Total/NA	Solid	3546	

Prep Batch: 541292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-52	AOC3-S4I-0.5	Total/NA	Solid	3546	
320-81042-53	AOC3-S4I-2	Total/NA	Solid	3546	
320-81042-54	AOC3-S5I-0.5	Total/NA	Solid	3546	
320-81042-55	AOC3-S5I-2	Total/NA	Solid	3546	
MB 320-541292/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-541292/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-81042-54 MS	AOC3-S5I-0.5	Total/NA	Solid	3546	
320-81042-54 MSD	AOC3-S5I-0.5	Total/NA	Solid	3546	

Prep Batch: 541298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-52	AOC3-S4I-0.5	Total/NA	Solid	3546	
320-81042-54	AOC3-S5I-0.5	Total/NA	Solid	3546	
MB 320-541298/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-541298/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 542188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-56	EB10282021	Total/NA	Water	8081A	539998
MB 320-539998/1-A	Method Blank	Total/NA	Water	8081A	539998
LCS 320-539998/2-A	Lab Control Sample	Total/NA	Water	8081A	539998
LCSD 320-539998/3-A	Lab Control Sample Dup	Total/NA	Water	8081A	539998

Analysis Batch: 542927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-56	EB10282021	Total/NA	Water	8082	539996
MB 320-539996/1-A	Method Blank	Total/NA	Water	8082	539996

GC Semi VOA (Continued)

Analysis Batch: 542927 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-539996/2-A	Lab Control Sample	Total/NA	Water	8082	539996
LCSD 320-539996/3-A	Lab Control Sample Dup	Total/NA	Water	8082	539996

Analysis Batch: 543860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-52	AOC3-S4I-0.5	Total/NA	Solid	8082	541298
320-81042-54	AOC3-S5I-0.5	Total/NA	Solid	8082	541298
MB 320-541298/1-A	Method Blank	Total/NA	Solid	8082	541298
LCS 320-541298/2-A	Lab Control Sample	Total/NA	Solid	8082	541298

Analysis Batch: 543943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-1	AOC3-S6D-0.5	Total/NA	Solid	8082	541026
320-81042-3	AOC3-S5D--0.5	Total/NA	Solid	8082	541026
320-81042-5	AOC3-S5E-0.5	Total/NA	Solid	8082	541026
320-81042-7	AOC3/AOC8-S6E-0.5	Total/NA	Solid	8082	541026
320-81042-9	AOC3-S8E-0.5	Total/NA	Solid	8082	541026
320-81042-12	AOC3-S9E-0.5	Total/NA	Solid	8082	541026
320-81042-13	AOC3-S9E-0.5 DUP	Total/NA	Solid	8082	541026
320-81042-15	AOC3-S7E-0.5	Total/NA	Solid	8082	541026
MB 320-541026/1-A	Method Blank	Total/NA	Solid	8082	541026
LCS 320-541026/2-A	Lab Control Sample	Total/NA	Solid	8082	541026
320-81042-15 MS	AOC3-S7E-0.5	Total/NA	Solid	8082	541026
320-81042-15 MSD	AOC3-S7E-0.5	Total/NA	Solid	8082	541026

Analysis Batch: 544372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-18	AOC3-S6G-0.5	Total/NA	Solid	8082	541215
320-81042-20	AOC3-S5F-0.5	Total/NA	Solid	8082	541215
320-81042-22	AOC3-S4F-0.5	Total/NA	Solid	8082	541215
320-81042-24	AOC3-S3F-0.5	Total/NA	Solid	8082	541215
320-81042-26	AOC3/AOC8-S3G-0.5	Total/NA	Solid	8082	541215
320-81042-28	AOC3-S4G-0.5	Total/NA	Solid	8082	541215
320-81042-30	AOC3-S5G-0.5	Total/NA	Solid	8082	541215
320-81042-33	AOC3-S2G-0.5	Total/NA	Solid	8082	541215
320-81042-35	AOC3-S2H-0.5	Total/NA	Solid	8082	541228
320-81042-37	AOC3-S2F-0.5	Total/NA	Solid	8082	541228
320-81042-39	AOC3-S2F-0.5 DUP	Total/NA	Solid	8082	541228
320-81042-40	AOC3-S1F-0.5	Total/NA	Solid	8082	541228
320-81042-42	AOC3-S1G-0.5	Total/NA	Solid	8082	541228
320-81042-44	AOC3-S1H-0.5	Total/NA	Solid	8082	541228
320-81042-46	AOC3-S5H-0.5	Total/NA	Solid	8082	541228
320-81042-48	AOC3-S4H-0.5	Total/NA	Solid	8082	541228
320-81042-50	AOC3-S3H-0.5	Total/NA	Solid	8082	541228
MB 320-541215/1-A	Method Blank	Total/NA	Solid	8082	541215
MB 320-541228/1-A	Method Blank	Total/NA	Solid	8082	541228
LCS 320-541215/2-A	Lab Control Sample	Total/NA	Solid	8082	541215
LCS 320-541228/2-A	Lab Control Sample	Total/NA	Solid	8082	541228

GC Semi VOA

Analysis Batch: 544884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-16	AOC3-S6F-0.5	Total/NA	Solid	8082	541026

Analysis Batch: 545685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-1	AOC3-S6D-0.5	Total/NA	Solid	8081A	541017
320-81042-2	AOC3-S6D-2	Total/NA	Solid	8081A	541017
320-81042-3	AOC3-S5D--0.5	Total/NA	Solid	8081A	541017
320-81042-4	AOC3-S5D-2	Total/NA	Solid	8081A	541017
320-81042-5	AOC3-S5E-0.5	Total/NA	Solid	8081A	541017
320-81042-6	AOC3-S5E-2	Total/NA	Solid	8081A	541017
320-81042-7	AOC3/AOC8-S6E-0.5	Total/NA	Solid	8081A	541017
320-81042-8	AOC3/AOC8-S6E-2	Total/NA	Solid	8081A	541017
320-81042-9	AOC3-S8E-0.5	Total/NA	Solid	8081A	541017
320-81042-10	AOC3-S8E-2	Total/NA	Solid	8081A	541017
320-81042-11	AOC3-S7E-2	Total/NA	Solid	8081A	541017
320-81042-12	AOC3-S9E-0.5	Total/NA	Solid	8081A	541017
320-81042-13	AOC3-S9E-0.5 DUP	Total/NA	Solid	8081A	541017
320-81042-14	AOC3-S9E-2	Total/NA	Solid	8081A	541017
320-81042-15	AOC3-S7E-0.5	Total/NA	Solid	8081A	541017
320-81042-16	AOC3-S6F-0.5	Total/NA	Solid	8081A	541017
320-81042-17	AOC3-S6F-2	Total/NA	Solid	8081A	541017
320-81042-52	AOC3-S4I-0.5	Total/NA	Solid	8081A	541292
320-81042-53	AOC3-S4I-2	Total/NA	Solid	8081A	541292
320-81042-54	AOC3-S5I-0.5	Total/NA	Solid	8081A	541292
MB 320-541017/1-A	Method Blank	Total/NA	Solid	8081A	541017
LCS 320-541017/2-A	Lab Control Sample	Total/NA	Solid	8081A	541017
LCS 320-541292/2-A	Lab Control Sample	Total/NA	Solid	8081A	541292
320-81042-16 MS	AOC3-S6F-0.5	Total/NA	Solid	8081A	541017
320-81042-16 MSD	AOC3-S6F-0.5	Total/NA	Solid	8081A	541017
320-81042-54 MS	AOC3-S5I-0.5	Total/NA	Solid	8081A	541292
320-81042-54 MSD	AOC3-S5I-0.5	Total/NA	Solid	8081A	541292

Analysis Batch: 546025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-18	AOC3-S6G-0.5	Total/NA	Solid	8081A	541214
320-81042-19	AOC3-S6G-2	Total/NA	Solid	8081A	541214
320-81042-20	AOC3-S5F-0.5	Total/NA	Solid	8081A	541214
320-81042-21	AOC3-S5F-2	Total/NA	Solid	8081A	541214
320-81042-22	AOC3-S4F-0.5	Total/NA	Solid	8081A	541214
320-81042-23	AOC3-S4F-2	Total/NA	Solid	8081A	541214
320-81042-24	AOC3-S3F-0.5	Total/NA	Solid	8081A	541214
320-81042-25	AOC3-S3F-2	Total/NA	Solid	8081A	541214
320-81042-26	AOC3/AOC8-S3G-0.5	Total/NA	Solid	8081A	541214
320-81042-27	AOC3/AOC8-S3G-2	Total/NA	Solid	8081A	541214
320-81042-28	AOC3-S4G-0.5	Total/NA	Solid	8081A	541214
320-81042-29	AOC3-S4G-2	Total/NA	Solid	8081A	541214
320-81042-30	AOC3-S5G-0.5	Total/NA	Solid	8081A	541214
320-81042-31	AOC3-S5G-2	Total/NA	Solid	8081A	541214
320-81042-32	AOC3-S5G-2 DUP	Total/NA	Solid	8081A	541214
320-81042-33	AOC3-S2G-0.5	Total/NA	Solid	8081A	541214
320-81042-34	AOC3-S2G-2	Total/NA	Solid	8081A	541214

GC Semi VOA (Continued)

Analysis Batch: 546025 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-35	AOC3-S2H-0.5	Total/NA	Solid	8081A	541224
320-81042-36	AOC3-S2H-2	Total/NA	Solid	8081A	541224
320-81042-55	AOC3-S5I-2	Total/NA	Solid	8081A	541292
MB 320-541214/1-A	Method Blank	Total/NA	Solid	8081A	541214
MB 320-541224/1-A	Method Blank	Total/NA	Solid	8081A	541224
MB 320-541292/1-A	Method Blank	Total/NA	Solid	8081A	541292
LCS 320-541214/2-A	Lab Control Sample	Total/NA	Solid	8081A	541214
LCS 320-541224/2-A	Lab Control Sample	Total/NA	Solid	8081A	541224
320-81042-18 MS	AOC3-S6G-0.5	Total/NA	Solid	8081A	541214
320-81042-18 MSD	AOC3-S6G-0.5	Total/NA	Solid	8081A	541214
320-81042-36 MS	AOC3-S2H-2	Total/NA	Solid	8081A	541224
320-81042-36 MSD	AOC3-S2H-2	Total/NA	Solid	8081A	541224

Analysis Batch: 546525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-37	AOC3-S2F-0.5	Total/NA	Solid	8081A	541224
320-81042-38	AOC3-S2F-2	Total/NA	Solid	8081A	541224
320-81042-39	AOC3-S2F-0.5 DUP	Total/NA	Solid	8081A	541224
320-81042-40	AOC3-S1F-0.5	Total/NA	Solid	8081A	541224
320-81042-41	AOC3-S1F-2	Total/NA	Solid	8081A	541224
320-81042-42	AOC3-S1G-0.5	Total/NA	Solid	8081A	541224
320-81042-43	AOC3-S1G-2	Total/NA	Solid	8081A	541224
320-81042-44	AOC3-S1H-0.5	Total/NA	Solid	8081A	541224
320-81042-45	AOC3-S1H-2	Total/NA	Solid	8081A	541224
320-81042-46	AOC3-S5H-0.5	Total/NA	Solid	8081A	541224
320-81042-47	AOC3-S5H-2	Total/NA	Solid	8081A	541224
320-81042-48	AOC3-S4H-0.5	Total/NA	Solid	8081A	541224
320-81042-49	AOC3-S4H-2	Total/NA	Solid	8081A	541224
320-81042-50	AOC3-S3H-0.5	Total/NA	Solid	8081A	541224
320-81042-51	AOC3-S3H-2	Total/NA	Solid	8081A	541224

Metals

Prep Batch: 193286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-56	EB10282021	Total/NA	Water	3010A	
MB 570-193286/1-A	Method Blank	Total/NA	Water	3010A	
LCS 570-193286/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 570-193286/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	

Analysis Batch: 193607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-193286/1-A	Method Blank	Total/NA	Water	6010B	193286
LCS 570-193286/2-A	Lab Control Sample	Total/NA	Water	6010B	193286
LCSD 570-193286/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	193286

Prep Batch: 193755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-1	AOC3-S6D-0.5	Total/NA	Solid	7471A	
320-81042-5	AOC3-S5E-0.5	Total/NA	Solid	7471A	
320-81042-18	AOC3-S6G-0.5	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 193755 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-37	AOC3-S2F-0.5	Total/NA	Solid	7471A	
320-81042-39	AOC3-S2F-0.5 DUP	Total/NA	Solid	7471A	
MB 570-193755/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 570-193755/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 570-193755/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	

Prep Batch: 193769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-56	EB10282021	Total/NA	Water	7470A	
MB 570-193769/1-A	Method Blank	Total/NA	Water	7470A	
LCS 570-193769/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 570-193769/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	

Analysis Batch: 193866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-1	AOC3-S6D-0.5	Total/NA	Solid	7471A	193755
320-81042-5	AOC3-S5E-0.5	Total/NA	Solid	7471A	193755
320-81042-18	AOC3-S6G-0.5	Total/NA	Solid	7471A	193755
320-81042-37	AOC3-S2F-0.5	Total/NA	Solid	7471A	193755
320-81042-39	AOC3-S2F-0.5 DUP	Total/NA	Solid	7471A	193755
320-81042-56	EB10282021	Total/NA	Water	7470A	193769
MB 570-193755/1-A	Method Blank	Total/NA	Solid	7471A	193755
MB 570-193769/1-A	Method Blank	Total/NA	Water	7470A	193769
LCS 570-193755/2-A	Lab Control Sample	Total/NA	Solid	7471A	193755
LCS 570-193769/2-A	Lab Control Sample	Total/NA	Water	7470A	193769
LCSD 570-193755/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	193755
LCSD 570-193769/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	193769

Analysis Batch: 193907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-56	EB10282021	Total/NA	Water	6010B	193286

Prep Batch: 539068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-1	AOC3-S6D-0.5	Total/NA	Solid	3050B	
320-81042-3	AOC3-S5D--0.5	Total/NA	Solid	3050B	
320-81042-5	AOC3-S5E-0.5	Total/NA	Solid	3050B	
320-81042-7	AOC3/AOC8-S6E-0.5	Total/NA	Solid	3050B	
320-81042-9	AOC3-S8E-0.5	Total/NA	Solid	3050B	
320-81042-12	AOC3-S9E-0.5	Total/NA	Solid	3050B	
320-81042-13	AOC3-S9E-0.5 DUP	Total/NA	Solid	3050B	
320-81042-15	AOC3-S7E-0.5	Total/NA	Solid	3050B	
320-81042-16	AOC3-S6F-0.5	Total/NA	Solid	3050B	
320-81042-18	AOC3-S6G-0.5	Total/NA	Solid	3050B	
320-81042-20	AOC3-S5F-0.5	Total/NA	Solid	3050B	
320-81042-22	AOC3-S4F-0.5	Total/NA	Solid	3050B	
320-81042-24	AOC3-S3F-0.5	Total/NA	Solid	3050B	
320-81042-26	AOC3/AOC8-S3G-0.5	Total/NA	Solid	3050B	
320-81042-28	AOC3-S4G-0.5	Total/NA	Solid	3050B	
320-81042-30	AOC3-S5G-0.5	Total/NA	Solid	3050B	
320-81042-33	AOC3-S2G-0.5	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 539068 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-35	AOC3-S2H-0.5	Total/NA	Solid	3050B	
320-81042-37	AOC3-S2F-0.5	Total/NA	Solid	3050B	
320-81042-39	AOC3-S2F-0.5 DUP	Total/NA	Solid	3050B	
MB 320-539068/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-539068/2-A	Lab Control Sample	Total/NA	Solid	3050B	
320-81042-1 MS	AOC3-S6D-0.5	Total/NA	Solid	3050B	
320-81042-1 MSD	AOC3-S6D-0.5	Total/NA	Solid	3050B	

Analysis Batch: 539464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-1	AOC3-S6D-0.5	Total/NA	Solid	6010B	539068
320-81042-3	AOC3-S5D--0.5	Total/NA	Solid	6010B	539068
320-81042-5	AOC3-S5E-0.5	Total/NA	Solid	6010B	539068
320-81042-7	AOC3/AOC8-S6E-0.5	Total/NA	Solid	6010B	539068
320-81042-9	AOC3-S8E-0.5	Total/NA	Solid	6010B	539068
320-81042-12	AOC3-S9E-0.5	Total/NA	Solid	6010B	539068
320-81042-13	AOC3-S9E-0.5 DUP	Total/NA	Solid	6010B	539068
320-81042-15	AOC3-S7E-0.5	Total/NA	Solid	6010B	539068
320-81042-16	AOC3-S6F-0.5	Total/NA	Solid	6010B	539068
320-81042-18	AOC3-S6G-0.5	Total/NA	Solid	6010B	539068
320-81042-20	AOC3-S5F-0.5	Total/NA	Solid	6010B	539068
320-81042-22	AOC3-S4F-0.5	Total/NA	Solid	6010B	539068
320-81042-24	AOC3-S3F-0.5	Total/NA	Solid	6010B	539068
320-81042-26	AOC3/AOC8-S3G-0.5	Total/NA	Solid	6010B	539068
320-81042-28	AOC3-S4G-0.5	Total/NA	Solid	6010B	539068
320-81042-30	AOC3-S5G-0.5	Total/NA	Solid	6010B	539068
320-81042-33	AOC3-S2G-0.5	Total/NA	Solid	6010B	539068
320-81042-35	AOC3-S2H-0.5	Total/NA	Solid	6010B	539068
320-81042-37	AOC3-S2F-0.5	Total/NA	Solid	6010B	539068
320-81042-39	AOC3-S2F-0.5 DUP	Total/NA	Solid	6010B	539068
MB 320-539068/1-A	Method Blank	Total/NA	Solid	6010B	539068
LCS 320-539068/2-A	Lab Control Sample	Total/NA	Solid	6010B	539068
320-81042-1 MS	AOC3-S6D-0.5	Total/NA	Solid	6010B	539068
320-81042-1 MSD	AOC3-S6D-0.5	Total/NA	Solid	6010B	539068

Prep Batch: 539628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-40	AOC3-S1F-0.5	Total/NA	Solid	3050B	
320-81042-42	AOC3-S1G-0.5	Total/NA	Solid	3050B	
320-81042-44	AOC3-S1H-0.5	Total/NA	Solid	3050B	
320-81042-46	AOC3-S5H-0.5	Total/NA	Solid	3050B	
320-81042-48	AOC3-S4H-0.5	Total/NA	Solid	3050B	
320-81042-50	AOC3-S3H-0.5	Total/NA	Solid	3050B	
320-81042-52	AOC3-S4I-0.5	Total/NA	Solid	3050B	
320-81042-54	AOC3-S5I-0.5	Total/NA	Solid	3050B	
MB 320-539628/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-539628/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 539835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-1	AOC3-S6D-0.5	Total/NA	Solid	6010B	539068

Metals (Continued)

Analysis Batch: 539835 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-5	AOC3-S5E-0.5	Total/NA	Solid	6010B	539068
320-81042-18	AOC3-S6G-0.5	Total/NA	Solid	6010B	539068
320-81042-37	AOC3-S2F-0.5	Total/NA	Solid	6010B	539068
320-81042-39	AOC3-S2F-0.5 DUP	Total/NA	Solid	6010B	539068
MB 320-539068/1-A	Method Blank	Total/NA	Solid	6010B	539068
LCS 320-539068/2-A	Lab Control Sample	Total/NA	Solid	6010B	539068
320-81042-1 MS	AOC3-S6D-0.5	Total/NA	Solid	6010B	539068
320-81042-1 MSD	AOC3-S6D-0.5	Total/NA	Solid	6010B	539068

Analysis Batch: 540178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-40	AOC3-S1F-0.5	Total/NA	Solid	6010B	539628
320-81042-42	AOC3-S1G-0.5	Total/NA	Solid	6010B	539628
320-81042-44	AOC3-S1H-0.5	Total/NA	Solid	6010B	539628
320-81042-46	AOC3-S5H-0.5	Total/NA	Solid	6010B	539628
320-81042-48	AOC3-S4H-0.5	Total/NA	Solid	6010B	539628
320-81042-50	AOC3-S3H-0.5	Total/NA	Solid	6010B	539628
320-81042-52	AOC3-S4I-0.5	Total/NA	Solid	6010B	539628
320-81042-54	AOC3-S5I-0.5	Total/NA	Solid	6010B	539628
MB 320-539628/1-A	Method Blank	Total/NA	Solid	6010B	539628
LCS 320-539628/2-A	Lab Control Sample	Total/NA	Solid	6010B	539628

Client Sample ID: AOC3-S6D-0.5

Lab Sample ID: 320-81042-1

Date Collected: 10/28/21 08:27

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.11 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		20			545685	11/24/21 17:11	K1D	TAL SAC
Total/NA	Prep	3546			15.11 g	5 mL	541026	11/08/21 15:15	NGK	TAL SAC
Total/NA	Analysis	8082		1			543943	11/18/21 21:50	K1D	TAL SAC
Total/NA	Prep	3050B			0.97 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 18:43	GSH	TAL SAC
Total/NA	Prep	3050B			0.97 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539835	11/03/21 16:47	GSH	TAL SAC
Total/NA	Prep	7471A			.63 g	100 mL	193755	11/12/21 05:53	WL8G	ECL 1
Total/NA	Analysis	7471A		1			193866	11/12/21 11:37	VWJ7	ECL 1

Client Sample ID: AOC3-S6D-2

Lab Sample ID: 320-81042-2

Date Collected: 10/28/21 08:28

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.35 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		5			545685	11/24/21 17:30	K1D	TAL SAC

Client Sample ID: AOC3-S5D--0.5

Lab Sample ID: 320-81042-3

Date Collected: 10/28/21 08:27

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.31 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		20			545685	11/24/21 17:49	K1D	TAL SAC
Total/NA	Prep	3546			15.31 g	5 mL	541026	11/08/21 15:15	NGK	TAL SAC
Total/NA	Analysis	8082		1			543943	11/18/21 22:10	K1D	TAL SAC
Total/NA	Prep	3050B			1.04 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 19:09	GSH	TAL SAC

Client Sample ID: AOC3-S5D-2

Lab Sample ID: 320-81042-4

Date Collected: 10/28/21 08:29

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.94 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		5			545685	11/24/21 18:08	K1D	TAL SAC

Client Sample ID: AOC3-S5E-0.5

Lab Sample ID: 320-81042-5

Date Collected: 10/28/21 08:34

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.19 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		20			545685	11/24/21 18:27	K1D	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S5E-0.5
Date Collected: 10/28/21 08:34
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.19 g	5 mL	541026	11/08/21 15:15	NGK	TAL SAC
Total/NA	Analysis	8082		1			543943	11/18/21 22:31	K1D	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 19:13	GSH	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539835	11/03/21 17:06	GSH	TAL SAC
Total/NA	Prep	7471A			.59 g	100 mL	193755	11/12/21 05:53	WL8G	ECL 1
Total/NA	Analysis	7471A		1			193866	11/12/21 11:39	VWJ7	ECL 1

Client Sample ID: AOC3-S5E-2
Date Collected: 10/28/21 08:35
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.99 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		2			545685	11/24/21 18:46	K1D	TAL SAC

Client Sample ID: AOC3/AOC8-S6E-0.5
Date Collected: 10/28/21 08:41
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.56 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		20			545685	11/24/21 19:04	K1D	TAL SAC
Total/NA	Prep	3546			15.56 g	5 mL	541026	11/08/21 15:15	NGK	TAL SAC
Total/NA	Analysis	8082		1			543943	11/18/21 22:51	K1D	TAL SAC
Total/NA	Prep	3050B			0.98 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 19:17	GSH	TAL SAC

Client Sample ID: AOC3/AOC8-S6E-2
Date Collected: 10/28/21 08:42
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.34 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		1			545685	11/24/21 19:23	K1D	TAL SAC

Client Sample ID: AOC3-S8E-0.5
Date Collected: 10/28/21 08:58
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.81 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		10			545685	11/24/21 19:42	K1D	TAL SAC
Total/NA	Prep	3546			15.81 g	5 mL	541026	11/08/21 15:15	NGK	TAL SAC
Total/NA	Analysis	8082		1			543943	11/18/21 23:12	K1D	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S8E-0.5

Lab Sample ID: 320-81042-9
Date Collected: 10/28/21 08:58
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 19:21	GSH	TAL SAC

Client Sample ID: AOC3-S8E-2

Lab Sample ID: 320-81042-10
Date Collected: 10/28/21 08:59
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.26 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		5			545685	11/24/21 20:01	K1D	TAL SAC

Client Sample ID: AOC3-S7E-2

Lab Sample ID: 320-81042-11
Date Collected: 10/28/21 09:01
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.38 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		1			545685	11/24/21 20:20	K1D	TAL SAC

Client Sample ID: AOC3-S9E-0.5

Lab Sample ID: 320-81042-12
Date Collected: 10/28/21 09:00
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.32 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		20			545685	11/24/21 20:39	K1D	TAL SAC
Total/NA	Prep	3546			15.32 g	5 mL	541026	11/08/21 15:15	NGK	TAL SAC
Total/NA	Analysis	8082		1			543943	11/18/21 23:33	K1D	TAL SAC
Total/NA	Prep	3050B			1.01 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 19:25	GSH	TAL SAC

Client Sample ID: AOC3-S9E-0.5 DUP

Lab Sample ID: 320-81042-13
Date Collected: 10/28/21 09:01
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.24 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		20			545685	11/24/21 20:58	K1D	TAL SAC
Total/NA	Prep	3546			15.24 g	5 mL	541026	11/08/21 15:15	NGK	TAL SAC
Total/NA	Analysis	8082		1			543943	11/18/21 23:53	K1D	TAL SAC
Total/NA	Prep	3050B			1.04 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 19:29	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S9E-2

Lab Sample ID: 320-81042-14
Date Collected: 10/28/21 09:02
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.28 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		1			545685	11/24/21 21:16	K1D	TAL SAC

Client Sample ID: AOC3-S7E-0.5

Lab Sample ID: 320-81042-15
Date Collected: 10/28/21 09:12
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.21 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		20			545685	11/24/21 21:35	K1D	TAL SAC
Total/NA	Prep	3546			15.21 g	5 mL	541026	11/08/21 15:15	NGK	TAL SAC
Total/NA	Analysis	8082		1			543943	11/19/21 00:14	K1D	TAL SAC
Total/NA	Prep	3050B			0.99 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 19:32	GSH	TAL SAC

Client Sample ID: AOC3-S6F-0.5

Lab Sample ID: 320-81042-16
Date Collected: 10/28/21 09:10
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.48 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		20			545685	11/24/21 21:54	K1D	TAL SAC
Total/NA	Prep	3546			15.48 g	5 mL	541026	11/08/21 15:15	NGK	TAL SAC
Total/NA	Analysis	8082		1			544884	11/22/21 17:44	K1D	TAL SAC
Total/NA	Prep	3050B			0.98 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 19:36	GSH	TAL SAC

Client Sample ID: AOC3-S6F-2

Lab Sample ID: 320-81042-17
Date Collected: 10/28/21 09:12
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.09 g	5 mL	541017	11/08/21 15:14	NGK	TAL SAC
Total/NA	Analysis	8081A		2			545685	11/24/21 22:51	K1D	TAL SAC

Client Sample ID: AOC3-S6G-0.5

Lab Sample ID: 320-81042-18
Date Collected: 10/28/21 09:56
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.51 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		20			546025	11/26/21 15:41	K1D	TAL SAC
Total/NA	Prep	3546			15.51 g	5 mL	541215	11/09/21 09:03	NGK	TAL SAC
Total/NA	Analysis	8082		5			544372	11/19/21 23:25	K1D	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 19:48	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S6G-0.5
Lab Sample ID: 320-81042-18
Date Collected: 10/28/21 09:56
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539835	11/03/21 17:10	GSH	TAL SAC
Total/NA	Prep	7471A			.61 g	100 mL	193755	11/12/21 05:53	WL8G	ECL 1
Total/NA	Analysis	7471A		1			193866	11/12/21 11:41	VWJ7	ECL 1

Client Sample ID: AOC3-S6G-2
Lab Sample ID: 320-81042-19
Date Collected: 10/28/21 09:58
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.37 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		20			546025	11/26/21 16:38	K1D	TAL SAC

Client Sample ID: AOC3-S5F-0.5
Lab Sample ID: 320-81042-20
Date Collected: 10/28/21 09:58
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.12 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		20			546025	11/26/21 16:57	K1D	TAL SAC
Total/NA	Prep	3546			15.12 g	5 mL	541215	11/09/21 09:03	NGK	TAL SAC
Total/NA	Analysis	8082		5			544372	11/19/21 23:45	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 19:51	GSH	TAL SAC

Client Sample ID: AOC3-S5F-2
Lab Sample ID: 320-81042-21
Date Collected: 10/28/21 09:59
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.48 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		2			546025	11/26/21 17:16	K1D	TAL SAC

Client Sample ID: AOC3-S4F-0.5
Lab Sample ID: 320-81042-22
Date Collected: 10/28/21 10:02
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.19 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		20			546025	11/26/21 17:35	K1D	TAL SAC
Total/NA	Prep	3546			15.19 g	5 mL	541215	11/09/21 09:03	NGK	TAL SAC
Total/NA	Analysis	8082		5			544372	11/20/21 00:05	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 19:55	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S4F-2

Lab Sample ID: 320-81042-23
Date Collected: 10/28/21 10:04
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.43 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		10			546025	11/26/21 17:53	K1D	TAL SAC

Client Sample ID: AOC3-S3F-0.5

Lab Sample ID: 320-81042-24
Date Collected: 10/28/21 10:05
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.39 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		50			546025	11/26/21 18:12	K1D	TAL SAC
Total/NA	Prep	3546			15.39 g	5 mL	541215	11/09/21 09:03	NGK	TAL SAC
Total/NA	Analysis	8082		5			544372	11/20/21 00:25	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 19:59	GSH	TAL SAC

Client Sample ID: AOC3-S3F-2

Lab Sample ID: 320-81042-25
Date Collected: 10/28/21 10:07
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.02 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		2			546025	11/26/21 18:31	K1D	TAL SAC

Client Sample ID: AOC3/AOC8-S3G-0.5

Lab Sample ID: 320-81042-26
Date Collected: 10/28/21 10:11
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.55 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		20			546025	11/26/21 18:50	K1D	TAL SAC
Total/NA	Prep	3546			15.55 g	5 mL	541215	11/09/21 09:03	NGK	TAL SAC
Total/NA	Analysis	8082		5			544372	11/20/21 00:45	K1D	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 20:03	GSH	TAL SAC

Client Sample ID: AOC3/AOC8-S3G-2

Lab Sample ID: 320-81042-27
Date Collected: 10/28/21 10:19
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.41 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		5			546025	11/26/21 19:09	K1D	TAL SAC

Client Sample ID: AOC3-S4G-0.5

Lab Sample ID: 320-81042-28

Date Collected: 10/28/21 10:22

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.05 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		50			546025	11/26/21 19:28	K1D	TAL SAC
Total/NA	Prep	3546			15.05 g	5 mL	541215	11/09/21 09:03	NGK	TAL SAC
Total/NA	Analysis	8082		5			544372	11/20/21 01:05	K1D	TAL SAC
Total/NA	Prep	3050B			0.99 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 20:07	GSH	TAL SAC

Client Sample ID: AOC3-S4G-2

Lab Sample ID: 320-81042-29

Date Collected: 10/28/21 10:24

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.26 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		2			546025	11/26/21 19:47	K1D	TAL SAC

Client Sample ID: AOC3-S5G-0.5

Lab Sample ID: 320-81042-30

Date Collected: 10/28/21 10:31

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.54 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		50			546025	11/26/21 20:06	K1D	TAL SAC
Total/NA	Prep	3546			15.54 g	5 mL	541215	11/09/21 09:03	NGK	TAL SAC
Total/NA	Analysis	8082		5			544372	11/20/21 01:25	K1D	TAL SAC
Total/NA	Prep	3050B			1.01 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 20:10	GSH	TAL SAC

Client Sample ID: AOC3-S5G-2

Lab Sample ID: 320-81042-31

Date Collected: 10/28/21 10:32

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.68 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		2			546025	11/26/21 20:25	K1D	TAL SAC

Client Sample ID: AOC3-S5G-2 DUP

Lab Sample ID: 320-81042-32

Date Collected: 10/28/21 10:32

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.64 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		2			546025	11/26/21 20:44	K1D	TAL SAC

Client Sample ID: AOC3-S2G-0.5

Lab Sample ID: 320-81042-33

Date Collected: 10/28/21 11:02

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.18 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		20			546025	11/26/21 21:02	K1D	TAL SAC
Total/NA	Prep	3546			15.18 g	5 mL	541215	11/09/21 09:03	NGK	TAL SAC
Total/NA	Analysis	8082		1			544372	11/20/21 01:45	K1D	TAL SAC
Total/NA	Prep	3050B			0.96 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 20:14	GSH	TAL SAC

Client Sample ID: AOC3-S2G-2

Lab Sample ID: 320-81042-34

Date Collected: 10/28/21 11:03

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.00 g	5 mL	541214	11/09/21 08:55	NGK	TAL SAC
Total/NA	Analysis	8081A		2			546025	11/26/21 21:21	K1D	TAL SAC

Client Sample ID: AOC3-S2H-0.5

Lab Sample ID: 320-81042-35

Date Collected: 10/28/21 11:01

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.23 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		20			546025	11/26/21 22:18	K1D	TAL SAC
Total/NA	Prep	3546			15.23 g	5 mL	541228	11/09/21 09:41	SJ	TAL SAC
Total/NA	Analysis	8082		1			544372	11/19/21 19:46	K1D	TAL SAC
Total/NA	Prep	3050B			0.98 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 20:18	GSH	TAL SAC

Client Sample ID: AOC3-S2H-2

Lab Sample ID: 320-81042-36

Date Collected: 10/28/21 11:03

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.40 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		10			546025	11/26/21 22:37	K1D	TAL SAC

Client Sample ID: AOC3-S2F-0.5

Lab Sample ID: 320-81042-37

Date Collected: 10/28/21 11:08

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.55 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		10			546525	11/29/21 18:16	K1D	TAL SAC
Total/NA	Prep	3546			15.55 g	5 mL	541228	11/09/21 09:41	SJ	TAL SAC
Total/NA	Analysis	8082		1			544372	11/19/21 20:06	K1D	TAL SAC
Total/NA	Prep	3050B			1.71 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 20:22	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S2F-0.5

Lab Sample ID: 320-81042-37

Date Collected: 10/28/21 11:08

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.71 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539835	11/03/21 17:21	GSH	TAL SAC
Total/NA	Prep	7471A			.60 g	100 mL	193755	11/12/21 05:53	WL8G	ECL 1
Total/NA	Analysis	7471A		1			193866	11/12/21 11:43	VWJ7	ECL 1

Client Sample ID: AOC3-S2F-2

Lab Sample ID: 320-81042-38

Date Collected: 10/28/21 11:10

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.58 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		1			546525	11/29/21 18:35	K1D	TAL SAC

Client Sample ID: AOC3-S2F-0.5 DUP

Lab Sample ID: 320-81042-39

Date Collected: 10/28/21 11:08

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.47 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		10			546525	11/29/21 18:54	K1D	TAL SAC
Total/NA	Prep	3546			15.47 g	5 mL	541228	11/09/21 09:41	SJ	TAL SAC
Total/NA	Analysis	8082		1			544372	11/19/21 20:26	K1D	TAL SAC
Total/NA	Prep	3050B			1.06 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539464	11/02/21 20:33	GSH	TAL SAC
Total/NA	Prep	3050B			1.06 g	100 mL	539068	11/02/21 06:55	NIM	TAL SAC
Total/NA	Analysis	6010B		1			539835	11/03/21 17:25	GSH	TAL SAC
Total/NA	Prep	7471A			.59 g	100 mL	193755	11/12/21 05:53	WL8G	ECL 1
Total/NA	Analysis	7471A		1			193866	11/12/21 11:44	VWJ7	ECL 1

Client Sample ID: AOC3-S1F-0.5

Lab Sample ID: 320-81042-40

Date Collected: 10/28/21 11:13

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.62 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		20			546525	11/29/21 19:12	K1D	TAL SAC
Total/NA	Prep	3546			15.62 g	5 mL	541228	11/09/21 09:41	SJ	TAL SAC
Total/NA	Analysis	8082		1			544372	11/19/21 20:46	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	539628	11/03/21 13:32	JP	TAL SAC
Total/NA	Analysis	6010B		1			540178	11/04/21 11:03	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S1F-2

Lab Sample ID: 320-81042-41
Date Collected: 10/28/21 11:14
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.12 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		1			546525	11/29/21 19:31	K1D	TAL SAC

Client Sample ID: AOC3-S1G-0.5

Lab Sample ID: 320-81042-42
Date Collected: 10/28/21 11:21
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.48 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		20			546525	11/29/21 19:50	K1D	TAL SAC
Total/NA	Prep	3546			15.48 g	5 mL	541228	11/09/21 09:41	SJ	TAL SAC
Total/NA	Analysis	8082		1			544372	11/19/21 21:05	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	539628	11/03/21 13:32	JP	TAL SAC
Total/NA	Analysis	6010B		1			540178	11/04/21 11:07	GSH	TAL SAC

Client Sample ID: AOC3-S1G-2

Lab Sample ID: 320-81042-43
Date Collected: 10/28/21 11:22
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.59 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		1			546525	11/29/21 20:09	K1D	TAL SAC

Client Sample ID: AOC3-S1H-0.5

Lab Sample ID: 320-81042-44
Date Collected: 10/28/21 11:24
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.58 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		20			546525	11/29/21 20:28	K1D	TAL SAC
Total/NA	Prep	3546			15.58 g	5 mL	541228	11/09/21 09:41	SJ	TAL SAC
Total/NA	Analysis	8082		1			544372	11/19/21 21:25	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	539628	11/03/21 13:32	JP	TAL SAC
Total/NA	Analysis	6010B		1			540178	11/04/21 11:20	GSH	TAL SAC

Client Sample ID: AOC3-S1H-2

Lab Sample ID: 320-81042-45
Date Collected: 10/28/21 11:25
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.83 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		1			546525	11/29/21 20:47	K1D	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S5H-0.5
Date Collected: 10/28/21 11:57
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-46
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.98 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		20			546525	11/29/21 21:06	K1D	TAL SAC
Total/NA	Prep	3546			15.98 g	5 mL	541228	11/09/21 09:41	SJ	TAL SAC
Total/NA	Analysis	8082		1			544372	11/19/21 21:45	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	539628	11/03/21 13:32	JP	TAL SAC
Total/NA	Analysis	6010B		1			540178	11/04/21 11:25	GSH	TAL SAC

Client Sample ID: AOC3-S5H-2
Date Collected: 10/28/21 11:59
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-47
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.84 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		1			546525	11/29/21 21:25	K1D	TAL SAC

Client Sample ID: AOC3-S4H-0.5
Date Collected: 10/28/21 12:00
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-48
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.41 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		10			546525	11/29/21 21:43	K1D	TAL SAC
Total/NA	Prep	3546			15.41 g	5 mL	541228	11/09/21 09:41	SJ	TAL SAC
Total/NA	Analysis	8082		1			544372	11/19/21 22:05	K1D	TAL SAC
Total/NA	Prep	3050B			1.05 g	100 mL	539628	11/03/21 13:32	JP	TAL SAC
Total/NA	Analysis	6010B		1			540178	11/04/21 11:29	GSH	TAL SAC

Client Sample ID: AOC3-S4H-2
Date Collected: 10/28/21 12:02
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-49
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.22 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		1			546525	11/29/21 22:02	K1D	TAL SAC

Client Sample ID: AOC3-S3H-0.5
Date Collected: 10/28/21 12:04
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-50
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.29 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		20			546525	11/29/21 22:21	K1D	TAL SAC
Total/NA	Prep	3546			15.29 g	5 mL	541228	11/09/21 09:41	SJ	TAL SAC
Total/NA	Analysis	8082		1			544372	11/19/21 22:25	K1D	TAL SAC
Total/NA	Prep	3050B			1.01 g	100 mL	539628	11/03/21 13:32	JP	TAL SAC
Total/NA	Analysis	6010B		1			540178	11/04/21 11:33	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: AOC3-S3H-2

Lab Sample ID: 320-81042-51
Date Collected: 10/28/21 12:06
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.68 g	5 mL	541224	11/09/21 09:28	SJ	TAL SAC
Total/NA	Analysis	8081A		1			546525	11/29/21 22:40	K1D	TAL SAC

Client Sample ID: AOC3-S4I-0.5

Lab Sample ID: 320-81042-52
Date Collected: 10/28/21 12:15
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.55 g	5 mL	541292	11/09/21 11:27	SJ	TAL SAC
Total/NA	Analysis	8081A		10			545685	11/24/21 23:47	K1D	TAL SAC
Total/NA	Prep	3546			15.55 g	5 mL	541298	11/09/21 11:44	SJ	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 20:25	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	539628	11/03/21 13:32	JP	TAL SAC
Total/NA	Analysis	6010B		1			540178	11/04/21 11:38	GSH	TAL SAC

Client Sample ID: AOC3-S4I-2

Lab Sample ID: 320-81042-53
Date Collected: 10/28/21 12:17
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.68 g	5 mL	541292	11/09/21 11:27	SJ	TAL SAC
Total/NA	Analysis	8081A		5			545685	11/25/21 00:06	K1D	TAL SAC

Client Sample ID: AOC3-S5I-0.5

Lab Sample ID: 320-81042-54
Date Collected: 10/28/21 12:26
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.73 g	5 mL	541292	11/09/21 11:27	SJ	TAL SAC
Total/NA	Analysis	8081A		10			545685	11/25/21 00:25	K1D	TAL SAC
Total/NA	Prep	3546			15.73 g	5 mL	541298	11/09/21 11:44	SJ	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 20:45	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	539628	11/03/21 13:32	JP	TAL SAC
Total/NA	Analysis	6010B		1			540178	11/04/21 11:42	GSH	TAL SAC

Client Sample ID: AOC3-S5I-2

Lab Sample ID: 320-81042-55
Date Collected: 10/28/21 12:28
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.23 g	5 mL	541292	11/09/21 11:27	SJ	TAL SAC
Total/NA	Analysis	8081A		5			546025	11/26/21 23:34	K1D	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Client Sample ID: EB10282021

Date Collected: 10/28/21 12:50
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-56

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1033.1 mL	10 mL	539998	11/04/21 13:37	NGK	TAL SAC
Total/NA	Analysis	8081A		1			542188	11/13/21 01:19	K1D	TAL SAC
Total/NA	Prep	3510C			1033.1 mL	10 mL	539996	11/04/21 13:35	NGK	TAL SAC
Total/NA	Analysis	8082		1			542927	11/15/21 18:25	K1D	TAL SAC
Total/NA	Prep	3010A			50 mL	50 mL	193286	11/10/21 14:08	WL8G	ECL 1
Total/NA	Analysis	6010B		1			193907	11/12/21 17:25	ULPF	ECL 1
Total/NA	Prep	7470A			50 mL	100 mL	193769	11/12/21 06:21	WL8G	ECL 1
Total/NA	Analysis	7470A		1			193866	11/12/21 12:52	VWJ7	ECL 1

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

Laboratory: Eurofins Calscience LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2944	09-30-22

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Method	Method Description	Protocol	Laboratory
8081A	Organochlorine Pesticides (GC)	SW846	TAL SAC
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL SAC
6010B	Metals (ICP)	SW846	ECL 1
6010B	Metals (ICP)	SW846	TAL SAC
7470A	Mercury (CVAA)	SW846	ECL 1
7471A	Mercury (CVAA)	SW846	ECL 1
3010A	Preparation, Total Metals	SW846	ECL 1
3050B	Preparation, Metals	SW846	TAL SAC
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL SAC
3546	Microwave Extraction	SW846	TAL SAC
7470A	Preparation, Mercury	SW846	ECL 1
7471A	Preparation, Mercury	SW846	ECL 1

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-81042-1	AOC3-S6D-0.5	Solid	10/28/21 08:27	10/29/21 14:21
320-81042-2	AOC3-S6D-2	Solid	10/28/21 08:28	10/29/21 14:21
320-81042-3	AOC3-S5D--0.5	Solid	10/28/21 08:27	10/29/21 14:21
320-81042-4	AOC3-S5D-2	Solid	10/28/21 08:29	10/29/21 14:21
320-81042-5	AOC3-S5E-0.5	Solid	10/28/21 08:34	10/29/21 14:21
320-81042-6	AOC3-S5E-2	Solid	10/28/21 08:35	10/29/21 14:21
320-81042-7	AOC3/AOC8-S6E-0.5	Solid	10/28/21 08:41	10/29/21 14:21
320-81042-8	AOC3/AOC8-S6E-2	Solid	10/28/21 08:42	10/29/21 14:21
320-81042-9	AOC3-S8E-0.5	Solid	10/28/21 08:58	10/29/21 14:21
320-81042-10	AOC3-S8E-2	Solid	10/28/21 08:59	10/29/21 14:21
320-81042-11	AOC3-S7E-2	Solid	10/28/21 09:01	10/29/21 14:21
320-81042-12	AOC3-S9E-0.5	Solid	10/28/21 09:00	10/29/21 14:21
320-81042-13	AOC3-S9E-0.5 DUP	Solid	10/28/21 09:01	10/29/21 14:21
320-81042-14	AOC3-S9E-2	Solid	10/28/21 09:02	10/29/21 14:21
320-81042-15	AOC3-S7E-0.5	Solid	10/28/21 09:12	10/29/21 14:21
320-81042-16	AOC3-S6F-0.5	Solid	10/28/21 09:10	10/29/21 14:21
320-81042-17	AOC3-S6F-2	Solid	10/28/21 09:12	10/29/21 14:21
320-81042-18	AOC3-S6G-0.5	Solid	10/28/21 09:56	10/29/21 14:21
320-81042-19	AOC3-S6G-2	Solid	10/28/21 09:58	10/29/21 14:21
320-81042-20	AOC3-S5F-0.5	Solid	10/28/21 09:58	10/29/21 14:21
320-81042-21	AOC3-S5F-2	Solid	10/28/21 09:59	10/29/21 14:21
320-81042-22	AOC3-S4F-0.5	Solid	10/28/21 10:02	10/29/21 14:21
320-81042-23	AOC3-S4F-2	Solid	10/28/21 10:04	10/29/21 14:21
320-81042-24	AOC3-S3F-0.5	Solid	10/28/21 10:05	10/29/21 14:21
320-81042-25	AOC3-S3F-2	Solid	10/28/21 10:07	10/29/21 14:21
320-81042-26	AOC3/AOC8-S3G-0.5	Solid	10/28/21 10:11	10/29/21 14:21
320-81042-27	AOC3/AOC8-S3G-2	Solid	10/28/21 10:19	10/29/21 14:21
320-81042-28	AOC3-S4G-0.5	Solid	10/28/21 10:22	10/29/21 14:21
320-81042-29	AOC3-S4G-2	Solid	10/28/21 10:24	10/29/21 14:21
320-81042-30	AOC3-S5G-0.5	Solid	10/28/21 10:31	10/29/21 14:21
320-81042-31	AOC3-S5G-2	Solid	10/28/21 10:32	10/29/21 14:21
320-81042-32	AOC3-S5G-2 DUP	Solid	10/28/21 10:32	10/29/21 14:21
320-81042-33	AOC3-S2G-0.5	Solid	10/28/21 11:02	10/29/21 14:21
320-81042-34	AOC3-S2G-2	Solid	10/28/21 11:03	10/29/21 14:21
320-81042-35	AOC3-S2H-0.5	Solid	10/28/21 11:01	10/29/21 14:21
320-81042-36	AOC3-S2H-2	Solid	10/28/21 11:03	10/29/21 14:21
320-81042-37	AOC3-S2F-0.5	Solid	10/28/21 11:08	10/29/21 14:21
320-81042-38	AOC3-S2F-2	Solid	10/28/21 11:10	10/29/21 14:21
320-81042-39	AOC3-S2F-0.5 DUP	Solid	10/28/21 11:08	10/29/21 14:21
320-81042-40	AOC3-S1F-0.5	Solid	10/28/21 11:13	10/29/21 14:21
320-81042-41	AOC3-S1F-2	Solid	10/28/21 11:14	10/29/21 14:21
320-81042-42	AOC3-S1G-0.5	Solid	10/28/21 11:21	10/29/21 14:21
320-81042-43	AOC3-S1G-2	Solid	10/28/21 11:22	10/29/21 14:21
320-81042-44	AOC3-S1H-0.5	Solid	10/28/21 11:24	10/29/21 14:21
320-81042-45	AOC3-S1H-2	Solid	10/28/21 11:25	10/29/21 14:21
320-81042-46	AOC3-S5H-0.5	Solid	10/28/21 11:57	10/29/21 14:21
320-81042-47	AOC3-S5H-2	Solid	10/28/21 11:59	10/29/21 14:21
320-81042-48	AOC3-S4H-0.5	Solid	10/28/21 12:00	10/29/21 14:21
320-81042-49	AOC3-S4H-2	Solid	10/28/21 12:02	10/29/21 14:21
320-81042-50	AOC3-S3H-0.5	Solid	10/28/21 12:04	10/29/21 14:21
320-81042-51	AOC3-S3H-2	Solid	10/28/21 12:06	10/29/21 14:21
320-81042-52	AOC3-S4I-0.5	Solid	10/28/21 12:15	10/29/21 14:21
320-81042-53	AOC3-S4I-2	Solid	10/28/21 12:17	10/29/21 14:21
320-81042-54	AOC3-S5I-0.5	Solid	10/28/21 12:26	10/29/21 14:21
320-81042-55	AOC3-S5I-2	Solid	10/28/21 12:28	10/29/21 14:21

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-81042-56	EB10282021	Water	10/28/21 12:50	10/29/21 14:21

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

320-81042

301259

eurofins

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemecio	Date: 10/28/21	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	1 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNR/NES
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☑ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole School PEA	☑ 2 weeks			Job / SDG No
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3-S6D-0.5	10/28/21	0827	G	Soil	1					X		X	X			
AOC3-S6D-2		0828										X				
AOC3-S5D-0.5		08:27										X	X		X	
AOC3-S5D-2		08:29										X				
AOC3-S5E-0.5		08:34								X		X	X			
AOC3-S5E-2		08:35										X				
AOC3/AOC8-S6E-0.5		08:41										X	X	X	X	
AOC3/AOC8-S6E-2		08:42										X		X		
AOC3-S8E-0.5		0858										X	X		X	
AOC3-S8E-2		0859										X				
AOC3-S7E-2		0901										X				

320-81042 Chain of Custody

Preservation Used 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. | Cooler Temp (°C): Obs'd._____ Corr'd._____ Therm ID No._____

Relinquished by: Daysi Nemecio (Secured location Alameda office)	Company: N&M	Date/Time: 10/28/21 14:34	Received by: Leslie Jung	Company: N&M	Date/Time: 10/28 1431
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10/29/21 13:07	Received by: C. Fisher	Company: ETA SJ	Date/Time: 10/29/21 13.07
Relinquished by: C. Fisher	Company: ETA SJ	Date/Time: 10/29/21 14:21	Received in Laboratory by:	Company: TestAmerica	Date/Time: 10/29/21 1421

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

10, 1.8 / 3.5, C°

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373 5600 fax 303.467 7248

Chain of Custody Record

320-81042

301259

eurofins

Environment Testing TestAmerica

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemeco	Date: 10/28/2021	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	2 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNR/LNES
Alameda California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
1 AOC3-S9E-0.5	10/28/21	09:00	G	Soil	1							X	X		X	
AOC3-S9E-0.5 DUP		09:01										X	X		X	
AOC3-S9E-2		09:02										X				
AOC3-S7E-0.5		0912										X	X		X	
AOC3-S6F-0.5		09:10										X	X		X	
AOC3-S6F-2		09:12										X				
AOC3-S6G-0.5		09:56								X		X	X			
AOC3-S6G-2		09:58										X				
AOC3-S5F-0.5		0958										X	X		X	
AOC3-S5F-2		0959										X				
2 AOC3-S4F-0.5	↓	1002	↓	↓	↓							X	X		X	

Preservation Used. 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments

Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp. (°C): Obs'd: _____ Corr'd _____ Therm ID No. _____			
Relinquished by: Daysi Nemeco (Alameda office secured location)	Company: NMM	Date/Time: 10/28/21 14:34	Received by: Leslie Jung	Company: NMM	Date/Time: 10/28/21 14:34
Relinquished by: Leslie Jung	Company: NMM	Date/Time: 10/29/21 13:07	Received by:	Company: ETT SJ	Date/Time: 10/29/21 13:07
Relinquished by:	Company: ETT SJ	Date/Time: 10/29/21 14:21	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

12/15/2021 (Rev. 1)

Chain of Custody Record

320-81042

201259

eurofins

Environment Testing America

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Demeno	Date: 10/28/21	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	3 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNR/NBS
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☑ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street; Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
23 AOC3-S4F-2	10/28/21	1004	G	Soil	1							X				
AOC3-S3F-0.5		1005										X	X		X	
AOC3-S3F-2		1007										X				
AOC3/AOC8-S3G-0.5		1011										X	X	X	X	
AOC3/AOC8-S3G-2		1019										X		X		
AOC3-S4G-0.5		1022										X	X		X	
AOC3-S4G-2		1024										X				
AOC3-S5G-0.5		1031										X	X		X	
AOC3-S5G-2		1032										X				
AOC3-S5G-2 DUP		1032										X				
33 AOC3-S2G-0.5		1102										X	X		X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH, 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Hold samples for additional analyses

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. | Cooler Temp. (°C): Obs'd._____ Corr'd._____ Therm ID No._____

Relinquished by: Daysi Demeno (Sealed to carton Alameda office)	Company: NMM	Date/Time: 10/28/21 14:34	Received by: Leslie Jung	Company: NMM	Date/Time: 10/28	14 34
Relinquished by: Leslie Jung	Company: NMM	Date/Time: 10/29/21 13.07	Received by: G. Fish	Company: ETA SS	Date/Time: 10/29/21	13:09
Relinquished by: G. Fish	Company: ETA SS	Date/Time: 10/29/21 14:21	Received in Laboratory by:	Company:	Date/Time:	

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

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Eurofins TestAmerica, Sacramento
880 Riverside Parkway

West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

320-81042 # 201259

eurofins

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemeao	Date: 10/28/21	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	4 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNR/NES
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☑ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes.
24 AOC3-S2G-2	10/28/21	1103	G	Soil	1							X				
AOC3-S2H-0.5	10/28/21	11:01										X	X		X	
AOC3-S2H-2	10/28/21	11:03										X				
AOC3-S2F-0.5		11:08								X		X	X			
AOC3-S2F-2		1110										X				
AOC3-S2F-0.5 Dup		11:08								X		X	X			
AOC3-S1F-0.5		11:13										X	X		X	
AOC3-S1F-2		11:14										X				
AOC3-S1G-0.5		1121										X	X		X	
AOC3-S1G-2		1122										X				
34 AOC3-S1H-0.5		1124										X	X		X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH, 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.

Hold sample for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.		Cooler Temp. (°C): Obs'd:_____ Corr'd._____ Therm ID No._____		
Relinquished by: Daysi Nemeao Alameda office secured location	Company: NR M	Date/Time: 10/28/21 14:31	Received by: Leslie Jung	Company: N&M	Date/Time: 10/28 1434
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10/29/21 13:07	Received by:	Company: EFA SJ	Date/Time: 10/29/21 13.07
Relinquished by:	Company: EFA SJ	Date/Time: 10/29/21 14:21	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

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12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

320-81042

201259

eurofins

Environment Testing TestAmerica

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Herrera	Date: 10/28/21	COC No: 1
Ninyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	5 of 5 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DURANES
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3-S1H-2	10/28/21	11:25	G	Soil	1							X				
AOC3-S5H-0.5	10/28/21	11:57	G	Soil	1							X	X		X	
AOC3-S5H-2	10/28/21	11:59	G	Soil	1							X				
AOC3-S4H-0.5	10/28/21	12:00	G	Soil	1							X	X		X	
AOC3-S4H-2	10/28/21	12:02	G	Soil	1							X				
AOC3-S3H-0.5	10/28/21	12:04	G	Soil	1							X	X		X	
AOC3-S3H-2	10/28/21	12:06	G	Soil	1							X				
AOC3-S4I-0.5	10/28/21	12:15	G	Soil	1							X	X		X	
AOC3-S4I-2	10/28/21	12:17	G	Soil	1							X				
AOC3-S5I-0.5	10/28/21	12:26	G	Soil	1							X	X		X	
AOC3-S5I-2	10/28/21	12:28	G	Soil	1							X				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments

Hold sample for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp. (°C): Obs'd _____ Corr'd. _____ Therm ID No.. _____			
Relinquished by: Daysi Herrera (Secured portion Alameda office)	Company: NM	Date/Time: 10/28/21 14:34	Received by: Leslie Jung	Company: NM	Date/Time: 10/28 1434
Relinquished by: Leslie Jung	Company: NM	Date/Time: 10/29/21 13:07	Received by:	Company: EPA SJ	Date/Time: 10/29/21 13:07
Relinquished by:	Company: EPA SJ	Date/Time: 10/29/21 14:21	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

Page 120 of 142

12/15/2021 (Rev. 1)

320-81042

501259

Eurofins TestAmerica, Sacramento

880 Riverside Parkway

West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

eurofins Environment Testing America

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Warren	Date: 10/28/21	COC No: 1
Ninyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	6 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DW/NES
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☑ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
EB10282021	10/28/21	12:50	G	H_2O	3					X		X	X	X		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.

Hold Samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.		Cooler Temp. (°C). Obs'd. _____ Corr'd. _____ Therm ID No. _____		
Relinquished by: Daysi Warren (Alameda office Courier location)	Company: NDM	Date/Time: 10/28/21 14:34	Received by: Leslie Jung	Company: NDM	Date/Time: 10/29/21 14:34
Relinquished by: Leslie Jung	Company: NDM	Date/Time: 10/29/21 13:07	Received by: [signature]	Company: EAT SS	Date/Time: 10/29/21 13:07
Relinquished by: [signature]	Company: EAT SS	Date/Time: 10/29/21 14:21	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247584.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B (MOD) Lead, Arsenic	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S6D-0 5 (320-81042-1)	10/28/21	08:27 Pacific		Solid			X	X	X				1	
AOC3-S6D-2 (320-81042-2)	10/28/21	08:28 Pacific		Solid				X					1	
AOC3-S5D--0.5 (320-81042-3)	10/28/21	08:27 Pacific		Solid				X	X	X			1	
AOC3-S5D-2 (320-81042-4)	10/28/21	08:29 Pacific		Solid				X					1	
AOC3-S5E-0.5 (320-81042-5)	10/28/21	08:34 Pacific		Solid			X	X	X				1	
AOC3-S5E-2 (320-81042-6)	10/28/21	08:35 Pacific		Solid				X					1	
AOC3/AOC8-S6E-0.5 (320-81042-7)	10/28/21	08:41 Pacific		Solid				X	X	X	X		1	
AOC3AOC8-S6E-2 (320-81042-8)	10/28/21	08:42 Pacific		Solid							X		1	
AOC3-S8E-0.5 (320-81042-9)	10/28/21	08:58 Pacific		Solid				X	X	X			1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		10/1/21 1615	EHS		10/1/21 1615	DCS
2		10-1-21 1930	DCS		10/1/21-1930	EEETSAL
3						

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4.7 & 1.6

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247584.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 2 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B (MOD) Lead, Arsenic	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S8E-2 (320-81042-10)	10/28/21	08:59 Pacific		Solid				X					1	
AOC3-S7E-2 (320-81042-11)	10/28/21	09:01 Pacific		Solid				X					1	
AOC3-S9E-0 5 (320-81042-12)	10/28/21	09:00 Pacific		Solid				X	X	X			1	
AOC3-S9E-0.5 DUP (320-81042-13)	10/28/21	09:01 Pacific		Solid				X	X	X			1	
AOC3-S9E-2 (320-81042-14)	10/28/21	09:02 Pacific		Solid				X					1	
AOC3-S7E-0.5 (320-81042-15)	10/28/21	09:12 Pacific		Solid				X	X	X			1	
AOC3-S6F-0.5 (320-81042-16)	10/28/21	09:10 Pacific		Solid				X	X	X			1	
AOC3-S6F-2 (320-81042-17)	10/28/21	09:12 Pacific		Solid				X					1	
AOC3-S6G-0 5 (320-81042-18)	10/28/21	09:56 Pacific		Solid			X	X	X				1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		11/1/21 1615	EEISA		11/1/21 1615	DCS
2		11-1-21 1930	DCS		11/1/21 1930	EEISA
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s)	COC No: 320-247584.3
Client Contact: Shipping/Receiving	Phone	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 3 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B (MOD) Lead, Arsenic	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S6G-2 (320-81042-19)	10/28/21	09:58 Pacific		Solid				X					1	
AOC3-S5F-0.5 (320-81042-20)	10/28/21	09:58 Pacific		Solid				X	X	X			1	
AOC3-S5F-2 (320-81042-21)	10/28/21	09:59 Pacific		Solid				X					1	
AOC3-S4F-0.5 (320-81042-22)	10/28/21	10:02 Pacific		Solid				X	X	X			1	
AOC3-S4F-2 (320-81042-23)	10/28/21	10:04 Pacific		Solid				X					1	
AOC3-S3F-0.5 (320-81042-24)	10/28/21	10:05 Pacific		Solid				X	X	X			1	
AOC3-S3F-2 (320-81042-25)	10/28/21	10:07 Pacific		Solid				X					1	
AOC3/AOC8-S3G-0.5 (320-81042-26)	10/28/21	10:11 Pacific		Solid				X	X	X	X		1	
AOC3-/AOC8-S3G-2 (320-81042-27)	10/28/21	10:19 Pacific		Solid							X		1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/1/21 1615	ESAT-SJ		11/1/21 1615	DCS
2		11-1-21 1930	DCS		11/1/21-1930	EESAC
3		Date/Time	Company		Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s)	COC No: 320-247584.4
Client Contact: Shipping/Receiving	Phone	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 4 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B (MOD) Lead, Arsenic	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S4G-0.5 (320-81042-28)	10/28/21	10:22 Pacific		Solid				X	X	X			1	
AOC3-S4G-2 (320-81042-29)	10/28/21	10:24 Pacific		Solid				X					1	
AOC3-S5G-0.5 (320-81042-30)	10/28/21	10:31 Pacific		Solid				X	X	X			1	
AOC3-S5G-2 (320-81042-31)	10/28/21	10:32 Pacific		Solid				X					1	
AOC3-S5G-2 DUP (320-81042-32)	10/28/21	10:32 Pacific		Solid				X					1	
AOC3-S2G-0.5 (320-81042-33)	10/28/21	11:02 Pacific		Solid				X	X	X			1	
AOC3-S2G-2 (320-81042-34)	10/28/21	11:03 Pacific		Solid				X					1	
AOC3-S2H-0.5 (320-81042-35)	10/28/21	11:01 Pacific		Solid				X	X	X			1	
AOC3-S2H-2 (320-81042-36)	10/28/21	11:03 Pacific		Solid				X					1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmenca laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	10/31/21 1615	FEMTA	[signature]	10/31/21 1615	TAS
2	[signature]	11-1-21 1930	TAS	[signature]	11/1/21 1930	EESA
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s)	COC No: 320-247584.5
Client Contact: Shipping/Receiving	Phone	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 5 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B (MOD) Lead, Arsenic	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S2F-0.5 (320-81042-37)	10/28/21	11:08 Pacific		Solid			X	X	X				1	
AOC3-S2F-2 (320-81042-38)	10/28/21	11:10 Pacific		Solid				X					1	
AOC3-S2F-0.5 DUP (320-81042-39)	10/28/21	11:08 Pacific		Solid			X	X	X				1	
AOC3-S1F-0.5 (320-81042-40)	10/28/21	11:13 Pacific		Solid				X	X	X			1	
AOC3-S1F-2 (320-81042-41)	10/28/21	11:14 Pacific		Solid				X					1	
AOC3-S1G-0.5 (320-81042-42)	10/28/21	11:21 Pacific		Solid				X	X	X			1	
AOC3--S1G-2 (320-81042-43)	10/28/21	11:22 Pacific		Solid				X					1	
AOC3-S1H-0.5 (320-81042-44)	10/28/21	11:24 Pacific		Solid				X	X	X			1	
AOC3-S1H-2 (320-81042-45)	10/28/21	11:25 Pacific		Solid				X					1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmenca places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmenca laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		10/1/21 1610	TEMA SF		10/1/21 1610	DE
2		10-1-21 1930	DCS		10/1/21 1930	EETSA
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s)	COC No: 320-247584.6
Client Contact: Shipping/Receiving	Phone	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 6 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B (MOD) Lead, Arsenic	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S5H-0.5 (320-81042-46)	10/28/21	11:57 Pacific		Solid				X	X	X			1	
AOC3-S5H-2 (320-81042-47)	10/28/21	11:59 Pacific		Solid				X					1	
AOC3-S4H-0.5 (320-81042-48)	10/28/21	12:00 Pacific		Solid				X	X	X			1	
AOC3-S4H-2 (320-81042-49)	10/28/21	12:02 Pacific		Solid				X					1	
AOC3-S3H-0 5 (320-81042-50)	10/28/21	12:04 Pacific		Solid				X	X	X			1	
AOC3-S3H-2 (320-81042-51)	10/28/21	12:06 Pacific		Solid				X					1	
AOC3-S4I-0.5 (320-81042-52)	10/28/21	12:15 Pacific		Solid				X	X	X			1	
AOC3-S4I-2 (320-81042-53)	10/28/21	12:17 Pacific		Solid				X					1	
AOC3-S5I-0.5 (320-81042-54)	10/28/21	12:26 Pacific		Solid				X	X	X			1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		11/1/21 1615	FedEx		11/1/21 1615	TLS
2		11-1-21 1930	TLS		11/1/21 1930	FEDEX
3		Date/Time	Company		Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247584 7
Client Contact: Shipping/Receiving	Phone	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 7 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify); Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B (MOD) Lead, Arsenic	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S5I-2 (320-81042-55)	10/28/21	12:08 Pacific		Solid				X					1	
EB10282021 (320-81042-56)	10/28/21	12:50 Pacific		Water								X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		11/1/21 1615	TestAm		11/1/21 1615	DCS
2		11-1-21 1930	DCS		11/1/21-1930	EETSAC
3		Date/Time	Company		Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

TestAmerica CUSTODY SEAL

Date 11/1/21 Signature



320-81042 Waybill

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Part # 59469-434 MTW EXP 07/22

ORIGIN ID:LVKA (928) 484-1919
SAMPLE RECEIVING
EUROFINS TEST AMERICA
780 MONTAGUE EXPRESSWAY
SUITE 602
SAN JOSE, CA 95131
UNITED STATES US

SHIP DATE: 01NOV21
ACTWGT: 30.05 LB
CAD: 0795504/CAFE3507
DIMS: 28x16x15 IN

BILL SENDER

TO SAMPLE RECEIVING
EUROFINS CALSCIENCE, LLC
7440 LINCOLN WAY

GARDEN GROVE CA 92841
(714) 895-5494 REF:

INV:
PO: DEPT:

570C1/A822/6F4B

FedEx Express

TUE - 02 NOV 11:30A
PRIORITY OVERNIGHT

TRK# 0201 5047 2941 7677

92 APVA

92841
CA-US SNA

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247583 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 1
Company: Eurofins Calscience LLC		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 7440 Lincoln Way, ,	Due Date Requested: 11/14/2021			
City: Garden Grove	TAT Requested (days):			
State, Zip: CA, 92841				
Phone: 714-895-5494(Tel) 714-894-7501(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes.

A - HCL	M - Hexane
B - NaOH	N None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U Acetone
J - DI Water	V - MCAA
K - EDTA	W pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7471A/7471A_Prep Mercury	6010B/3010A California Administrative Manual List	7470A/7470A_Prep Mercury	8081A/3510C (MOD) Standard List	8082/3510C (MOD) Standard List	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
AOC3-S6D-0 5 (320-81042-1)	10/28/21	08:27 Pacific		Solid			X					1	
AOC3-S5E-0 5 (320-81042-5)	10/28/21	08 34 Pacific		Solid			X					1	
AOC3-S6G-0 5 (320-81042-18)	10/28/21	09 56 Pacific		Solid			X					1	
AOC3-S2F-0 5 (320-81042-37)	10/28/21	11 08 Pacific		Solid			X					1	
AOC3-S2F-0 5 DUP (320-81042-39)	10/28/21	11 08 Pacific		Solid			X					1	
EB10282021 (320-81042-56)	10/28/21	12 50 Pacific		Water				X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/1/21 1600	EC		11/2/21 1020	EC66
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No: N/A | Cooler Temperature(s) °C and Other Remarks: 1.9/2.8 SCS

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81042-1

Login Number: 81042
List Number: 1
Creator: Garcia, Hilario A

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81042-1

Login Number: 81042
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.7 & 1.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81042-1

Login Number: 81042
List Number: 3
Creator: Ortiz-Luis, Michael

List Source: Eurofins Calscience LLC
List Creation: 11/02/21 02:39 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-81042-2
Client Project/Site: Cole School PEA
Revision: 1

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/15/2021 10:15:03 AM

Justinn Gonzales, Project Manager I
(925)484-1919
Justinn.Gonzales@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Qualifiers

Dioxin

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
q	The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Job ID: 320-81042-2

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-81042-2

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 11/23/2021. The report (revision 1) is being revised due to: Report smaples to MDL or EDL for 8290A per client request. Total TEQ also added.

Receipt
The samples were received on 10/29/2021 2:21 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.8º C, 1.0º C and 1.8º C.

Dioxin
Method 8290A: The scheduled automatic ending resolution check did not print due to loss of communication to the SIOS data acquisition computer. Upon arrival to the laboratory, the analyst rebooted the SIOS and performed a manual ending resolution check. Although this ending resolution check was performed past the 12 hour analytical clock, all associated samples were analyzed within the 12 hour analytical clock and the resolution check indicates the instrument maintained greater than 10,000 resolution. No further corrective action was taken. AOC3/AOC8-S6E-0.5 (320-81042-7), (CCV 320-544985/17) and (CCV 320-544985/2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Dioxin Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Client Sample ID: AOC3/AOC8-S6E-0.5 — Lab Sample ID: 320-81042-7

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDD	0.32	J	0.98	0.15	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDD	0.40	J q	4.9	0.18	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDF	0.89	J	4.9	0.22	pg/g	1		8290A	Total/NA
2,3,4,7,8-PeCDF	1.3	J	4.9	0.23	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.60	J B	4.9	0.14	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	0.56	J B	4.9	0.14	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	0.50	J	4.9	0.13	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.75	J B	4.9	0.10	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	1.1	J B	4.9	0.10	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDF	0.28	J B	4.9	0.12	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.94	J	4.9	0.11	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	3.3	J B	4.9	0.052	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	2.3	J	4.9	0.11	pg/g	1		8290A	Total/NA
1,2,3,4,7,8,9-HpCDF	0.24	J	4.9	0.13	pg/g	1		8290A	Total/NA
OCDD	12	B	9.8	0.14	pg/g	1		8290A	Total/NA
OCDF	1.8	J B	9.8	0.12	pg/g	1		8290A	Total/NA
2,3,7,8-TCDF - RA	1.6		0.98	0.23	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S6E-2 — Lab Sample ID: 320-81042-8

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,7,8-PeCDD	0.28	J q	4.7	0.11	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDF	0.32	J q	4.7	0.075	pg/g	1		8290A	Total/NA
2,3,4,7,8-PeCDF	0.21	J q	4.7	0.078	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.40	J q B	4.7	0.11	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	0.34	J B	4.7	0.11	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	0.37	J	4.7	0.10	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.26	J B	4.7	0.061	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.28	J B	4.7	0.061	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDF	0.34	J q B	4.7	0.069	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.22	J	4.7	0.066	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	0.56	J B	4.7	0.043	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.50	J	4.7	0.098	pg/g	1		8290A	Total/NA
1,2,3,4,7,8,9-HpCDF	0.37	J	4.7	0.11	pg/g	1		8290A	Total/NA
OCDD	3.3	J B	9.4	0.14	pg/g	1		8290A	Total/NA
OCDF	0.83	J B	9.4	0.097	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S3G-0.5 — Lab Sample ID: 320-81042-26

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDF	0.94	J	0.97	0.079	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDD	0.23	J	4.9	0.14	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDF	0.38	J	4.9	0.088	pg/g	1		8290A	Total/NA
2,3,4,7,8-PeCDF	0.43	J	4.9	0.091	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.43	J B	4.9	0.13	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	0.40	J B	4.9	0.13	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	0.50	J	4.9	0.12	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.31	J q B	4.9	0.091	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.45	J B	4.9	0.091	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDF	0.29	J B	4.9	0.10	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.39	J	4.9	0.097	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	2.5	J B	4.9	0.080	pg/g	1		8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AOC3/AOC8-S3G-0.5 (Continued) — Lab Sample ID: 320-81042-26

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,4,6,7,8-HpCDF	1.2	J	4.9	0.15	pg/g	1		8290A	Total/NA
OCDD	16	B	9.7	0.15	pg/g	1		8290A	Total/NA
OCDF	1.7	J B	9.7	0.17	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S3G-2 — Lab Sample ID: 320-81042-27

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDF	0.23	J	0.98	0.036	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.28	J B	4.9	0.098	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDF	0.14	J B	4.9	0.064	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	0.26	J B	4.9	0.061	pg/g	1		8290A	Total/NA
OCDD	1.0	J B	9.8	0.13	pg/g	1		8290A	Total/NA
OCDF	0.21	J B	9.8	0.095	pg/g	1		8290A	Total/NA

Client Sample ID: EB10282021 — Lab Sample ID: 320-81042-56

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,4,7,8-HxCDD	2.5	J B	49	0.52	pg/L	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	1.3	J q B	49	0.18	pg/L	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.92	J B	49	0.22	pg/L	1		8290A	Total/NA
OCDD	11	J B	97	0.52	pg/L	1		8290A	Total/NA
OCDF	2.1	J B	97	0.44	pg/L	1		8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Client Sample ID: AOC3/AOC8-S6E-0.5

Date Collected: 10/28/21 08:41
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-7

Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	0.32	J	0.98	0.15	pg/g		11/02/21 10:24	11/19/21 02:25	1
1,2,3,7,8-PeCDD	0.40	J q	4.9	0.18	pg/g		11/02/21 10:24	11/19/21 02:25	1
1,2,3,7,8-PeCDF	0.89	J	4.9	0.22	pg/g		11/02/21 10:24	11/19/21 02:25	1
2,3,4,7,8-PeCDF	1.3	J	4.9	0.23	pg/g		11/02/21 10:24	11/19/21 02:25	1
1,2,3,4,7,8-HxCDD	0.60	J B	4.9	0.14	pg/g		11/02/21 10:24	11/19/21 02:25	1
1,2,3,6,7,8-HxCDD	0.56	J B	4.9	0.14	pg/g		11/02/21 10:24	11/19/21 02:25	1
1,2,3,7,8,9-HxCDD	0.50	J	4.9	0.13	pg/g		11/02/21 10:24	11/19/21 02:25	1
1,2,3,4,7,8-HxCDF	0.75	J B	4.9	0.10	pg/g		11/02/21 10:24	11/19/21 02:25	1
1,2,3,6,7,8-HxCDF	1.1	J B	4.9	0.10	pg/g		11/02/21 10:24	11/19/21 02:25	1
1,2,3,7,8,9-HxCDF	0.28	J B	4.9	0.12	pg/g		11/02/21 10:24	11/19/21 02:25	1
2,3,4,6,7,8-HxCDF	0.94	J	4.9	0.11	pg/g		11/02/21 10:24	11/19/21 02:25	1
1,2,3,4,6,7,8-HpCDD	3.3	J B	4.9	0.052	pg/g		11/02/21 10:24	11/19/21 02:25	1
1,2,3,4,6,7,8-HpCDF	2.3	J	4.9	0.11	pg/g		11/02/21 10:24	11/19/21 02:25	1
1,2,3,4,7,8,9-HpCDF	0.24	J	4.9	0.13	pg/g		11/02/21 10:24	11/19/21 02:25	1
OCDD	12	B	9.8	0.14	pg/g		11/02/21 10:24	11/19/21 02:25	1
OCDF	1.8	J B	9.8	0.12	pg/g		11/02/21 10:24	11/19/21 02:25	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*77*		*40 - 135*	*11/02/21 10:24*	*11/19/21 02:25*	*1*
13C-1,2,3,7,8-PeCDD	*84*		*40 - 135*	*11/02/21 10:24*	*11/19/21 02:25*	*1*
13C-1,2,3,7,8-PeCDF	*76*		*40 - 135*	*11/02/21 10:24*	*11/19/21 02:25*	*1*
13C-1,2,3,6,7,8-HxCDD	*76*		*40 - 135*	*11/02/21 10:24*	*11/19/21 02:25*	*1*
13C-1,2,3,4,7,8-HxCDF	*79*		*40 - 135*	*11/02/21 10:24*	*11/19/21 02:25*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*74*		*40 - 135*	*11/02/21 10:24*	*11/19/21 02:25*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*77*		*40 - 135*	*11/02/21 10:24*	*11/19/21 02:25*	*1*
13C-OCDD	*72*		*40 - 135*	*11/02/21 10:24*	*11/19/21 02:25*	*1*

Method: 8290A - Dioxins and Furans (HRGC/HRMS) - RA

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDF	1.6		0.98	0.23	pg/g		11/02/21 10:24	11/21/21 22:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDF	*89*		*40 - 135*	*11/02/21 10:24*	*11/21/21 22:32*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Client Sample ID: AOC3/AOC8-S6E-2
Date Collected: 10/28/21 08:42
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-8
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.94	0.11	pg/g		11/02/21 10:24	11/19/21 03:13	1
2,3,7,8-TCDF	ND		0.94	0.033	pg/g		11/02/21 10:24	11/19/21 03:13	1
1,2,3,7,8-PeCDD	**0.28**	**J q**	4.7	0.11	pg/g		11/02/21 10:24	11/19/21 03:13	1
1,2,3,7,8-PeCDF	**0.32**	**J q**	4.7	0.075	pg/g		11/02/21 10:24	11/19/21 03:13	1
2,3,4,7,8-PeCDF	**0.21**	**J q**	4.7	0.078	pg/g		11/02/21 10:24	11/19/21 03:13	1
1,2,3,4,7,8-HxCDD	**0.40**	**J q B**	4.7	0.11	pg/g		11/02/21 10:24	11/19/21 03:13	1
1,2,3,6,7,8-HxCDD	**0.34**	**J B**	4.7	0.11	pg/g		11/02/21 10:24	11/19/21 03:13	1
1,2,3,7,8,9-HxCDD	**0.37**	**J**	4.7	0.10	pg/g		11/02/21 10:24	11/19/21 03:13	1
1,2,3,4,7,8-HxCDF	**0.26**	**J B**	4.7	0.061	pg/g		11/02/21 10:24	11/19/21 03:13	1
1,2,3,6,7,8-HxCDF	**0.28**	**J B**	4.7	0.061	pg/g		11/02/21 10:24	11/19/21 03:13	1
1,2,3,7,8,9-HxCDF	**0.34**	**J q B**	4.7	0.069	pg/g		11/02/21 10:24	11/19/21 03:13	1
2,3,4,6,7,8-HxCDF	**0.22**	**J**	4.7	0.066	pg/g		11/02/21 10:24	11/19/21 03:13	1
1,2,3,4,6,7,8-HpCDD	**0.56**	**J B**	4.7	0.043	pg/g		11/02/21 10:24	11/19/21 03:13	1
1,2,3,4,6,7,8-HpCDF	**0.50**	**J**	4.7	0.098	pg/g		11/02/21 10:24	11/19/21 03:13	1
1,2,3,4,7,8,9-HpCDF	**0.37**	**J**	4.7	0.11	pg/g		11/02/21 10:24	11/19/21 03:13	1
OCDD	**3.3**	**J B**	9.4	0.14	pg/g		11/02/21 10:24	11/19/21 03:13	1
OCDF	**0.83**	**J B**	9.4	0.097	pg/g		11/02/21 10:24	11/19/21 03:13	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*62*		*40 - 135*	*11/02/21 10:24*	*11/19/21 03:13*	*1*
13C-2,3,7,8-TCDF	*69*		*40 - 135*	*11/02/21 10:24*	*11/19/21 03:13*	*1*
13C-1,2,3,7,8-PeCDD	*72*		*40 - 135*	*11/02/21 10:24*	*11/19/21 03:13*	*1*
13C-1,2,3,7,8-PeCDF	*70*		*40 - 135*	*11/02/21 10:24*	*11/19/21 03:13*	*1*
13C-1,2,3,6,7,8-HxCDD	*72*		*40 - 135*	*11/02/21 10:24*	*11/19/21 03:13*	*1*
13C-1,2,3,4,7,8-HxCDF	*72*		*40 - 135*	*11/02/21 10:24*	*11/19/21 03:13*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*74*		*40 - 135*	*11/02/21 10:24*	*11/19/21 03:13*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*72*		*40 - 135*	*11/02/21 10:24*	*11/19/21 03:13*	*1*
13C-OCDD	*72*		*40 - 135*	*11/02/21 10:24*	*11/19/21 03:13*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Client Sample ID: AOC3/AOC8-S3G-0.5
Date Collected: 10/28/21 10:11
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-26
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.97	0.11	pg/g		11/02/21 10:24	11/19/21 04:01	1
2,3,7,8-TCDF	**0.94**	**J**	0.97	0.079	pg/g		11/02/21 10:24	11/19/21 04:01	1
1,2,3,7,8-PeCDD	**0.23**	**J**	4.9	0.14	pg/g		11/02/21 10:24	11/19/21 04:01	1
1,2,3,7,8-PeCDF	**0.38**	**J**	4.9	0.088	pg/g		11/02/21 10:24	11/19/21 04:01	1
2,3,4,7,8-PeCDF	**0.43**	**J**	4.9	0.091	pg/g		11/02/21 10:24	11/19/21 04:01	1
1,2,3,4,7,8-HxCDD	**0.43**	**J B**	4.9	0.13	pg/g		11/02/21 10:24	11/19/21 04:01	1
1,2,3,6,7,8-HxCDD	**0.40**	**J B**	4.9	0.13	pg/g		11/02/21 10:24	11/19/21 04:01	1
1,2,3,7,8,9-HxCDD	**0.50**	**J**	4.9	0.12	pg/g		11/02/21 10:24	11/19/21 04:01	1
1,2,3,4,7,8-HxCDF	**0.31**	**J q B**	4.9	0.091	pg/g		11/02/21 10:24	11/19/21 04:01	1
1,2,3,6,7,8-HxCDF	**0.45**	**J B**	4.9	0.091	pg/g		11/02/21 10:24	11/19/21 04:01	1
1,2,3,7,8,9-HxCDF	**0.29**	**J B**	4.9	0.10	pg/g		11/02/21 10:24	11/19/21 04:01	1
2,3,4,6,7,8-HxCDF	**0.39**	**J**	4.9	0.097	pg/g		11/02/21 10:24	11/19/21 04:01	1
1,2,3,4,6,7,8-HpCDD	**2.5**	**J B**	4.9	0.080	pg/g		11/02/21 10:24	11/19/21 04:01	1
1,2,3,4,6,7,8-HpCDF	**1.2**	**J**	4.9	0.15	pg/g		11/02/21 10:24	11/19/21 04:01	1
1,2,3,4,7,8,9-HpCDF	ND		4.9	0.18	pg/g		11/02/21 10:24	11/19/21 04:01	1
OCDD	**16**	**B**	9.7	0.15	pg/g		11/02/21 10:24	11/19/21 04:01	1
OCDF	**1.7**	**J B**	9.7	0.17	pg/g		11/02/21 10:24	11/19/21 04:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*77*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:01*	*1*
13C-2,3,7,8-TCDF	*77*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:01*	*1*
13C-1,2,3,7,8-PeCDD	*79*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:01*	*1*
13C-1,2,3,7,8-PeCDF	*84*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:01*	*1*
13C-1,2,3,6,7,8-HxCDD	*79*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:01*	*1*
13C-1,2,3,4,7,8-HxCDF	*81*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:01*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*71*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:01*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*76*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:01*	*1*
13C-OCDD	*70*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:01*	*1*

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Client Sample ID: AOC3/AOC8-S3G-2

Date Collected: 10/28/21 10:19
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-27

Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.98	0.087	pg/g		11/02/21 10:24	11/19/21 04:49	1
2,3,7,8-TCDF	**0.23**	**J**	0.98	0.036	pg/g		11/02/21 10:24	11/19/21 04:49	1
1,2,3,7,8-PeCDD	ND		4.9	0.091	pg/g		11/02/21 10:24	11/19/21 04:49	1
1,2,3,7,8-PeCDF	ND		4.9	0.063	pg/g		11/02/21 10:24	11/19/21 04:49	1
2,3,4,7,8-PeCDF	ND		4.9	0.066	pg/g		11/02/21 10:24	11/19/21 04:49	1
1,2,3,4,7,8-HxCDD	**0.28**	**J B**	4.9	0.098	pg/g		11/02/21 10:24	11/19/21 04:49	1
1,2,3,6,7,8-HxCDD	ND		4.9	0.098	pg/g		11/02/21 10:24	11/19/21 04:49	1
1,2,3,7,8,9-HxCDD	ND		4.9	0.090	pg/g		11/02/21 10:24	11/19/21 04:49	1
1,2,3,4,7,8-HxCDF	ND		4.9	0.057	pg/g		11/02/21 10:24	11/19/21 04:49	1
1,2,3,6,7,8-HxCDF	ND		4.9	0.057	pg/g		11/02/21 10:24	11/19/21 04:49	1
1,2,3,7,8,9-HxCDF	**0.14**	**J B**	4.9	0.064	pg/g		11/02/21 10:24	11/19/21 04:49	1
2,3,4,6,7,8-HxCDF	ND		4.9	0.061	pg/g		11/02/21 10:24	11/19/21 04:49	1
1,2,3,4,6,7,8-HpCDD	**0.26**	**J B**	4.9	0.061	pg/g		11/02/21 10:24	11/19/21 04:49	1
1,2,3,4,6,7,8-HpCDF	ND		4.9	0.084	pg/g		11/02/21 10:24	11/19/21 04:49	1
1,2,3,4,7,8,9-HpCDF	ND		4.9	0.095	pg/g		11/02/21 10:24	11/19/21 04:49	1
OCDD	**1.0**	**J B**	9.8	0.13	pg/g		11/02/21 10:24	11/19/21 04:49	1
OCDF	**0.21**	**J B**	9.8	0.095	pg/g		11/02/21 10:24	11/19/21 04:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*74*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:49*	*1*
13C-2,3,7,8-TCDF	*73*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:49*	*1*
13C-1,2,3,7,8-PeCDD	*80*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:49*	*1*
13C-1,2,3,7,8-PeCDF	*75*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:49*	*1*
13C-1,2,3,6,7,8-HxCDD	*70*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:49*	*1*
13C-1,2,3,4,7,8-HxCDF	*71*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:49*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*71*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:49*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*69*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:49*	*1*
13C-OCDD	*71*		*40 - 135*	*11/02/21 10:24*	*11/19/21 04:49*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Client Sample ID: EB10282021
Date Collected: 10/28/21 12:50
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-56
Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		9.7	0.33	pg/L		11/03/21 06:26	11/12/21 11:08	1
2,3,7,8-TCDF	ND		9.7	0.20	pg/L		11/03/21 06:26	11/12/21 11:08	1
1,2,3,7,8-PeCDD	ND		49	0.56	pg/L		11/03/21 06:26	11/12/21 11:08	1
1,2,3,7,8-PeCDF	ND		49	0.38	pg/L		11/03/21 06:26	11/12/21 11:08	1
2,3,4,7,8-PeCDF	ND		49	0.38	pg/L		11/03/21 06:26	11/12/21 11:08	1
1,2,3,4,7,8-HxCDD	**2.5**	**J B**	49	0.52	pg/L		11/03/21 06:26	11/12/21 11:08	1
1,2,3,6,7,8-HxCDD	ND		49	0.50	pg/L		11/03/21 06:26	11/12/21 11:08	1
1,2,3,7,8,9-HxCDD	ND		49	0.45	pg/L		11/03/21 06:26	11/12/21 11:08	1
1,2,3,4,7,8-HxCDF	ND		49	0.67	pg/L		11/03/21 06:26	11/12/21 11:08	1
1,2,3,6,7,8-HxCDF	ND		49	0.64	pg/L		11/03/21 06:26	11/12/21 11:08	1
1,2,3,7,8,9-HxCDF	ND		49	0.68	pg/L		11/03/21 06:26	11/12/21 11:08	1
2,3,4,6,7,8-HxCDF	ND		49	0.65	pg/L		11/03/21 06:26	11/12/21 11:08	1
1,2,3,4,6,7,8-HpCDD	**1.3**	**J q B**	49	0.18	pg/L		11/03/21 06:26	11/12/21 11:08	1
1,2,3,4,6,7,8-HpCDF	**0.92**	**J B**	49	0.22	pg/L		11/03/21 06:26	11/12/21 11:08	1
1,2,3,4,7,8,9-HpCDF	ND		49	0.27	pg/L		11/03/21 06:26	11/12/21 11:08	1
OCDD	**11**	**J B**	97	0.52	pg/L		11/03/21 06:26	11/12/21 11:08	1
OCDF	**2.1**	**J B**	97	0.44	pg/L		11/03/21 06:26	11/12/21 11:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*85*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:08*	*1*
13C-2,3,7,8-TCDF	*86*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:08*	*1*
13C-1,2,3,7,8-PeCDD	*85*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:08*	*1*
13C-1,2,3,7,8-PeCDF	*89*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:08*	*1*
13C-1,2,3,6,7,8-HxCDD	*90*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:08*	*1*
13C-1,2,3,4,7,8-HxCDF	*102*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:08*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*104*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:08*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*98*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:08*	*1*
13C-OCDD	*114*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:08*	*1*

Toxicity Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Client Sample ID: AOC3/AOC8-S6E-0.5 — Lab Sample ID: 320-81042-7

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	0.32	J	0.98	0.15	pg/g	1	0.32	8290A
1,2,3,7,8-PeCDD	0.40	J q	4.9	0.18	pg/g	1	0.40	8290A
1,2,3,7,8-PeCDF	0.89	J	4.9	0.22	pg/g	0.03	0.027	8290A
2,3,4,7,8-PeCDF	1.3	J	4.9	0.23	pg/g	0.3	0.39	8290A
1,2,3,4,7,8-HxCDD	0.60	J B	4.9	0.14	pg/g	0.1	0.060	8290A
1,2,3,6,7,8-HxCDD	0.56	J B	4.9	0.14	pg/g	0.1	0.056	8290A
1,2,3,7,8,9-HxCDD	0.50	J	4.9	0.13	pg/g	0.1	0.050	8290A
1,2,3,4,7,8-HxCDF	0.75	J B	4.9	0.10	pg/g	0.1	0.075	8290A
1,2,3,6,7,8-HxCDF	1.1	J B	4.9	0.10	pg/g	0.1	0.11	8290A
1,2,3,7,8,9-HxCDF	0.28	J B	4.9	0.12	pg/g	0.1	0.028	8290A
2,3,4,6,7,8-HxCDF	0.94	J	4.9	0.11	pg/g	0.1	0.094	8290A
1,2,3,4,6,7,8-HpCDD	3.3	J B	4.9	0.052	pg/g	0.01	0.033	8290A
1,2,3,4,6,7,8-HpCDF	2.3	J	4.9	0.11	pg/g	0.01	0.023	8290A
1,2,3,4,7,8,9-HpCDF	0.24	J	4.9	0.13	pg/g	0.01	0.0024	8290A
OCDD	12	B	9.8	0.14	pg/g	0.0003	0.0036	8290A
OCDF	1.8	J B	9.8	0.12	pg/g	0.0003	0.00054	8290A
2,3,7,8-TCDF - RA	1.6		0.98	0.23	pg/g	0.1	0.16	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		1.8	TEQ

Client Sample ID: AOC3/AOC8-S6E-2 — Lab Sample ID: 320-81042-8

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.94	0.11	pg/g	1	0.00	8290A
2,3,7,8-TCDF	ND		0.94	0.033	pg/g	0.1	0.00	8290A
1,2,3,7,8-PeCDD	0.28	J q	4.7	0.11	pg/g	1	0.28	8290A
1,2,3,7,8-PeCDF	0.32	J q	4.7	0.075	pg/g	0.03	0.0096	8290A
2,3,4,7,8-PeCDF	0.21	J q	4.7	0.078	pg/g	0.3	0.063	8290A
1,2,3,4,7,8-HxCDD	0.40	J q B	4.7	0.11	pg/g	0.1	0.040	8290A
1,2,3,6,7,8-HxCDD	0.34	J B	4.7	0.11	pg/g	0.1	0.034	8290A
1,2,3,7,8,9-HxCDD	0.37	J	4.7	0.10	pg/g	0.1	0.037	8290A
1,2,3,4,7,8-HxCDF	0.26	J B	4.7	0.061	pg/g	0.1	0.026	8290A
1,2,3,6,7,8-HxCDF	0.28	J B	4.7	0.061	pg/g	0.1	0.028	8290A
1,2,3,7,8,9-HxCDF	0.34	J q B	4.7	0.069	pg/g	0.1	0.034	8290A
2,3,4,6,7,8-HxCDF	0.22	J	4.7	0.066	pg/g	0.1	0.022	8290A
1,2,3,4,6,7,8-HpCDD	0.56	J B	4.7	0.043	pg/g	0.01	0.0056	8290A
1,2,3,4,6,7,8-HpCDF	0.50	J	4.7	0.098	pg/g	0.01	0.0050	8290A
1,2,3,4,7,8,9-HpCDF	0.37	J	4.7	0.11	pg/g	0.01	0.0037	8290A
OCDD	3.3	J B	9.4	0.14	pg/g	0.0003	0.00099	8290A
OCDF	0.83	J B	9.4	0.097	pg/g	0.0003	0.00025	8290A

TEF Reference:
WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Toxicity Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Client Sample ID: AOC3/AOC8-S6E-2 (Continued) — Lab Sample ID: 320-81042-8

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.59	TEQ

Client Sample ID: AOC3/AOC8-S3G-0.5 — Lab Sample ID: 320-81042-26

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.97	0.11	pg/g	1	0.00	8290A
2,3,7,8-TCDF	**0.94**	**J**	0.97	0.079	pg/g	0.1	**0.094**	8290A
1,2,3,7,8-PeCDD	**0.23**	**J**	4.9	0.14	pg/g	1	**0.23**	8290A
1,2,3,7,8-PeCDF	**0.38**	**J**	4.9	0.088	pg/g	0.03	**0.011**	8290A
2,3,4,7,8-PeCDF	**0.43**	**J**	4.9	0.091	pg/g	0.3	**0.13**	8290A
1,2,3,4,7,8-HxCDD	**0.43**	**J B**	4.9	0.13	pg/g	0.1	**0.043**	8290A
1,2,3,6,7,8-HxCDD	**0.40**	**J B**	4.9	0.13	pg/g	0.1	**0.040**	8290A
1,2,3,7,8,9-HxCDD	**0.50**	**J**	4.9	0.12	pg/g	0.1	**0.050**	8290A
1,2,3,4,7,8-HxCDF	**0.31**	**J q B**	4.9	0.091	pg/g	0.1	**0.031**	8290A
1,2,3,6,7,8-HxCDF	**0.45**	**J B**	4.9	0.091	pg/g	0.1	**0.045**	8290A
1,2,3,7,8,9-HxCDF	**0.29**	**J B**	4.9	0.10	pg/g	0.1	**0.029**	8290A
2,3,4,6,7,8-HxCDF	**0.39**	**J**	4.9	0.097	pg/g	0.1	**0.039**	8290A
1,2,3,4,6,7,8-HpCDD	**2.5**	**J B**	4.9	0.080	pg/g	0.01	**0.025**	8290A
1,2,3,4,6,7,8-HpCDF	**1.2**	**J**	4.9	0.15	pg/g	0.01	**0.012**	8290A
1,2,3,4,7,8,9-HpCDF	ND		4.9	0.18	pg/g	0.01	0.00	8290A
OCDD	**16**	**B**	9.7	0.15	pg/g	0.0003	**0.0048**	8290A
OCDF	**1.7**	**J B**	9.7	0.17	pg/g	0.0003	**0.00051**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.78	TEQ

Client Sample ID: AOC3/AOC8-S3G-2 — Lab Sample ID: 320-81042-27

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.98	0.087	pg/g	1	0.00	8290A
2,3,7,8-TCDF	**0.23**	**J**	0.98	0.036	pg/g	0.1	**0.023**	8290A
1,2,3,7,8-PeCDD	ND		4.9	0.091	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	ND		4.9	0.063	pg/g	0.03	0.00	8290A
2,3,4,7,8-PeCDF	ND		4.9	0.066	pg/g	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	**0.28**	**J B**	4.9	0.098	pg/g	0.1	**0.028**	8290A
1,2,3,6,7,8-HxCDD	ND		4.9	0.098	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDD	ND		4.9	0.090	pg/g	0.1	0.00	8290A
1,2,3,4,7,8-HxCDF	ND		4.9	0.057	pg/g	0.1	0.00	8290A
1,2,3,6,7,8-HxCDF	ND		4.9	0.057	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDF	**0.14**	**J B**	4.9	0.064	pg/g	0.1	**0.014**	8290A
2,3,4,6,7,8-HxCDF	ND		4.9	0.061	pg/g	0.1	0.00	8290A

TEF Reference:
WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Client Sample ID: AOC3/AOC8-S3G-2 (Continued)

Lab Sample ID: 320-81042-27

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
1,2,3,4,6,7,8-HpCDD	**0.26**	**J B**	4.9	0.061	pg/g	0.01	**0.0026**	8290A
1,2,3,4,6,7,8-HpCDF	ND		4.9	0.084	pg/g	0.01	0.00	8290A
1,2,3,4,7,8,9-HpCDF	ND		4.9	0.095	pg/g	0.01	0.00	8290A
OCDD	**1.0**	**J B**	9.8	0.13	pg/g	0.0003	**0.00030**	8290A
OCDF	**0.21**	**J B**	9.8	0.095	pg/g	0.0003	**0.000063**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.068	TEQ

Client Sample ID: EB10282021

Lab Sample ID: 320-81042-56

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		9.7	0.33	pg/L	1	0.00	8290A
2,3,7,8-TCDF	ND		9.7	0.20	pg/L	0.1	0.00	8290A
1,2,3,7,8-PeCDD	ND		49	0.56	pg/L	1	0.00	8290A
1,2,3,7,8-PeCDF	ND		49	0.38	pg/L	0.03	0.00	8290A
2,3,4,7,8-PeCDF	ND		49	0.38	pg/L	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	**2.5**	**J B**	49	0.52	pg/L	0.1	**0.25**	8290A
1,2,3,6,7,8-HxCDD	ND		49	0.50	pg/L	0.1	0.00	8290A
1,2,3,7,8,9-HxCDD	ND		49	0.45	pg/L	0.1	0.00	8290A
1,2,3,4,7,8-HxCDF	ND		49	0.67	pg/L	0.1	0.00	8290A
1,2,3,6,7,8-HxCDF	ND		49	0.64	pg/L	0.1	0.00	8290A
1,2,3,7,8,9-HxCDF	ND		49	0.68	pg/L	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	ND		49	0.65	pg/L	0.1	0.00	8290A
1,2,3,4,6,7,8-HpCDD	**1.3**	**J q B**	49	0.18	pg/L	0.01	**0.013**	8290A
1,2,3,4,6,7,8-HpCDF	**0.92**	**J B**	49	0.22	pg/L	0.01	**0.0092**	8290A
1,2,3,4,7,8,9-HpCDF	ND		49	0.27	pg/L	0.01	0.00	8290A
OCDD	**11**	**J B**	97	0.52	pg/L	0.0003	**0.0033**	8290A
OCDF	**2.1**	**J B**	97	0.44	pg/L	0.0003	**0.00063**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/L		0.28	TEQ

TEF Reference:
WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Isotope Dilution Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (40-135)	TCDF (40-135)	PeCDD (40-135)	PeCDF (40-135)	HxDD (40-135)	HxCDF (40-135)	HpCDD (40-135)	HpCDF (40-135)
320-81042-7	AOC3/AOC8-S6E-0.5	77		84	76	76	79	74	77
320-81042-7 - RA	AOC3/AOC8-S6E-0.5		89						
320-81042-8	AOC3/AOC8-S6E-2	62	69	72	70	72	72	74	72
320-81042-26	AOC3/AOC8-S3G-0.5	77	77	79	84	79	81	71	76
320-81042-27	AOC3/AOC8-S3G-2	74	73	80	75	70	71	71	69
LCS 320-539149/2-A	Lab Control Sample	72	73	75	66	76	80	73	72
LCSD 320-539149/3-A	Lab Control Sample Dup	74	75	72	76	74	76	77	73
MB 320-539149/1-A	Method Blank	72	82	87	90	63	72	66	68

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OCDD (40-135)
320-81042-7	AOC3/AOC8-S6E-0.5	72
320-81042-7 - RA	AOC3/AOC8-S6E-0.5	
320-81042-8	AOC3/AOC8-S6E-2	72
320-81042-26	AOC3/AOC8-S3G-0.5	70
320-81042-27	AOC3/AOC8-S3G-2	71
LCS 320-539149/2-A	Lab Control Sample	75
LCSD 320-539149/3-A	Lab Control Sample Dup	72
MB 320-539149/1-A	Method Blank	65

Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF = 13C-1,2,3,7,8-PeCDF
HxDD = 13C-1,2,3,6,7,8-HxCDD
HxCDF = 13C-1,2,3,4,7,8-HxCDF
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
OCDD = 13C-OCDD

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (40-135)	TCDF (40-135)	PeCDD (40-135)	PeCDF (40-135)	HxDD (40-135)	HxCDF (40-135)	HpCDD (40-135)	HpCDF (40-135)
320-81042-56	EB10282021	85	86	85	89	90	102	104	98
LCS 320-539427/2-A	Lab Control Sample	84	85	95	92	83	91	108	98
LCSD 320-539427/3-A	Lab Control Sample Dup	90	92	100	94	88	89	102	98
MB 320-539427/1-A	Method Blank	69	74	74	77	75	81	91	80

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OCDD (40-135)
320-81042-56	EB10282021	114
LCS 320-539427/2-A	Lab Control Sample	91
LCSD 320-539427/3-A	Lab Control Sample Dup	96
MB 320-539427/1-A	Method Blank	95

Surrogate Legend

Isotope Dilution Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF = 13C-1,2,3,7,8-PeCDF
HxDD = 13C-1,2,3,6,7,8-HxCDD
HxCDF = 13C-1,2,3,4,7,8-HxCDF
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
OCDD = 13C-OCDD

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 320-539149/1-A
Matrix: Solid
Analysis Batch: 544394

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539149

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.0	0.13	pg/g		11/02/21 10:24	11/18/21 23:13	1
2,3,7,8-TCDF	ND		1.0	0.034	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,7,8-PeCDD	ND		5.0	0.12	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,7,8-PeCDF	ND		5.0	0.066	pg/g		11/02/21 10:24	11/18/21 23:13	1
2,3,4,7,8-PeCDF	ND		5.0	0.068	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,4,7,8-HxCDD	0.377	J	5.0	0.14	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,6,7,8-HxCDD	0.201	J q	5.0	0.14	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,7,8,9-HxCDD	ND		5.0	0.13	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,4,7,8-HxCDF	0.163	J	5.0	0.059	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,6,7,8-HxCDF	0.176	J	5.0	0.059	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,7,8,9-HxCDF	0.258	J	5.0	0.066	pg/g		11/02/21 10:24	11/18/21 23:13	1
2,3,4,6,7,8-HxCDF	ND		5.0	0.063	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,4,6,7,8-HpCDD	0.312	J	5.0	0.031	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,4,6,7,8-HpCDF	ND		5.0	0.094	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,4,7,8,9-HpCDF	ND		5.0	0.11	pg/g		11/02/21 10:24	11/18/21 23:13	1
OCDD	0.871	J q	10	0.11	pg/g		11/02/21 10:24	11/18/21 23:13	1
OCDF	0.478	J	10	0.089	pg/g		11/02/21 10:24	11/18/21 23:13	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*72*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-2,3,7,8-TCDF	*82*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-1,2,3,7,8-PeCDD	*87*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-1,2,3,7,8-PeCDF	*90*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-1,2,3,6,7,8-HxCDD	*63*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-1,2,3,4,7,8-HxCDF	*72*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*66*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*68*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-OCDD	*65*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*

Lab Sample ID: LCS 320-539149/2-A
Matrix: Solid
Analysis Batch: 544394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	20.0	23.3		pg/g		117	77 - 130
2,3,7,8-TCDF	20.0	24.0		pg/g		120	79 - 137
1,2,3,7,8-PeCDD	100	112		pg/g		112	79 - 134
1,2,3,7,8-PeCDF	100	118		pg/g		118	81 - 134
2,3,4,7,8-PeCDF	100	117		pg/g		117	76 - 132
1,2,3,4,7,8-HxCDD	100	110		pg/g		110	65 - 144
1,2,3,6,7,8-HxCDD	100	111		pg/g		111	73 - 147
1,2,3,7,8,9-HxCDD	100	112		pg/g		112	80 - 143
1,2,3,4,7,8-HxCDF	100	109		pg/g		109	72 - 140
1,2,3,6,7,8-HxCDF	100	110		pg/g		110	63 - 152
1,2,3,7,8,9-HxCDF	100	113		pg/g		113	72 - 152
2,3,4,6,7,8-HxCDF	100	112		pg/g		112	72 - 151
1,2,3,4,6,7,8-HpCDD	100	110		pg/g		110	86 - 134
1,2,3,4,6,7,8-HpCDF	100	115		pg/g		115	81 - 137
1,2,3,4,7,8,9-HpCDF	100	115		pg/g		115	79 - 139

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-539149/2-A
Matrix: Solid
Analysis Batch: 544394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539149

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
OCDD			200	220		pg/g		110	80 - 137		
OCDF			200	224		pg/g		112	75 - 141		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*72*		*40 - 135*
13C-2,3,7,8-TCDF	*73*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*75*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*66*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*76*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*80*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*73*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*72*		*40 - 135*
13C-OCDD	*75*		*40 - 135*

Lab Sample ID: LCSD 320-539149/3-A
Matrix: Solid
Analysis Batch: 544394

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 539149

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,7,8-TCDD			20.0	22.4		pg/g		112	77 - 130	4	20
2,3,7,8-TCDF			20.0	22.9		pg/g		115	79 - 137	5	20
1,2,3,7,8-PeCDD			100	111		pg/g		111	79 - 134	1	20
1,2,3,7,8-PeCDF			100	111		pg/g		111	81 - 134	7	20
2,3,4,7,8-PeCDF			100	110		pg/g		110	76 - 132	6	20
1,2,3,4,7,8-HxCDD			100	108		pg/g		108	65 - 144	2	20
1,2,3,6,7,8-HxCDD			100	110		pg/g		110	73 - 147	1	20
1,2,3,7,8,9-HxCDD			100	111		pg/g		111	80 - 143	1	20
1,2,3,4,7,8-HxCDF			100	108		pg/g		108	72 - 140	1	20
1,2,3,6,7,8-HxCDF			100	107		pg/g		107	63 - 152	3	20
1,2,3,7,8,9-HxCDF			100	109		pg/g		109	72 - 152	3	20
2,3,4,6,7,8-HxCDF			100	108		pg/g		108	72 - 151	4	20
1,2,3,4,6,7,8-HpCDD			100	107		pg/g		107	86 - 134	3	20
1,2,3,4,6,7,8-HpCDF			100	111		pg/g		111	81 - 137	4	20
1,2,3,4,7,8,9-HpCDF			100	112		pg/g		112	79 - 139	2	20
OCDD			200	229		pg/g		115	80 - 137	4	20
OCDF			200	239		pg/g		119	75 - 141	6	20

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*74*		*40 - 135*
13C-2,3,7,8-TCDF	*75*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*72*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*76*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*74*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*76*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*77*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*73*		*40 - 135*
13C-OCDD	*72*		*40 - 135*

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-539427/1-A
Matrix: Water
Analysis Batch: 542008

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539427

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10	0.77	pg/L		11/03/21 06:26	11/12/21 04:23	1
2,3,7,8-TCDF	ND		10	0.31	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,7,8-PeCDD	ND		50	0.81	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,7,8-PeCDF	ND		50	0.55	pg/L		11/03/21 06:26	11/12/21 04:23	1
2,3,4,7,8-PeCDF	ND		50	0.56	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,4,7,8-HxCDD	3.68	J	50	0.82	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,6,7,8-HxCDD	ND		50	0.79	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,7,8,9-HxCDD	2.18	J	50	0.70	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,4,7,8-HxCDF	ND		50	0.77	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,6,7,8-HxCDF	ND		50	0.74	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,7,8,9-HxCDF	1.20	J	50	0.79	pg/L		11/03/21 06:26	11/12/21 04:23	1
2,3,4,6,7,8-HxCDF	1.61	J	50	0.75	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,4,6,7,8-HpCDD	3.97	J	50	0.32	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,4,6,7,8-HpCDF	2.14	J	50	0.44	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,4,7,8,9-HpCDF	1.83	J q	50	0.55	pg/L		11/03/21 06:26	11/12/21 04:23	1
OCDD	24.3	J	100	0.74	pg/L		11/03/21 06:26	11/12/21 04:23	1
OCDF	7.30	J q	100	0.62	pg/L		11/03/21 06:26	11/12/21 04:23	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*69*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-2,3,7,8-TCDF	*74*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-1,2,3,7,8-PeCDD	*74*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-1,2,3,7,8-PeCDF	*77*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-1,2,3,6,7,8-HxCDD	*75*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-1,2,3,4,7,8-HxCDF	*81*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*91*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*80*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-OCDD	*95*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*

Lab Sample ID: LCS 320-539427/2-A
Matrix: Water
Analysis Batch: 542532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539427

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	200	224		pg/L		112	64 - 142
2,3,7,8-TCDF	200	223		pg/L		111	71 - 142
1,2,3,7,8-PeCDD	1000	1130		pg/L		113	71 - 140
1,2,3,7,8-PeCDF	1000	1120		pg/L		112	76 - 135
2,3,4,7,8-PeCDF	1000	1110		pg/L		111	74 - 137
1,2,3,4,7,8-HxCDD	1000	1200		pg/L		120	56 - 146
1,2,3,6,7,8-HxCDD	1000	1180		pg/L		118	73 - 144
1,2,3,7,8,9-HxCDD	1000	1180		pg/L		118	71 - 151
1,2,3,4,7,8-HxCDF	1000	1080		pg/L		108	75 - 131
1,2,3,6,7,8-HxCDF	1000	1060		pg/L		106	76 - 133
1,2,3,7,8,9-HxCDF	1000	1110		pg/L		111	77 - 142
2,3,4,6,7,8-HxCDF	1000	1070		pg/L		107	80 - 137
1,2,3,4,6,7,8-HpCDD	1000	1070		pg/L		107	78 - 139
1,2,3,4,6,7,8-HpCDF	1000	1100		pg/L		110	79 - 133
1,2,3,4,7,8,9-HpCDF	1000	1220		pg/L		122	83 - 130

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-539427/2-A
Matrix: Water
Analysis Batch: 542532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539427

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
OCDD			2000	2240		pg/L		112	80 - 132		
OCDF			2000	2380		pg/L		119	72 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*84*		*40 - 135*
13C-2,3,7,8-TCDF	*85*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*95*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*92*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*83*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*91*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*108*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*98*		*40 - 135*
13C-OCDD	*91*		*40 - 135*

Lab Sample ID: LCSD 320-539427/3-A
Matrix: Water
Analysis Batch: 542532

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 539427

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,7,8-TCDD			200	233		pg/L		117	64 - 142	4	20
2,3,7,8-TCDF			200	233		pg/L		116	71 - 142	5	20
1,2,3,7,8-PeCDD			1000	1130		pg/L		113	71 - 140	0	20
1,2,3,7,8-PeCDF			1000	1170		pg/L		117	76 - 135	4	20
2,3,4,7,8-PeCDF			1000	1150		pg/L		115	74 - 137	4	20
1,2,3,4,7,8-HxCDD			1000	1170		pg/L		117	56 - 146	3	20
1,2,3,6,7,8-HxCDD			1000	1140		pg/L		114	73 - 144	3	20
1,2,3,7,8,9-HxCDD			1000	1080		pg/L		108	71 - 151	8	20
1,2,3,4,7,8-HxCDF			1000	1090		pg/L		109	75 - 131	0	20
1,2,3,6,7,8-HxCDF			1000	1080		pg/L		108	76 - 133	2	20
1,2,3,7,8,9-HxCDF			1000	1140		pg/L		114	77 - 142	3	20
2,3,4,6,7,8-HxCDF			1000	1120		pg/L		112	80 - 137	4	20
1,2,3,4,6,7,8-HpCDD			1000	1080		pg/L		108	78 - 139	0	20
1,2,3,4,6,7,8-HpCDF			1000	1090		pg/L		109	79 - 133	0	20
1,2,3,4,7,8,9-HpCDF			1000	1240		pg/L		124	83 - 130	2	20
OCDD			2000	2120		pg/L		106	80 - 132	5	20
OCDF			2000	2250		pg/L		112	72 - 140	6	20

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*90*		*40 - 135*
13C-2,3,7,8-TCDF	*92*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*100*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*94*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*88*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*89*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*102*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*98*		*40 - 135*
13C-OCDD	*96*		*40 - 135*

QC Association Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Specialty Organics

Prep Batch: 539149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-7 - RA	AOC3/AOC8-S6E-0.5	Total/NA	Solid	8290	
320-81042-7	AOC3/AOC8-S6E-0.5	Total/NA	Solid	8290	
320-81042-8	AOC3/AOC8-S6E-2	Total/NA	Solid	8290	
320-81042-26	AOC3/AOC8-S3G-0.5	Total/NA	Solid	8290	
320-81042-27	AOC3/AOC8-S3G-2	Total/NA	Solid	8290	
MB 320-539149/1-A	Method Blank	Total/NA	Solid	8290	
LCS 320-539149/2-A	Lab Control Sample	Total/NA	Solid	8290	
LCSD 320-539149/3-A	Lab Control Sample Dup	Total/NA	Solid	8290	

Prep Batch: 539427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-56	EB10282021	Total/NA	Water	8290	
MB 320-539427/1-A	Method Blank	Total/NA	Water	8290	
LCS 320-539427/2-A	Lab Control Sample	Total/NA	Water	8290	
LCSD 320-539427/3-A	Lab Control Sample Dup	Total/NA	Water	8290	

Analysis Batch: 542008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-56	EB10282021	Total/NA	Water	8290A	539427
MB 320-539427/1-A	Method Blank	Total/NA	Water	8290A	539427

Analysis Batch: 542532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-539427/2-A	Lab Control Sample	Total/NA	Water	8290A	539427
LCSD 320-539427/3-A	Lab Control Sample Dup	Total/NA	Water	8290A	539427

Analysis Batch: 544394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-7	AOC3/AOC8-S6E-0.5	Total/NA	Solid	8290A	539149
320-81042-8	AOC3/AOC8-S6E-2	Total/NA	Solid	8290A	539149
320-81042-26	AOC3/AOC8-S3G-0.5	Total/NA	Solid	8290A	539149
320-81042-27	AOC3/AOC8-S3G-2	Total/NA	Solid	8290A	539149
MB 320-539149/1-A	Method Blank	Total/NA	Solid	8290A	539149
LCS 320-539149/2-A	Lab Control Sample	Total/NA	Solid	8290A	539149
LCSD 320-539149/3-A	Lab Control Sample Dup	Total/NA	Solid	8290A	539149

Analysis Batch: 544985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-7 - RA	AOC3/AOC8-S6E-0.5	Total/NA	Solid	8290A	539149

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Client Sample ID: AOC3/AOC8-S6E-0.5

Lab Sample ID: 320-81042-7

Date Collected: 10/28/21 08:41

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290	RA		10.17 g	20.0 uL	539149	11/02/21 10:24	FC	TAL SAC
Total/NA	Analysis	8290A	RA	1			544985	11/21/21 22:32	KSS	TAL SAC
Total/NA	Prep	8290			10.17 g	20.0 uL	539149	11/02/21 10:24	FC	TAL SAC
Total/NA	Analysis	8290A		1			544394	11/19/21 02:25	GRB	TAL SAC

Client Sample ID: AOC3/AOC8-S6E-2

Lab Sample ID: 320-81042-8

Date Collected: 10/28/21 08:42

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.63 g	20.0 uL	539149	11/02/21 10:24	FC	TAL SAC
Total/NA	Analysis	8290A		1			544394	11/19/21 03:13	GRB	TAL SAC

Client Sample ID: AOC3/AOC8-S3G-0.5

Lab Sample ID: 320-81042-26

Date Collected: 10/28/21 10:11

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.29 g	20.0 uL	539149	11/02/21 10:24	FC	TAL SAC
Total/NA	Analysis	8290A		1			544394	11/19/21 04:01	GRB	TAL SAC

Client Sample ID: AOC3/AOC8-S3G-2

Lab Sample ID: 320-81042-27

Date Collected: 10/28/21 10:19

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.25 g	20.0 uL	539149	11/02/21 10:24	FC	TAL SAC
Total/NA	Analysis	8290A		1			544394	11/19/21 04:49	GRB	TAL SAC

Client Sample ID: EB10282021

Lab Sample ID: 320-81042-56

Date Collected: 10/28/21 12:50

Matrix: Water

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			1025.9 mL	20.0 uL	539427	11/03/21 06:26	FC	TAL SAC
Total/NA	Analysis	8290A		1			542008	11/12/21 11:08	GRB	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Laboratory: Eurofins TestAmerica, Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TEQ		Solid	Total Dioxin/Furan TEQ
TEQ		Water	Total Dioxin/Furan TEQ

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Method	Method Description	Protocol	Laboratory
8290A	Dioxins and Furans (HRGC/HRMS)	SW846	TAL SAC
TEQ	Total TEQ Calculation	Lab SOP	TAL SAC
8290	Separatory Funnel (Liquid-Liquid) Extraction of Dioxins and Furans	SW846	TAL SAC
8290	Soxhlet Extraction of Dioxins and Furans	SW846	TAL SAC

Protocol References:

Lab SOP = Laboratory Standard Operating Procedure

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-81042-7	AOC3/AOC8-S6E-0.5	Solid	10/28/21 08:41	10/29/21 14:21
320-81042-8	AOC3/AOC8-S6E-2	Solid	10/28/21 08:42	10/29/21 14:21
320-81042-26	AOC3/AOC8-S3G-0.5	Solid	10/28/21 10:11	10/29/21 14:21
320-81042-27	AOC3/AOC8-S3G-2	Solid	10/28/21 10:19	10/29/21 14:21
320-81042-56	EB10282021	Water	10/28/21 12:50	10/29/21 14:21

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

320-81042

301259

eurofins

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemeco	Date: 10/28/21	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	1 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNR/NES
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☑ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole School PEA	☑ 2 weeks			Job / SDG No
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3-S6D-0.5	10/28/21	0827	G	Soil	1					X		X	X			
AOC3-S6D-2		0828										X				
AOC3-S5D-0.5		08:27										X	X		X	
AOC3-S5D-2		08:29										X				
AOC3-S5E-0.5		08:34								X		X	X			
AOC3-S5E-2		08:35										X				
AOC3/AOC8-S6E-0.5		08:41										X	X	X	X	
AOC3/AOC8-S6E-2		08:42										X		X		
AOC3-S8E-0.5		0858										X	X		X	
AOC3-S8E-2		0859										X				
AOC3-S7E-2		0901										X				

320-81042 Chain of Custody

Preservation Used 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. | Cooler Temp (°C): Obs'd._____ Corr'd._____ Therm ID No._____

Relinquished by: Daysi Nemeco	Secured location Alameda office	Company: N&M	Date/Time: 10/28/21 14:34	Received by: Leslie Jung	Company: N&M	Date/Time: 10/28 1431
Relinquished by: Leslie Jung		Company: N&M	Date/Time: 10/29/21 13:07	Received by: C. Fisher	Company: ETA SJ	Date/Time: 10/29/21 13.07
Relinquished by: C. Fisher		Company: ETA SJ	Date/Time: 10/29/21 14:21	Received in Laboratory by:	Company: TestAmerica	Date/Time: 10/29/21 1421

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

10.1.8 / 3.5, C°

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12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway

West Sacramento, CA 95605-1500
phone 916.373 5600 fax 303.467 7248

Chain of Custody Record

320-81042

301259

eurofins

Environment Testing TestAmerica

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemeco	Date: 10/28/2021	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	2 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNR/LNES
Alameda California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
1 AOC3-S9E-0.5	10/28/21	09:00	G	Soil	1							X	X		X	
AOC3-S9E-0.5 DUP		09:01										X	X		X	
AOC3-S9E-2		09:02										X				
AOC3-S7E-0.5		0912										X	X		X	
AOC3-S6F-0.5		09:10										X	X		X	
AOC3-S6F-2		09:12										X				
AOC3-S6G-0.5		09:56								X		X	X			
AOC3-S6G-2		09:58										X				
AOC3-S5F-0.5		0958										X	X		X	
AOC3-S5F-2		0959										X				
2 AOC3-S4F-0.5	↓	1002	↓	↓	↓							X	X		X	

Preservation Used. 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments

Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp. (°C): Obs'd: _____ Corr'd _____ Therm ID No. _____			
Relinquished by: Daysi Nemeco Alameda office, secured location	Company: NMM	Date/Time: 10/28/21 14:34	Received by: Leslie Jung	Company: NMM	Date/Time: 10/28/21 14:34
Relinquished by: Leslie Jung	Company: NMM	Date/Time: 10/29/21 13:07	Received by:	Company: FEDEX ST	Date/Time: 10/29/21 13:07
Relinquished by:	Company: FEDEX ST	Date/Time: 10/29/21 14:21	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

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Chain of Custody Record

320-81042

201259

eurofins

Environment Testing America

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Demeno	Date: 10/28/21	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	3 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNR/NBS
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☑ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street; Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
23 AOC3-S4F-2	10/28/21	1004	G	Soil	1							X				
AOC3-S3F-0.5		1005										X	X		X	
AOC3-S3F-2		1007										X				
AOC3/AOC8-S3G-0.5		1011										X	X	X	X	
AOC3/AOC8-S3G-2		1019										X		X		
AOC3-S4G-0.5		1022										X	X		X	
AOC3-S4G-2		1024										X				
AOC3-S5G-0.5		1031										X	X		X	
AOC3-S5G-2		1032										X				
AOC3-S5G-2 DUP		1032										X				
33 AOC3-S2G-0.5		1102										X	X		X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH, 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Hold samples for additional analyses

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. | Cooler Temp. (°C): Obs'd._____ Corr'd._____ Therm ID No._____

Relinquished by: Daysi Demeno (Secured to cabinet Alameda office)	Company: NRM	Date/Time: 10/28/21 14:34	Received by: Leslie Jung	Company: NRM	Date/Time: 10/28	14 34
Relinquished by: Leslie Jung	Company: NRM	Date/Time: 10/29/21 13.07	Received by: G. Fish	Company: ETA SS	Date/Time: 10/29/21	13:09
Relinquished by: G. Fish	Company: ETA SS	Date/Time: 10/29/21 14:21	Received in Laboratory by:	Company:	Date/Time:	

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

Eurofins TestAmerica, Sacramento
880 Riverside Parkway

West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

320-81042 # 201259

eurofins

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemeao	Date: 10/28/21	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	4 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNR/NES
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☑ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes.
24 AOC3-S2G-2	10/28/21	1103	G	Soil	1							X				
AOC3-S2H-0.5	10/28/21	11:01										X	X		X	
AOC3-S2H-2	10/28/21	11:03										X				
AOC3-S2F-0.5		11:08								X		X	X			
AOC3-S2F-2		11:10										X				
AOC3-S2F-0.5 Dup		11:08								X		X	X			
AOC3-S1F-0.5		11:13										X	X		X	
AOC3-S1F-2		11:14										X				
AOC3-S1G-0.5		1121										X	X		X	
AOC3-S1G-2		1122										X				
34 AOC3-S1H-0.5		1124										X	X		X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH, 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.

Hold sample for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp. (°C): Obs'd:_____ Corr'd._____ Therm ID No._____			
Relinquished by: Daysi Nemeao Alameda office secured location	Company: NR/A	Date/Time: 10/28/21 14:31	Received by: Leslie Jung	Company: N&M	Date/Time: 10/28 1434
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 10/29/21 13:07	Received by:	Company: EFA SJ	Date/Time: 10/29/21 13.07
Relinquished by:	Company: EFA SJ	Date/Time: 10/29/21 14:21	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

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12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

320-81042

201259

eurofins

Environment Testing TestAmerica

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Herrera	Date: 10/28/21	COC No: 1
Ninyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	5 of 5 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DURANES
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3-S1H-2	10/28/21	11:25	G	Soil	1							X				
AOC3-S5H-0.5	10/28/21	11:57	G	Soil	1							X	X		X	
AOC3-S5H-2	10/28/21	11:59	G	Soil	1							X				
AOC3-S4H-0.5	10/28/21	12:00	G	Soil	1							X	X		X	
AOC3-S4H-2	10/28/21	12:02	G	Soil	1							X				
AOC3-S3H-0.5	10/28/21	12:04	G	Soil	1							X	X		X	
AOC3-S3H-2	10/28/21	12:06	G	Soil	1							X				
AOC3-S4I-0.5	10/28/21	12:15	G	Soil	1							X	X		X	
AOC3-S4I-2	10/28/21	12:17	G	Soil	1							X				
AOC3-S5I-0.5	10/28/21	12:26	G	Soil	1							X	X		X	
AOC3-S5I-2	10/28/21	12:28	G	Soil	1							X				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments

Hold sample for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp. (°C): Obs'd _____ Corr'd. _____ Therm ID No. _____

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Daysi Herrera (Secured Portion Alameda Office)	NM	10/28/21 14:34	Leslie Jung	NEM	10/28 1434
Relinquished by: Leslie Jung	Company: NEM	Date/Time: 10/29/21 13:07	Received by:	Company: EFM SJ	Date/Time: 10/29/21 13:07
Relinquished by:	Company: EFM SJ	Date/Time: 10/29/21 14:21	Received in Laboratory by	Company	Date/Time:

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

12/15/2021 (Rev. 1)

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320-81042

501259

Eurofins TestAmerica, Sacramento

880 Riverside Parkway

West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

eurofins

Environment Testing America

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Warren	Date: 10/28/21	COC No: 1
Ninyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	6 of 6 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DW/NES
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☑ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
EB10282021	10/28/21	12:50	G	H_2O	3					X		X	X	X		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.

Hold Samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. | Cooler Temp. (°C). Obs'd._____ Corr'd._____ Therm ID No._____

Relinquished by: Daysi Warren	Company: Alameda office Ninyo & Moore	Date/Time: 10/28/21 14:34	Received by: Leslie Jung	Company: NEM	Date/Time: 10/29/21	14 34
Relinquished by: Leslie Jung	Company: NEM	Date/Time: 10/29/21 13:07	Received by:	Company: EFA SS	Date/Time: 10/29/21	13 07
Relinquished by:	Company: EFA SS	Date/Time: 10/29/21 14:21	Received in Laboratory by:	Company:	Date/Time:	

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247584.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B (MOD) Lead, Arsenic	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S6D-0 5 (320-81042-1)	10/28/21	08:27 Pacific		Solid			X	X	X				1	
AOC3-S6D-2 (320-81042-2)	10/28/21	08:28 Pacific		Solid				X					1	
AOC3-S5D--0.5 (320-81042-3)	10/28/21	08:27 Pacific		Solid				X	X	X			1	
AOC3-S5D-2 (320-81042-4)	10/28/21	08:29 Pacific		Solid				X					1	
AOC3-S5E-0.5 (320-81042-5)	10/28/21	08:34 Pacific		Solid			X	X	X				1	
AOC3-S5E-2 (320-81042-6)	10/28/21	08:35 Pacific		Solid				X					1	
AOC3/AOC8-S6E-0.5 (320-81042-7)	10/28/21	08:41 Pacific		Solid				X	X	X	X		1	
AOC3AOC8-S6E-2 (320-81042-8)	10/28/21	08:42 Pacific		Solid							X		1	
AOC3-S8E-0.5 (320-81042-9)	10/28/21	08:58 Pacific		Solid				X	X	X			1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		10/1/21 1615	EMSL		10/1/21 1615	DCS
2		10-1-21 1930	DCS		10/1/21-1930	EEETSAT
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.7 & 1.6

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247584.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 2 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B (MOD) Lead, Arsenic	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S8E-2 (320-81042-10)	10/28/21	08:59 Pacific		Solid				X					1	
AOC3-S7E-2 (320-81042-11)	10/28/21	09:01 Pacific		Solid				X					1	
AOC3-S9E-0 5 (320-81042-12)	10/28/21	09:00 Pacific		Solid				X	X	X			1	
AOC3-S9E-0.5 DUP (320-81042-13)	10/28/21	09:01 Pacific		Solid				X	X	X			1	
AOC3-S9E-2 (320-81042-14)	10/28/21	09:02 Pacific		Solid				X					1	
AOC3-S7E-0.5 (320-81042-15)	10/28/21	09:12 Pacific		Solid				X	X	X			1	
AOC3-S6F-0.5 (320-81042-16)	10/28/21	09:10 Pacific		Solid				X	X	X			1	
AOC3-S6F-2 (320-81042-17)	10/28/21	09:12 Pacific		Solid				X					1	
AOC3-S6G-0 5 (320-81042-18)	10/28/21	09:56 Pacific		Solid			X	X	X				1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		11/1/21 1615	EEISA		11/1/21 1615	DCS
2		11-1-21 1930	DCS		11/1/21 1930	EEISA
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s)	COC No: 320-247584.3
Client Contact: Shipping/Receiving	Phone	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 3 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B (MOD) Lead, Arsenic	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S6G-2 (320-81042-19)	10/28/21	09:58 Pacific		Solid				X					1	
AOC3-S5F-0.5 (320-81042-20)	10/28/21	09:58 Pacific		Solid				X	X	X			1	
AOC3-S5F-2 (320-81042-21)	10/28/21	09:59 Pacific		Solid				X					1	
AOC3-S4F-0.5 (320-81042-22)	10/28/21	10:02 Pacific		Solid				X	X	X			1	
AOC3-S4F-2 (320-81042-23)	10/28/21	10:04 Pacific		Solid				X					1	
AOC3-S3F-0.5 (320-81042-24)	10/28/21	10:05 Pacific		Solid				X	X	X			1	
AOC3-S3F-2 (320-81042-25)	10/28/21	10:07 Pacific		Solid				X					1	
AOC3/AOC8-S3G-0.5 (320-81042-26)	10/28/21	10:11 Pacific		Solid				X	X	X	X		1	
AOC3-/AOC8-S3G-2 (320-81042-27)	10/28/21	10:19 Pacific		Solid							X		1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/1/21 1615	ESAT-SJ		11/1/21 1615	DCS
2		11-1-21 1930	DCS		11/1/21-1930	EESAC
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s)	COC No: 320-247584.4
Client Contact: Shipping/Receiving	Phone	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 4 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B (MOD) Lead, Arsenic	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S4G-0.5 (320-81042-28)	10/28/21	10:22 Pacific		Solid				X	X	X			1	
AOC3-S4G-2 (320-81042-29)	10/28/21	10:24 Pacific		Solid				X					1	
AOC3-S5G-0.5 (320-81042-30)	10/28/21	10:31 Pacific		Solid				X	X	X			1	
AOC3-S5G-2 (320-81042-31)	10/28/21	10:32 Pacific		Solid				X					1	
AOC3-S5G-2 DUP (320-81042-32)	10/28/21	10:32 Pacific		Solid				X					1	
AOC3-S2G-0.5 (320-81042-33)	10/28/21	11:02 Pacific		Solid				X	X	X			1	
AOC3-S2G-2 (320-81042-34)	10/28/21	11:03 Pacific		Solid				X					1	
AOC3-S2H-0.5 (320-81042-35)	10/28/21	11:01 Pacific		Solid				X	X	X			1	
AOC3-S2H-2 (320-81042-36)	10/28/21	11:03 Pacific		Solid				X					1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmenca laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	10/31/21 1615	FEMTA	[signature]	10/31/21 1615	TAS
2	[signature]	11-1-21 1930	TAS	[signature]	11/1/21 1930	EESA
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s)	COC No: 320-247584.5
Client Contact: Shipping/Receiving	Phone	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 5 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B (MOD) Lead, Arsenic	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S2F-0.5 (320-81042-37)	10/28/21	11:08 Pacific		Solid			X	X	X				1	
AOC3-S2F-2 (320-81042-38)	10/28/21	11:10 Pacific		Solid				X					1	
AOC3-S2F-0.5 DUP (320-81042-39)	10/28/21	11:08 Pacific		Solid			X	X	X				1	
AOC3-S1F-0.5 (320-81042-40)	10/28/21	11:13 Pacific		Solid				X	X	X			1	
AOC3-S1F-2 (320-81042-41)	10/28/21	11:14 Pacific		Solid				X					1	
AOC3-S1G-0.5 (320-81042-42)	10/28/21	11:21 Pacific		Solid				X	X	X			1	
AOC3--S1G-2 (320-81042-43)	10/28/21	11:22 Pacific		Solid				X					1	
AOC3-S1H-0.5 (320-81042-44)	10/28/21	11:24 Pacific		Solid				X	X	X			1	
AOC3-S1H-2 (320-81042-45)	10/28/21	11:25 Pacific		Solid				X					1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	10/1/21 1610	TEL-SAC	[signature]	10/1/21 1610	DE
2	[signature]	10-1-21 1930	DCS	[signature]	10/1/21 1930	EETSAC
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s)	COC No: 320-247584.6
Client Contact: Shipping/Receiving	Phone	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 6 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B (MOD) Lead, Arsenic	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S5H-0.5 (320-81042-46)	10/28/21	11:57 Pacific		Solid				X	X	X			1	
AOC3-S5H-2 (320-81042-47)	10/28/21	11:59 Pacific		Solid				X					1	
AOC3-S4H-0.5 (320-81042-48)	10/28/21	12:00 Pacific		Solid				X	X	X			1	
AOC3-S4H-2 (320-81042-49)	10/28/21	12:02 Pacific		Solid				X					1	
AOC3-S3H-0 5 (320-81042-50)	10/28/21	12:04 Pacific		Solid				X	X	X			1	
AOC3-S3H-2 (320-81042-51)	10/28/21	12:06 Pacific		Solid				X					1	
AOC3-S4I-0.5 (320-81042-52)	10/28/21	12:15 Pacific		Solid				X	X	X			1	
AOC3-S4I-2 (320-81042-53)	10/28/21	12:17 Pacific		Solid				X					1	
AOC3-S5I-0.5 (320-81042-54)	10/28/21	12:26 Pacific		Solid				X	X	X			1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		11/1/21 1615	FedEx		11/1/21 1615	TLS
2		11-1-21 1930	TLS		11/1/21 1930	EETSAC
3		Date/Time	Company		Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s)	COC No: 320-247584 7
Client Contact: Shipping/Receiving	Phone	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 7 of 7
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81042-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B (MOD) Lead, Arsenic	8290/8290_P_Sox 17 isomers List	8290A/8290_P_Sep 17 isomers List	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
AOC3-S5I-2 (320-81042-55)	10/28/21	12:08 Pacific		Solid				X					1	
EB10282021 (320-81042-56)	10/28/21	12:50 Pacific		Water								X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		11/1/21 1615	Eurofins		11/1/21 1615	DCS
2		11-1-21 1930	DCS		11/1/21-1930	EETSAC
3		Date/Time	Company		Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

TestAmerica CUSTODY SEAL

Date 11/1/21 Signature



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Part # 5946-434 MTW EXP 07/22

ORIGIN ID:LVKA (928) 484-1919
SAMPLE RECEIVING
EUROFINS TEST AMERICA
780 MONTAGUE EXPRESSWAY
SUITE 602
SAN JOSE, CA 95131
UNITED STATES US

SHIP DATE: 01NOV21
ACTWGT: 30.05 LB
CAD: 0795504/CAFE3507
DIMS: 28x16x15 IN

BILL SENDER

TO SAMPLE RECEIVING
EUROFINS CALSCIENCE, LLC
7440 LINCOLN WAY

GARDEN GROVE CA 92841
(714) 895-5494 REF:
INV:
PO: DEPT:

570C1/A822/6F4B

FedEx Express

TRK# 0201 5047 2941 7677

TUE - 02 NOV 11:30A
PRIORITY OVERNIGHT

92 APVA

92841
CA-US SNA

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81042-2

Login Number: 81042
List Number: 1
Creator: Garcia, Hilario A

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81042-2

Login Number: 81042
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.7 & 1.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-81042-3
Client Project/Site: Cole School PEA
Revision: 1

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/15/2021 10:41:18 AM

Justinn Gonzales, Project Manager I
(925)484-1919
Justinn.Gonzales@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 320-81042-3

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-81042-3

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 11/23/2021. The report (revision 1) is being revised due to: Report samples to MDL per client request.

Receipt
The samples were received on 10/29/2021 2:21 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.8º C, 1.0º C and 1.8º C.

Metals
Method 6010B: The matrix spike duplicate (MSD) recoveries for preparation batch 320-543917 and analytical batch 320-544802 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S6D-2 — Lab Sample ID: 320-81042-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	24	F2 F1	0.96	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5D-2 — Lab Sample ID: 320-81042-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	990		0.95	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	2.2		1.9	1.2	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5E-2 — Lab Sample ID: 320-81042-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	14		0.98	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S8E-2 — Lab Sample ID: 320-81042-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	19		0.96	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S7E-2 — Lab Sample ID: 320-81042-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.4		0.98	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S9E-2 — Lab Sample ID: 320-81042-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	1.9		0.97	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S6F-2 — Lab Sample ID: 320-81042-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.5		0.95	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S6G-2 — Lab Sample ID: 320-81042-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	65		0.98	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5F-2 — Lab Sample ID: 320-81042-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.3		0.98	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S4F-2 — Lab Sample ID: 320-81042-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	6.4		0.98	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S3F-2 — Lab Sample ID: 320-81042-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	4.2		1.0	0.26	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3/AOC8-S3G-2 — Lab Sample ID: 320-81042-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	49		1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	1.9	J	2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S4G-2 — Lab Sample ID: 320-81042-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	4.1		0.98	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5G-2 — Lab Sample ID: 320-81042-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.7	J	2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S2G-2 — Lab Sample ID: 320-81042-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.9	J	2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S2F-2 — Lab Sample ID: 320-81042-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.9	J	2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5H-2 — Lab Sample ID: 320-81042-47

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	45		0.98	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S4H-2 — Lab Sample ID: 320-81042-49

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.9		1.0	0.26	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S3H-2 — Lab Sample ID: 320-81042-51

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.9		0.97	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S5I-2 — Lab Sample ID: 320-81042-55

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	210		0.96	0.25	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S6D-2

Date Collected: 10/28/21 08:28
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-2

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	24	F2 F1	0.96	0.25	mg/Kg		11/18/21 13:37	11/19/21 13:42	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S5D-2

Date Collected: 10/28/21 08:29
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-4

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	990		0.95	0.25	mg/Kg		11/18/21 13:37	11/19/21 14:03	1
Arsenic	2.2		1.9	1.2	mg/Kg		11/18/21 13:37	11/19/21 14:03	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S5E-2

Date Collected: 10/28/21 08:35
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-6

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14		0.98	0.25	mg/Kg		11/18/21 13:37	11/19/21 14:07	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S8E-2

Date Collected: 10/28/21 08:59
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-10

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	19		0.96	0.25	mg/Kg		11/18/21 13:37	11/19/21 14:11	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S7E-2
Date Collected: 10/28/21 09:01
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-11
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.4		0.98	0.25	mg/Kg		11/18/21 13:37	11/19/21 14:23	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S9E-2

Date Collected: 10/28/21 09:02
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-14

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.9		0.97	0.25	mg/Kg		11/18/21 13:37	11/19/21 14:28	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S6F-2
Date Collected: 10/28/21 09:12
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-17
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.5		0.95	0.25	mg/Kg		11/18/21 13:37	11/19/21 14:32	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S6G-2
Date Collected: 10/28/21 09:58
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-19
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	65		0.98	0.25	mg/Kg		11/18/21 13:37	11/19/21 14:36	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S5F-2
Date Collected: 10/28/21 09:59
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-21
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.3		0.98	0.25	mg/Kg		11/18/21 13:37	11/19/21 14:40	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S4F-2
Date Collected: 10/28/21 10:04
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-23
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.4		0.98	0.25	mg/Kg		11/18/21 13:37	11/19/21 10:22	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S3F-2

Date Collected: 10/28/21 10:07
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-25

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.2		1.0	0.26	mg/Kg		11/18/21 13:37	11/19/21 10:41	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3/AOC8-S3G-2
Date Collected: 10/28/21 10:19
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-27
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	49		1.0	0.26	mg/Kg		11/18/21 13:37	11/19/21 10:45	1
Arsenic	1.9	J	2.0	1.3	mg/Kg		11/18/21 13:37	11/19/21 10:45	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S4G-2

Date Collected: 10/28/21 10:24
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-29

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.1		0.98	0.25	mg/Kg		11/18/21 13:37	11/19/21 10:49	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S5G-2
Date Collected: 10/28/21 10:32
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-31
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7	J	2.0	1.3	mg/Kg		11/18/21 13:37	11/19/21 11:00	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S2G-2

Date Collected: 10/28/21 11:03
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-34

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9	J	2.0	1.3	mg/Kg		11/18/21 13:37	11/19/21 11:04	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S2F-2

Date Collected: 10/28/21 11:10
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-38

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9	J	2.0	1.3	mg/Kg		11/18/21 13:37	11/19/21 11:08	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S5H-2
Date Collected: 10/28/21 11:59
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-47
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	45		0.98	0.25	mg/Kg		11/18/21 13:37	11/19/21 11:12	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S4H-2

Date Collected: 10/28/21 12:02
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-49

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.9		1.0	0.26	mg/Kg		11/18/21 13:37	11/19/21 11:15	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S3H-2
Date Collected: 10/28/21 12:06
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-51
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.9		0.97	0.25	mg/Kg		11/18/21 13:37	11/19/21 11:19	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S5I-2
Date Collected: 10/28/21 12:28
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81042-55
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	210		0.96	0.25	mg/Kg		11/18/21 13:37	11/19/21 11:23	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 320-543917/1-A
Matrix: Solid
Analysis Batch: 544802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 543917

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.26	mg/Kg		11/18/21 13:37	11/19/21 13:34	1
Arsenic	ND		2.0	1.3	mg/Kg		11/18/21 13:37	11/19/21 13:34	1

Lab Sample ID: LCS 320-543917/2-A
Matrix: Solid
Analysis Batch: 544802

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543917

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	25.0	22.8		mg/Kg		91	80 - 120
Arsenic	50.0	44.2		mg/Kg		88	80 - 120

Lab Sample ID: 320-81042-2 MS
Matrix: Solid
Analysis Batch: 544802

Client Sample ID: AOC3-S6D-2
Prep Type: Total/NA
Prep Batch: 543917

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	24	F2 F1	24.0	46.5		mg/Kg		92	80 - 120
Arsenic	2.1		48.1	44.5		mg/Kg		88	80 - 120

Lab Sample ID: 320-81042-2 MSD
Matrix: Solid
Analysis Batch: 544802

Client Sample ID: AOC3-S6D-2
Prep Type: Total/NA
Prep Batch: 543917

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	24	F2 F1	24.3	222	F1 F2	mg/Kg		814	80 - 120	131	35
Arsenic	2.1		48.5	43.8		mg/Kg		86	80 - 120	2	35

Lab Sample ID: MB 320-543922/1-A
Matrix: Solid
Analysis Batch: 544371

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 543922

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.26	mg/Kg		11/18/21 13:37	11/19/21 10:14	1
Arsenic	ND		2.0	1.3	mg/Kg		11/18/21 13:37	11/19/21 10:14	1

Lab Sample ID: LCS 320-543922/2-A
Matrix: Solid
Analysis Batch: 544371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543922

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	25.0	22.4		mg/Kg		89	80 - 120
Arsenic	50.0	42.9		mg/Kg		86	80 - 120

Lab Sample ID: 320-81042-23 MS
Matrix: Solid
Analysis Batch: 544371

Client Sample ID: AOC3-S4F-2
Prep Type: Total/NA
Prep Batch: 543922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	6.4		24.5	26.7		mg/Kg		83	80 - 120
Arsenic	2.0		49.0	44.4		mg/Kg		87	80 - 120

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Method: 6010B - Metals (ICP)

Lab Sample ID: 320-81042-23 MSD
Matrix: Solid
Analysis Batch: 544371

Client Sample ID: AOC3-S4F-2
Prep Type: Total/NA
Prep Batch: 543922

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	6.4		23.8	25.7		mg/Kg		81	80 - 120	4	35
Arsenic	2.0		47.6	43.3		mg/Kg		87	80 - 120	2	35

Metals

Prep Batch: 543917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-2	AOC3-S6D-2	Total/NA	Solid	3050B	
320-81042-4	AOC3-S5D-2	Total/NA	Solid	3050B	
320-81042-6	AOC3-S5E-2	Total/NA	Solid	3050B	
320-81042-10	AOC3-S8E-2	Total/NA	Solid	3050B	
320-81042-11	AOC3-S7E-2	Total/NA	Solid	3050B	
320-81042-14	AOC3-S9E-2	Total/NA	Solid	3050B	
320-81042-17	AOC3-S6F-2	Total/NA	Solid	3050B	
320-81042-19	AOC3-S6G-2	Total/NA	Solid	3050B	
320-81042-21	AOC3-S5F-2	Total/NA	Solid	3050B	
MB 320-543917/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-543917/2-A	Lab Control Sample	Total/NA	Solid	3050B	
320-81042-2 MS	AOC3-S6D-2	Total/NA	Solid	3050B	
320-81042-2 MSD	AOC3-S6D-2	Total/NA	Solid	3050B	

Prep Batch: 543922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-23	AOC3-S4F-2	Total/NA	Solid	3050B	
320-81042-25	AOC3-S3F-2	Total/NA	Solid	3050B	
320-81042-27	AOC3/AOC8-S3G-2	Total/NA	Solid	3050B	
320-81042-29	AOC3-S4G-2	Total/NA	Solid	3050B	
320-81042-31	AOC3-S5G-2	Total/NA	Solid	3050B	
320-81042-34	AOC3-S2G-2	Total/NA	Solid	3050B	
320-81042-38	AOC3-S2F-2	Total/NA	Solid	3050B	
320-81042-47	AOC3-S5H-2	Total/NA	Solid	3050B	
320-81042-49	AOC3-S4H-2	Total/NA	Solid	3050B	
320-81042-51	AOC3-S3H-2	Total/NA	Solid	3050B	
320-81042-55	AOC3-S5I-2	Total/NA	Solid	3050B	
MB 320-543922/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-543922/2-A	Lab Control Sample	Total/NA	Solid	3050B	
320-81042-23 MS	AOC3-S4F-2	Total/NA	Solid	3050B	
320-81042-23 MSD	AOC3-S4F-2	Total/NA	Solid	3050B	

Analysis Batch: 544371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-23	AOC3-S4F-2	Total/NA	Solid	6010B	543922
320-81042-25	AOC3-S3F-2	Total/NA	Solid	6010B	543922
320-81042-27	AOC3/AOC8-S3G-2	Total/NA	Solid	6010B	543922
320-81042-29	AOC3-S4G-2	Total/NA	Solid	6010B	543922
320-81042-31	AOC3-S5G-2	Total/NA	Solid	6010B	543922
320-81042-34	AOC3-S2G-2	Total/NA	Solid	6010B	543922
320-81042-38	AOC3-S2F-2	Total/NA	Solid	6010B	543922
320-81042-47	AOC3-S5H-2	Total/NA	Solid	6010B	543922
320-81042-49	AOC3-S4H-2	Total/NA	Solid	6010B	543922
320-81042-51	AOC3-S3H-2	Total/NA	Solid	6010B	543922
320-81042-55	AOC3-S5I-2	Total/NA	Solid	6010B	543922
MB 320-543922/1-A	Method Blank	Total/NA	Solid	6010B	543922
LCS 320-543922/2-A	Lab Control Sample	Total/NA	Solid	6010B	543922
320-81042-23 MS	AOC3-S4F-2	Total/NA	Solid	6010B	543922
320-81042-23 MSD	AOC3-S4F-2	Total/NA	Solid	6010B	543922

QC Association Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Metals

Analysis Batch: 544802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81042-2	AOC3-S6D-2	Total/NA	Solid	6010B	543917
320-81042-4	AOC3-S5D-2	Total/NA	Solid	6010B	543917
320-81042-6	AOC3-S5E-2	Total/NA	Solid	6010B	543917
320-81042-10	AOC3-S8E-2	Total/NA	Solid	6010B	543917
320-81042-11	AOC3-S7E-2	Total/NA	Solid	6010B	543917
320-81042-14	AOC3-S9E-2	Total/NA	Solid	6010B	543917
320-81042-17	AOC3-S6F-2	Total/NA	Solid	6010B	543917
320-81042-19	AOC3-S6G-2	Total/NA	Solid	6010B	543917
320-81042-21	AOC3-S5F-2	Total/NA	Solid	6010B	543917
MB 320-543917/1-A	Method Blank	Total/NA	Solid	6010B	543917
LCS 320-543917/2-A	Lab Control Sample	Total/NA	Solid	6010B	543917
320-81042-2 MS	AOC3-S6D-2	Total/NA	Solid	6010B	543917
320-81042-2 MSD	AOC3-S6D-2	Total/NA	Solid	6010B	543917

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S6D-2
Lab Sample ID: 320-81042-2
Date Collected: 10/28/21 08:28
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	100 mL	543917	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544802	11/19/21 13:42	GSH	TAL SAC

Client Sample ID: AOC3-S5D-2
Lab Sample ID: 320-81042-4
Date Collected: 10/28/21 08:29
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	100 mL	543917	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544802	11/19/21 14:03	GSH	TAL SAC

Client Sample ID: AOC3-S5E-2
Lab Sample ID: 320-81042-6
Date Collected: 10/28/21 08:35
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	100 mL	543917	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544802	11/19/21 14:07	GSH	TAL SAC

Client Sample ID: AOC3-S8E-2
Lab Sample ID: 320-81042-10
Date Collected: 10/28/21 08:59
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	100 mL	543917	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544802	11/19/21 14:11	GSH	TAL SAC

Client Sample ID: AOC3-S7E-2
Lab Sample ID: 320-81042-11
Date Collected: 10/28/21 09:01
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	100 mL	543917	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544802	11/19/21 14:23	GSH	TAL SAC

Client Sample ID: AOC3-S9E-2
Lab Sample ID: 320-81042-14
Date Collected: 10/28/21 09:02
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	100 mL	543917	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544802	11/19/21 14:28	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S6F-2
Lab Sample ID: 320-81042-17
Date Collected: 10/28/21 09:12
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	100 mL	543917	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544802	11/19/21 14:32	GSH	TAL SAC

Client Sample ID: AOC3-S6G-2
Lab Sample ID: 320-81042-19
Date Collected: 10/28/21 09:58
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	100 mL	543917	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544802	11/19/21 14:36	GSH	TAL SAC

Client Sample ID: AOC3-S5F-2
Lab Sample ID: 320-81042-21
Date Collected: 10/28/21 09:59
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	100 mL	543917	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544802	11/19/21 14:40	GSH	TAL SAC

Client Sample ID: AOC3-S4F-2
Lab Sample ID: 320-81042-23
Date Collected: 10/28/21 10:04
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 10:22	GSH	TAL SAC

Client Sample ID: AOC3-S3F-2
Lab Sample ID: 320-81042-25
Date Collected: 10/28/21 10:07
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 10:41	GSH	TAL SAC

Client Sample ID: AOC3/AOC8-S3G-2
Lab Sample ID: 320-81042-27
Date Collected: 10/28/21 10:19
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 10:45	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S4G-2
Lab Sample ID: 320-81042-29
Date Collected: 10/28/21 10:24
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 10:49	GSH	TAL SAC

Client Sample ID: AOC3-S5G-2
Lab Sample ID: 320-81042-31
Date Collected: 10/28/21 10:32
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 11:00	GSH	TAL SAC

Client Sample ID: AOC3-S2G-2
Lab Sample ID: 320-81042-34
Date Collected: 10/28/21 11:03
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 11:04	GSH	TAL SAC

Client Sample ID: AOC3-S2F-2
Lab Sample ID: 320-81042-38
Date Collected: 10/28/21 11:10
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 11:08	GSH	TAL SAC

Client Sample ID: AOC3-S5H-2
Lab Sample ID: 320-81042-47
Date Collected: 10/28/21 11:59
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 11:12	GSH	TAL SAC

Client Sample ID: AOC3-S4H-2
Lab Sample ID: 320-81042-49
Date Collected: 10/28/21 12:02
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 11:15	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Client Sample ID: AOC3-S3H-2

Lab Sample ID: 320-81042-51

Date Collected: 10/28/21 12:06

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 11:19	GSH	TAL SAC

Client Sample ID: AOC3-S5I-2

Lab Sample ID: 320-81042-55

Date Collected: 10/28/21 12:28

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 11:23	GSH	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81042-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-81042-2	AOC3-S6D-2	Solid	10/28/21 08:28	10/29/21 14:21
320-81042-4	AOC3-S5D-2	Solid	10/28/21 08:29	10/29/21 14:21
320-81042-6	AOC3-S5E-2	Solid	10/28/21 08:35	10/29/21 14:21
320-81042-10	AOC3-S8E-2	Solid	10/28/21 08:59	10/29/21 14:21
320-81042-11	AOC3-S7E-2	Solid	10/28/21 09:01	10/29/21 14:21
320-81042-14	AOC3-S9E-2	Solid	10/28/21 09:02	10/29/21 14:21
320-81042-17	AOC3-S6F-2	Solid	10/28/21 09:12	10/29/21 14:21
320-81042-19	AOC3-S6G-2	Solid	10/28/21 09:58	10/29/21 14:21
320-81042-21	AOC3-S5F-2	Solid	10/28/21 09:59	10/29/21 14:21
320-81042-23	AOC3-S4F-2	Solid	10/28/21 10:04	10/29/21 14:21
320-81042-25	AOC3-S3F-2	Solid	10/28/21 10:07	10/29/21 14:21
320-81042-27	AOC3/AOC8-S3G-2	Solid	10/28/21 10:19	10/29/21 14:21
320-81042-29	AOC3-S4G-2	Solid	10/28/21 10:24	10/29/21 14:21
320-81042-31	AOC3-S5G-2	Solid	10/28/21 10:32	10/29/21 14:21
320-81042-34	AOC3-S2G-2	Solid	10/28/21 11:03	10/29/21 14:21
320-81042-38	AOC3-S2F-2	Solid	10/28/21 11:10	10/29/21 14:21
320-81042-47	AOC3-S5H-2	Solid	10/28/21 11:59	10/29/21 14:21
320-81042-49	AOC3-S4H-2	Solid	10/28/21 12:02	10/29/21 14:21
320-81042-51	AOC3-S3H-2	Solid	10/28/21 12:06	10/29/21 14:21
320-81042-55	AOC3-S5I-2	Solid	10/28/21 12:28	10/29/21 14:21

Gonzales, Justinn

From: Nathan Diem <ndiem@ninyoandmoore.com>
Sent: Wednesday, November 17, 2021 6:20 AM
To: Gonzales, Justinn
Subject: RE: Preliminary Eurofins TestAmerica report files from 320-81042-1 Cole School PEA

Follow Up Flag: Follow up
Flag Status: Flagged

EXTERNAL EMAIL*

Hi Justinn,

Please analyze the samples below:

Lead and arsenic
AOC3-S5D-2
AOC3/AOC8-S3G-2

Lead
AOC3-S6D-2
AOC3-S5E-2
AOC3-S8E-2
AOC3-S9E-2
AOC3-S7E-2
AOC3-S6F-2
AOC3-S6G-2
AOC3-S5F-2
AOC3-S4F-2
AOC3-S3F-2
AOC3/AOC8-S3G-2
AOC3-S4G-2
AOC3-S5H-2
AOC3-S4H-2
AOC3-S3H-2
AOC3-S5I-2

Arsenic

AOC3-S5G-2
AOC3-S2G-2
AOC3-S2F-2

Nathan Diem

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81042-3

Login Number: 81042
List Number: 1
Creator: Garcia, Hilario A

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81042-3

Login Number: 81042
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.7 & 1.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-81044-1
Client Project/Site: Cole School PEA
Revision: 1

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/15/2021 11:36:31 AM

Justinn Gonzales, Project Manager I
(925)484-1919
Justinn.Gonzales@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
P	The %RPD between the primary and confirmation column/detector is >40%. The higher value has been reported
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 320-81044-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-81044-1

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 11/26/2021. The report (revision 1) is being revised due to: Report samples to MDL per client request.

Receipt
The samples were received on 10/29/2021 2:21 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.8º C, 1.0º C and 1.8º C.

GC Semi VOA
Method 8082: Surrogate recovery for the following samples were outside control limits: AOC3-S6I-0.5-DUP (320-81044-6), AOC3-S8F-0.5 (320-81044-8), AOC3-S7I-0.5 (320-81044-29), (320-81044-A-29-D MS) and (320-81044-A-29-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8082: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-541557 and analytical batch 320-543860 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8082: The following sample was diluted due to the nature of the sample matrix: AOC3-S2I-0.5 (320-81044-3). Elevated reporting limits (RLs) are provided.

Method 8081A: Surrogate recovery for the following samples were outside control limits: AOC3-S1I-2 (320-81044-2), AOC3-S2I-2 (320-81044-4), AOC3-S6I-2 (320-81044-7), AOC3-S8F-2 (320-81044-9), AOC3-S9G-2 (320-81044-11), AOC3-S7G-2 (320-81044-17), AOC3/AOC8-S6H-2 (320-81044-19), AOC3-S7H-2 (320-81044-21), AOC3-S8H-2 (320-81044-23), AOC3/AOC8-S9I-2 (320-81044-26), AOC3-S8H-2 (320-81044-28), AOC3-S7I-2 (320-81044-30) and (320-81044-A-17-B MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC3-S7F-2 (320-81044-13) and AOC3-S8G-2 (320-81044-15). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC3-S1I-0.5 (320-81044-1), AOC3-S2I-0.5 (320-81044-3), AOC3-S6I-0.5 (320-81044-5), AOC3-S6I-0.5-DUP (320-81044-6), AOC3-S8F-0.5 (320-81044-8), AOC3-S7F-0.5 (320-81044-12), AOC3-S8G-0.5 (320-81044-14), AOC3-S7G-0.5 (320-81044-16), AOC3/AOC8-S6H-0.5 (320-81044-18) and AOC3-S8H-0.5 (320-81044-22). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC3-S9G-0.5 (320-81044-10) and AOC3-S7H-0.5 (320-81044-20). Elevated reporting limits (RLs) are provided.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: AOC3/AOC8-S9I-0.5 (320-81044-24), AOC3/AOC8-S9I-0.5 DUP (320-81044-25), AOC3-S8H-0.5 (320-81044-27) and AOC3-S7I-0.5 (320-81044-29). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8081A: The following samples were diluted due to the nature of the sample matrix: (320-81044-A-27-C MS) and (320-81044-A-27-D MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Job ID: 320-81044-1 (Continued)

Laboratory: Eurofins TestAmerica, Sacramento (Continued)

Method 8081A: The %RPD between the primary and confirmation column exceeded 40% for trans-Chlordane, beta-BHC, Endosulfan I and 4,4'-DDT for the following sample (320-81044-A-27-C MS) and (320-81044-A-27-D MSD) . The primary results have been reported and qualified in accordance with the laboratory's SOP. 320-81044-27[MS] for trans-Chlordane, beta-BHC and Endosulfan I. 320-81044-27[MSD] for Endosulfan I and 4,4'-DDT.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-539936 and analytical batch 320-540856 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with method 8081A aqueous in preparation batch 320-540231.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S1I-0.5 — Lab Sample ID: 320-81044-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	7.6	J P	33	3.8	ug/Kg	1		8082	Total/NA
Lead	260		0.99	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	3.7		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S1I-2 — Lab Sample ID: 320-81044-2

No Detections.

Client Sample ID: AOC3-S2I-0.5 — Lab Sample ID: 320-81044-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	65		0.99	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	5.1		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S2I-2 — Lab Sample ID: 320-81044-4

No Detections.

Client Sample ID: AOC3-S6I-0.5 — Lab Sample ID: 320-81044-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.7		1.9	1.3	mg/Kg	1		6010B	Total/NA
Barium	280		0.97	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.70		0.19	0.029	mg/Kg	1		6010B	Total/NA
Cadmium	0.14	J	0.19	0.029	mg/Kg	1		6010B	Total/NA
Cobalt	5.6		0.49	0.24	mg/Kg	1		6010B	Total/NA
Chromium	26	B	0.49	0.14	mg/Kg	1		6010B	Total/NA
Copper	20	B	1.5	0.21	mg/Kg	1		6010B	Total/NA
Nickel	22		0.97	0.23	mg/Kg	1		6010B	Total/NA
Lead	250		0.97	0.25	mg/Kg	1		6010B	Total/NA
Antimony	12		1.9	0.91	mg/Kg	1		6010B	Total/NA
Vanadium	25		0.49	0.18	mg/Kg	1		6010B	Total/NA
Zinc	85		1.9	0.18	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S6I-0.5-DUP — Lab Sample ID: 320-81044-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.8		1.9	1.3	mg/Kg	1		6010B	Total/NA
Barium	150		0.97	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.58		0.19	0.029	mg/Kg	1		6010B	Total/NA
Cadmium	0.19		0.19	0.029	mg/Kg	1		6010B	Total/NA
Cobalt	5.6		0.49	0.24	mg/Kg	1		6010B	Total/NA
Chromium	22	B	0.49	0.14	mg/Kg	1		6010B	Total/NA
Copper	16	B	1.5	0.21	mg/Kg	1		6010B	Total/NA
Nickel	21		0.97	0.23	mg/Kg	1		6010B	Total/NA
Lead	150		0.97	0.25	mg/Kg	1		6010B	Total/NA
Antimony	12		1.9	0.91	mg/Kg	1		6010B	Total/NA
Vanadium	23		0.49	0.18	mg/Kg	1		6010B	Total/NA
Zinc	87		1.9	0.18	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S6I-2 — Lab Sample ID: 320-81044-7

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S8F-0.5 — Lab Sample ID: 320-81044-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	22		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	2.3		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S8F-2 — Lab Sample ID: 320-81044-9

No Detections.

Client Sample ID: AOC3-S9G-0.5 — Lab Sample ID: 320-81044-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	28		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	1.7	J	2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S9G-2 — Lab Sample ID: 320-81044-11

No Detections.

Client Sample ID: AOC3-S7F-0.5 — Lab Sample ID: 320-81044-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	87		0.96	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	8.1		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S7F-2 — Lab Sample ID: 320-81044-13

No Detections.

Client Sample ID: AOC3-S8G-0.5 — Lab Sample ID: 320-81044-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	60		0.96	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	3.9		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S8G-2 — Lab Sample ID: 320-81044-15

No Detections.

Client Sample ID: AOC3-S7G-0.5 — Lab Sample ID: 320-81044-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	150		0.97	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	7.3		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S7G-2 — Lab Sample ID: 320-81044-17

No Detections.

Client Sample ID: AOC3/AOC8-S6H-0.5 — Lab Sample ID: 320-81044-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	83		0.99	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	6.4		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3/AOC8-S6H-2 — Lab Sample ID: 320-81044-19

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S7H-0.5 — Lab Sample ID: 320-81044-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.4		1.9	1.3	mg/Kg	1		6010B	Total/NA
Barium	130		0.97	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.54		0.19	0.029	mg/Kg	1		6010B	Total/NA
Cadmium	0.35		0.19	0.029	mg/Kg	1		6010B	Total/NA
Cobalt	5.3		0.49	0.24	mg/Kg	1		6010B	Total/NA
Chromium	26	B	0.49	0.14	mg/Kg	1		6010B	Total/NA
Copper	28	B	1.5	0.21	mg/Kg	1		6010B	Total/NA
Nickel	20		0.97	0.23	mg/Kg	1		6010B	Total/NA
Lead	700		0.97	0.25	mg/Kg	1		6010B	Total/NA
Antimony	13		1.9	0.91	mg/Kg	1		6010B	Total/NA
Vanadium	25		0.49	0.18	mg/Kg	1		6010B	Total/NA
Zinc	150		1.9	0.18	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S7H-2 — Lab Sample ID: 320-81044-21

No Detections.

Client Sample ID: AOC3-S8H-0.5 — Lab Sample ID: 320-81044-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	100		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	8.0		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S8H-2 — Lab Sample ID: 320-81044-23

No Detections.

Client Sample ID: AOC3/AOC8-S9I-0.5 — Lab Sample ID: 320-81044-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.6		2.0	1.3	mg/Kg	1		6010B	Total/NA
Barium	88		0.99	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.43		0.20	0.030	mg/Kg	1		6010B	Total/NA
Cadmium	0.25		0.20	0.030	mg/Kg	1		6010B	Total/NA
Cobalt	5.7		0.50	0.25	mg/Kg	1		6010B	Total/NA
Chromium	23	B	0.50	0.14	mg/Kg	1		6010B	Total/NA
Copper	17	B	1.5	0.22	mg/Kg	1		6010B	Total/NA
Nickel	17		0.99	0.24	mg/Kg	1		6010B	Total/NA
Lead	190		0.99	0.26	mg/Kg	1		6010B	Total/NA
Antimony	8.9		2.0	0.93	mg/Kg	1		6010B	Total/NA
Thallium	0.85	J	2.0	0.83	mg/Kg	1		6010B	Total/NA
Vanadium	25		0.50	0.19	mg/Kg	1		6010B	Total/NA
Zinc	170		2.0	0.19	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3/AOC8-S9I-0.5 DUP — Lab Sample ID: 320-81044-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.4		2.0	1.3	mg/Kg	1		6010B	Total/NA
Barium	150		0.98	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.49		0.20	0.029	mg/Kg	1		6010B	Total/NA
Cadmium	0.15	J	0.20	0.029	mg/Kg	1		6010B	Total/NA
Cobalt	4.3		0.49	0.25	mg/Kg	1		6010B	Total/NA
Chromium	28	B	0.49	0.14	mg/Kg	1		6010B	Total/NA
Copper	15	B	1.5	0.22	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3/AOC8-S9I-0.5 DUP (Continued) — Lab Sample ID: 320-81044-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	16		0.98	0.24	mg/Kg	1		6010B	Total/NA
Lead	250		0.98	0.25	mg/Kg	1		6010B	Total/NA
Antimony	11		2.0	0.92	mg/Kg	1		6010B	Total/NA
Vanadium	22		0.49	0.19	mg/Kg	1		6010B	Total/NA
Zinc	74		2.0	0.19	mg/Kg	1		6010B	Total/NA
Mercury	0.20		0.083	0.014	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC3/AOC8-S9I-2 — Lab Sample ID: 320-81044-26

No Detections.

Client Sample ID: AOC3-S8H-0.5 — Lab Sample ID: 320-81044-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	14		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	2.1		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S8H-2 — Lab Sample ID: 320-81044-28

No Detections.

Client Sample ID: AOC3-S7I-0.5 — Lab Sample ID: 320-81044-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	110		0.98	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	4.1		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S7I-2 — Lab Sample ID: 320-81044-30

No Detections.

Client Sample ID: EB10292021 — Lab Sample ID: 320-81044-31

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: AOC3-S1I-0.5

Date Collected: 10/29/21 08:38
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-1

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.3	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
4,4'-DDE	ND		17	2.1	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
4,4'-DDT	ND		17	2.5	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
Aldrin	ND		17	1.4	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
alpha-BHC	ND		17	1.6	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
beta-BHC	ND		17	2.2	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
Chlordane (technical)	ND		200	94	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
delta-BHC	ND		17	3.5	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
Dieldrin	ND		17	2.0	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
Endosulfan I	ND		17	1.8	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
Endosulfan II	ND		17	1.8	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
Endosulfan sulfate	ND		17	3.5	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
Endrin	ND		17	2.0	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
Endrin aldehyde	ND		17	5.7	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
Endrin ketone	ND		17	2.7	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
trans-Chlordane	ND		17	6.0	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
Heptachlor	ND		17	1.5	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
Methoxychlor	ND		34	5.6	ug/Kg		11/10/21 10:47	11/22/21 20:54	10
Toxaphene	ND		670	220	ug/Kg		11/10/21 10:47	11/22/21 20:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*46 - 109*	*11/10/21 10:47*	*11/22/21 20:54*	*10*
DCB Decachlorobiphenyl	*74*		*46 - 109*	*11/10/21 10:47*	*11/22/21 20:54*	*10*
Tetrachloro-m-xylene	*124*	*S1+*	*47 - 107*	*11/10/21 10:47*	*11/22/21 20:54*	*10*
Tetrachloro-m-xylene	*103*		*47 - 107*	*11/10/21 10:47*	*11/22/21 20:54*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.6	ug/Kg		11/10/21 10:52	11/18/21 13:45	1
PCB-1221	ND		33	3.6	ug/Kg		11/10/21 10:52	11/18/21 13:45	1
PCB-1232	ND		33	4.8	ug/Kg		11/10/21 10:52	11/18/21 13:45	1
PCB-1242	ND		33	5.9	ug/Kg		11/10/21 10:52	11/18/21 13:45	1
PCB-1248	ND		33	2.4	ug/Kg		11/10/21 10:52	11/18/21 13:45	1
PCB-1254	**7.6**	**J P**	33	3.8	ug/Kg		11/10/21 10:52	11/18/21 13:45	1
PCB-1260	ND		33	2.7	ug/Kg		11/10/21 10:52	11/18/21 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*52 - 138*	*11/10/21 10:52*	*11/18/21 13:45*	*1*
Tetrachloro-m-xylene	*75*		*56 - 114*	*11/10/21 10:52*	*11/18/21 13:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**260**		0.99	0.26	mg/Kg		11/04/21 13:39	11/05/21 11:03	1
Arsenic	**3.7**		2.0	1.3	mg/Kg		11/04/21 13:39	11/05/21 11:03	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S1I-2
Date Collected: 10/29/21 08:40
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-2
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
Aldrin	ND		1.6	0.13	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
Chlordane (technical)	ND		19	9.0	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
delta-BHC	ND		1.6	0.34	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
Endosulfan sulfate	ND		1.6	0.34	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
Endrin	ND		1.6	0.19	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
Endrin aldehyde	ND		1.6	0.55	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
trans-Chlordane	ND		1.6	0.57	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/09/21 14:45	11/21/21 22:23	1
Toxaphene	ND		64	21	ug/Kg		11/09/21 14:45	11/21/21 22:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*47*		*46 - 109*	*11/09/21 14:45*	*11/21/21 22:23*	*1*
DCB Decachlorobiphenyl	*41*	*S1-*	*46 - 109*	*11/09/21 14:45*	*11/21/21 22:23*	*1*
Tetrachloro-m-xylene	*73*		*47 - 107*	*11/09/21 14:45*	*11/21/21 22:23*	*1*
Tetrachloro-m-xylene	*70*		*47 - 107*	*11/09/21 14:45*	*11/21/21 22:23*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S2I-0.5

Date Collected: 10/29/21 08:41
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-3

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		82	11	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
4,4'-DDE	ND		82	10	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
4,4'-DDT	ND		82	12	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
Aldrin	ND		82	6.8	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
alpha-BHC	ND		82	7.7	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
cis-Chlordane	ND		82	8.7	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
beta-BHC	ND		82	11	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
Chlordane (technical)	ND		970	450	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
delta-BHC	ND		82	17	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
Dieldrin	ND		82	9.7	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
Endosulfan I	ND		82	8.7	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
Endosulfan II	ND		82	8.7	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
Endosulfan sulfate	ND		82	17	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
Endrin	ND		82	9.7	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
Endrin aldehyde	ND		82	28	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
Endrin ketone	ND		82	13	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
trans-Chlordane	ND		82	29	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
gamma-BHC (Lindane)	ND		82	6.8	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
Heptachlor	ND		82	7.2	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
Heptachlor epoxide	ND		82	8.7	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
Methoxychlor	ND		160	27	ug/Kg		11/10/21 10:47	11/22/21 21:13	50
Toxaphene	ND		3200	1100	ug/Kg		11/10/21 10:47	11/22/21 21:13	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/10/21 10:47*	*11/22/21 21:13*	*50*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/10/21 10:47*	*11/22/21 21:13*	*50*
Tetrachloro-m-xylene	*144*	*S1+*	*47 - 107*	*11/10/21 10:47*	*11/22/21 21:13*	*50*
Tetrachloro-m-xylene	*82*		*47 - 107*	*11/10/21 10:47*	*11/22/21 21:13*	*50*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		160	12	ug/Kg		11/10/21 10:52	11/18/21 14:05	5
PCB-1221	ND		160	17	ug/Kg		11/10/21 10:52	11/18/21 14:05	5
PCB-1232	ND		160	23	ug/Kg		11/10/21 10:52	11/18/21 14:05	5
PCB-1242	ND		160	29	ug/Kg		11/10/21 10:52	11/18/21 14:05	5
PCB-1248	ND		160	12	ug/Kg		11/10/21 10:52	11/18/21 14:05	5
PCB-1254	ND		160	18	ug/Kg		11/10/21 10:52	11/18/21 14:05	5
PCB-1260	ND		160	13	ug/Kg		11/10/21 10:52	11/18/21 14:05	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*52 - 138*	*11/10/21 10:52*	*11/18/21 14:05*	*5*
Tetrachloro-m-xylene	*77*		*56 - 114*	*11/10/21 10:52*	*11/18/21 14:05*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**65**		0.99	0.26	mg/Kg		11/04/21 13:39	11/05/21 11:21	1
Arsenic	**5.1**		2.0	1.3	mg/Kg		11/04/21 13:39	11/05/21 11:21	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S2I-2
Date Collected: 10/29/21 08:42
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-4
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
Aldrin	ND		1.6	0.14	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
alpha-BHC	ND		1.6	0.16	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
Chlordane (technical)	ND		19	9.1	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
delta-BHC	ND		1.6	0.34	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
Endosulfan sulfate	ND		1.6	0.34	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
Endrin	ND		1.6	0.19	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
Endrin aldehyde	ND		1.6	0.55	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
trans-Chlordane	ND		1.6	0.58	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
gamma-BHC (Lindane)	ND		1.6	0.14	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
Heptachlor	ND		1.6	0.15	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/09/21 14:45	11/21/21 22:42	1
Toxaphene	ND		65	22	ug/Kg		11/09/21 14:45	11/21/21 22:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*46 - 109*	*11/09/21 14:45*	*11/21/21 22:42*	*1*
DCB Decachlorobiphenyl	*33*	*S1-*	*46 - 109*	*11/09/21 14:45*	*11/21/21 22:42*	*1*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/09/21 14:45*	*11/21/21 22:42*	*1*
Tetrachloro-m-xylene	*59*		*47 - 107*	*11/09/21 14:45*	*11/21/21 22:42*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S6I-0.5

Date Collected: 10/29/21 09:02
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-5

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		34	4.6	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
4,4'-DDE	ND		34	4.2	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
4,4'-DDT	ND		34	5.0	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
Aldrin	ND		34	2.8	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
alpha-BHC	ND		34	3.2	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
cis-Chlordane	ND		34	3.6	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
beta-BHC	ND		34	4.4	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
Chlordane (technical)	ND		400	190	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
delta-BHC	ND		34	7.0	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
Dieldrin	ND		34	4.0	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
Endosulfan I	ND		34	3.6	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
Endosulfan II	ND		34	3.6	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
Endosulfan sulfate	ND		34	7.0	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
Endrin	ND		34	4.0	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
Endrin aldehyde	ND		34	11	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
Endrin ketone	ND		34	5.4	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
trans-Chlordane	ND		34	12	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
gamma-BHC (Lindane)	ND		34	2.8	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
Heptachlor	ND		34	3.0	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
Heptachlor epoxide	ND		34	3.6	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
Methoxychlor	ND		68	11	ug/Kg		11/10/21 10:47	11/22/21 21:32	20
Toxaphene	ND		1300	450	ug/Kg		11/10/21 10:47	11/22/21 21:32	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*46 - 109*	*11/10/21 10:47*	*11/22/21 21:32*	*20*
DCB Decachlorobiphenyl	*56*		*46 - 109*	*11/10/21 10:47*	*11/22/21 21:32*	*20*
Tetrachloro-m-xylene	*108*	*S1+*	*47 - 107*	*11/10/21 10:47*	*11/22/21 21:32*	*20*
Tetrachloro-m-xylene	*71*		*47 - 107*	*11/10/21 10:47*	*11/22/21 21:32*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/10/21 10:52	11/18/21 14:25	1
PCB-1221	ND		33	3.6	ug/Kg		11/10/21 10:52	11/18/21 14:25	1
PCB-1232	ND		33	4.8	ug/Kg		11/10/21 10:52	11/18/21 14:25	1
PCB-1242	ND		33	5.9	ug/Kg		11/10/21 10:52	11/18/21 14:25	1
PCB-1248	ND		33	2.4	ug/Kg		11/10/21 10:52	11/18/21 14:25	1
PCB-1254	ND		33	3.8	ug/Kg		11/10/21 10:52	11/18/21 14:25	1
PCB-1260	ND		33	2.7	ug/Kg		11/10/21 10:52	11/18/21 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*53*		*52 - 138*	*11/10/21 10:52*	*11/18/21 14:25*	*1*
Tetrachloro-m-xylene	*56*		*56 - 114*	*11/10/21 10:52*	*11/18/21 14:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.49	0.087	mg/Kg		11/04/21 13:39	11/05/21 11:25	1
Arsenic	**3.7**		1.9	1.3	mg/Kg		11/04/21 13:39	11/05/21 11:25	1
Barium	**280**		0.97	0.12	mg/Kg		11/04/21 13:39	11/05/21 11:25	1
Beryllium	**0.70**		0.19	0.029	mg/Kg		11/04/21 13:39	11/05/21 11:25	1
Cadmium	**0.14**	**J**	0.19	0.029	mg/Kg		11/04/21 13:39	11/05/21 11:25	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S6I-0.5
Date Collected: 10/29/21 09:02
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-5
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	5.6		0.49	0.24	mg/Kg		11/04/21 13:39	11/05/21 11:25	1
Chromium	26	B	0.49	0.14	mg/Kg		11/04/21 13:39	11/05/21 11:25	1
Copper	20	B	1.5	0.21	mg/Kg		11/04/21 13:39	11/05/21 11:25	1
Molybdenum	ND		1.9	0.73	mg/Kg		11/04/21 13:39	11/05/21 11:25	1
Nickel	22		0.97	0.23	mg/Kg		11/04/21 13:39	11/05/21 11:25	1
Lead	250		0.97	0.25	mg/Kg		11/04/21 13:39	11/05/21 11:25	1
Selenium	ND		1.9	1.4	mg/Kg		11/04/21 13:39	11/05/21 11:25	1
Antimony	12		1.9	0.91	mg/Kg		11/04/21 13:39	11/05/21 11:25	1
Thallium	ND		1.9	0.82	mg/Kg		11/04/21 13:39	11/05/21 11:25	1
Vanadium	25		0.49	0.18	mg/Kg		11/04/21 13:39	11/05/21 11:25	1
Zinc	85		1.9	0.18	mg/Kg		11/04/21 13:39	11/05/21 11:25	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.081	0.013	mg/Kg		11/12/21 05:53	11/12/21 11:46	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S6I-0.5-DUP

Date Collected: 10/29/21 09:02
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-6

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		34	4.5	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
4,4'-DDE	ND		34	4.2	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
4,4'-DDT	ND		34	4.9	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
Aldrin	ND		34	2.8	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
alpha-BHC	ND		34	3.2	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
cis-Chlordane	ND		34	3.6	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
beta-BHC	ND		34	4.4	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
Chlordane (technical)	ND		400	190	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
delta-BHC	ND		34	6.9	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
Dieldrin	ND		34	4.0	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
Endosulfan I	ND		34	3.6	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
Endosulfan II	ND		34	3.6	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
Endosulfan sulfate	ND		34	6.9	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
Endrin	ND		34	4.0	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
Endrin aldehyde	ND		34	11	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
Endrin ketone	ND		34	5.3	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
trans-Chlordane	ND		34	12	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
gamma-BHC (Lindane)	ND		34	2.8	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
Heptachlor	ND		34	3.0	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
Heptachlor epoxide	ND		34	3.6	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
Methoxychlor	ND		67	11	ug/Kg		11/10/21 10:47	11/22/21 21:51	20
Toxaphene	ND		1300	440	ug/Kg		11/10/21 10:47	11/22/21 21:51	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*46 - 109*	*11/10/21 10:47*	*11/22/21 21:51*	*20*
DCB Decachlorobiphenyl	*78*		*46 - 109*	*11/10/21 10:47*	*11/22/21 21:51*	*20*
Tetrachloro-m-xylene	*109*	*S1+*	*47 - 107*	*11/10/21 10:47*	*11/22/21 21:51*	*20*
Tetrachloro-m-xylene	*66*		*47 - 107*	*11/10/21 10:47*	*11/22/21 21:51*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/10/21 10:52	11/18/21 14:45	1
PCB-1221	ND		33	3.6	ug/Kg		11/10/21 10:52	11/18/21 14:45	1
PCB-1232	ND		33	4.7	ug/Kg		11/10/21 10:52	11/18/21 14:45	1
PCB-1242	ND		33	5.8	ug/Kg		11/10/21 10:52	11/18/21 14:45	1
PCB-1248	ND		33	2.4	ug/Kg		11/10/21 10:52	11/18/21 14:45	1
PCB-1254	ND		33	3.8	ug/Kg		11/10/21 10:52	11/18/21 14:45	1
PCB-1260	ND		33	2.7	ug/Kg		11/10/21 10:52	11/18/21 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*47*	*S1-*	*52 - 138*	*11/10/21 10:52*	*11/18/21 14:45*	*1*
Tetrachloro-m-xylene	*52*	*S1-*	*56 - 114*	*11/10/21 10:52*	*11/18/21 14:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.49	0.087	mg/Kg		11/04/21 13:39	11/05/21 11:29	1
Arsenic	**3.8**		1.9	1.3	mg/Kg		11/04/21 13:39	11/05/21 11:29	1
Barium	**150**		0.97	0.12	mg/Kg		11/04/21 13:39	11/05/21 11:29	1
Beryllium	**0.58**		0.19	0.029	mg/Kg		11/04/21 13:39	11/05/21 11:29	1
Cadmium	**0.19**		0.19	0.029	mg/Kg		11/04/21 13:39	11/05/21 11:29	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S6I-0.5-DUP
Date Collected: 10/29/21 09:02
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-6
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	5.6		0.49	0.24	mg/Kg		11/04/21 13:39	11/05/21 11:29	1
Chromium	22	B	0.49	0.14	mg/Kg		11/04/21 13:39	11/05/21 11:29	1
Copper	16	B	1.5	0.21	mg/Kg		11/04/21 13:39	11/05/21 11:29	1
Molybdenum	ND		1.9	0.73	mg/Kg		11/04/21 13:39	11/05/21 11:29	1
Nickel	21		0.97	0.23	mg/Kg		11/04/21 13:39	11/05/21 11:29	1
Lead	150		0.97	0.25	mg/Kg		11/04/21 13:39	11/05/21 11:29	1
Selenium	ND		1.9	1.4	mg/Kg		11/04/21 13:39	11/05/21 11:29	1
Antimony	12		1.9	0.91	mg/Kg		11/04/21 13:39	11/05/21 11:29	1
Thallium	ND		1.9	0.82	mg/Kg		11/04/21 13:39	11/05/21 11:29	1
Vanadium	23		0.49	0.18	mg/Kg		11/04/21 13:39	11/05/21 11:29	1
Zinc	87		1.9	0.18	mg/Kg		11/04/21 13:39	11/05/21 11:29	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.083	0.014	mg/Kg		11/12/21 05:53	11/12/21 11:48	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S6I-2
Date Collected: 10/29/21 09:05
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-7
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
Aldrin	ND		1.6	0.13	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
Chlordane (technical)	ND		19	8.9	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
Endrin	ND		1.6	0.19	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
Endrin aldehyde	ND		1.6	0.54	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
trans-Chlordane	ND		1.6	0.57	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
Methoxychlor	ND		3.2	0.53	ug/Kg		11/09/21 14:45	11/21/21 23:01	1
Toxaphene	ND		64	21	ug/Kg		11/09/21 14:45	11/21/21 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*40*	*S1-*	*46 - 109*	*11/09/21 14:45*	*11/21/21 23:01*	*1*
DCB Decachlorobiphenyl	*36*	*S1-*	*46 - 109*	*11/09/21 14:45*	*11/21/21 23:01*	*1*
Tetrachloro-m-xylene	*57*		*47 - 107*	*11/09/21 14:45*	*11/21/21 23:01*	*1*
Tetrachloro-m-xylene	*55*		*47 - 107*	*11/09/21 14:45*	*11/21/21 23:01*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S8F-0.5

Date Collected: 10/29/21 09:32
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-8

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.3	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
4,4'-DDE	ND		17	2.1	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
4,4'-DDT	ND		17	2.5	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
Aldrin	ND		17	1.4	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
alpha-BHC	ND		17	1.6	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
beta-BHC	ND		17	2.2	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
Chlordane (technical)	ND		200	93	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
delta-BHC	ND		17	3.4	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
Dieldrin	ND		17	2.0	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
Endosulfan I	ND		17	1.8	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
Endosulfan II	ND		17	1.8	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
Endosulfan sulfate	ND		17	3.4	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
Endrin	ND		17	2.0	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
Endrin aldehyde	ND		17	5.6	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
Endrin ketone	ND		17	2.7	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
trans-Chlordane	ND		17	5.9	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
Heptachlor	ND		17	1.5	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
Methoxychlor	ND		33	5.5	ug/Kg		11/10/21 10:47	11/22/21 22:10	10
Toxaphene	ND		660	220	ug/Kg		11/10/21 10:47	11/22/21 22:10	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*74*		*46 - 109*	*11/10/21 10:47*	*11/22/21 22:10*	*10*
DCB Decachlorobiphenyl	*54*		*46 - 109*	*11/10/21 10:47*	*11/22/21 22:10*	*10*
Tetrachloro-m-xylene	*106*		*47 - 107*	*11/10/21 10:47*	*11/22/21 22:10*	*10*
Tetrachloro-m-xylene	*92*		*47 - 107*	*11/10/21 10:47*	*11/22/21 22:10*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/10/21 10:52	11/18/21 15:05	1
PCB-1221	ND		33	3.6	ug/Kg		11/10/21 10:52	11/18/21 15:05	1
PCB-1232	ND		33	4.7	ug/Kg		11/10/21 10:52	11/18/21 15:05	1
PCB-1242	ND		33	5.8	ug/Kg		11/10/21 10:52	11/18/21 15:05	1
PCB-1248	ND		33	2.4	ug/Kg		11/10/21 10:52	11/18/21 15:05	1
PCB-1254	ND		33	3.8	ug/Kg		11/10/21 10:52	11/18/21 15:05	1
PCB-1260	ND		33	2.7	ug/Kg		11/10/21 10:52	11/18/21 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*51*	*S1-*	*52 - 138*	*11/10/21 10:52*	*11/18/21 15:05*	*1*
Tetrachloro-m-xylene	*59*		*56 - 114*	*11/10/21 10:52*	*11/18/21 15:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**22**		0.98	0.25	mg/Kg		11/04/21 13:39	11/05/21 11:40	1
Arsenic	**2.3**		2.0	1.3	mg/Kg		11/04/21 13:39	11/05/21 11:40	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S8F-2
Date Collected: 10/29/21 09:33
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-9
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
Aldrin	ND		1.6	0.13	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
Chlordane (technical)	ND		19	9.0	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
delta-BHC	ND		1.6	0.34	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
Endosulfan sulfate	ND		1.6	0.34	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
Endrin	ND		1.6	0.19	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
Endrin aldehyde	ND		1.6	0.55	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
trans-Chlordane	ND		1.6	0.57	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/09/21 14:45	11/21/21 23:20	1
Toxaphene	ND		64	21	ug/Kg		11/09/21 14:45	11/21/21 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*44*	*S1-*	*46 - 109*	*11/09/21 14:45*	*11/21/21 23:20*	*1*
DCB Decachlorobiphenyl	*47*		*46 - 109*	*11/09/21 14:45*	*11/21/21 23:20*	*1*
Tetrachloro-m-xylene	*68*		*47 - 107*	*11/09/21 14:45*	*11/21/21 23:20*	*1*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/09/21 14:45*	*11/21/21 23:20*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S9G-0.5

Date Collected: 10/29/21 09:36
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-10

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.3	1.1	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
4,4'-DDE	ND		8.3	1.0	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
4,4'-DDT	ND		8.3	1.2	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
Aldrin	ND		8.3	0.68	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
alpha-BHC	ND		8.3	0.78	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
cis-Chlordane	ND		8.3	0.87	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
beta-BHC	ND		8.3	1.1	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
Chlordane (technical)	ND		97	46	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
delta-BHC	ND		8.3	1.7	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
Dieldrin	ND		8.3	0.97	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
Endosulfan I	ND		8.3	0.87	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
Endosulfan II	ND		8.3	0.87	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
Endosulfan sulfate	ND		8.3	1.7	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
Endrin	ND		8.3	0.97	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
Endrin aldehyde	ND		8.3	2.8	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
Endrin ketone	ND		8.3	1.3	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
trans-Chlordane	ND		8.3	2.9	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
gamma-BHC (Lindane)	ND		8.3	0.68	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
Heptachlor	ND		8.3	0.73	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
Heptachlor epoxide	ND		8.3	0.87	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
Methoxychlor	ND		17	2.7	ug/Kg		11/10/21 10:47	11/22/21 22:29	5
Toxaphene	ND		330	110	ug/Kg		11/10/21 10:47	11/22/21 22:29	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*64*		*46 - 109*	*11/10/21 10:47*	*11/22/21 22:29*	*5*
DCB Decachlorobiphenyl	*52*		*46 - 109*	*11/10/21 10:47*	*11/22/21 22:29*	*5*
Tetrachloro-m-xylene	*82*		*47 - 107*	*11/10/21 10:47*	*11/22/21 22:29*	*5*
Tetrachloro-m-xylene	*71*		*47 - 107*	*11/10/21 10:47*	*11/22/21 22:29*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/10/21 10:52	11/18/21 15:25	1
PCB-1221	ND		32	3.5	ug/Kg		11/10/21 10:52	11/18/21 15:25	1
PCB-1232	ND		32	4.7	ug/Kg		11/10/21 10:52	11/18/21 15:25	1
PCB-1242	ND		32	5.7	ug/Kg		11/10/21 10:52	11/18/21 15:25	1
PCB-1248	ND		32	2.4	ug/Kg		11/10/21 10:52	11/18/21 15:25	1
PCB-1254	ND		32	3.7	ug/Kg		11/10/21 10:52	11/18/21 15:25	1
PCB-1260	ND		32	2.6	ug/Kg		11/10/21 10:52	11/18/21 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*62*		*52 - 138*	*11/10/21 10:52*	*11/18/21 15:25*	*1*
Tetrachloro-m-xylene	*61*		*56 - 114*	*11/10/21 10:52*	*11/18/21 15:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**28**		0.98	0.25	mg/Kg		11/04/21 13:39	11/05/21 11:44	1
Arsenic	**1.7**	**J**	2.0	1.3	mg/Kg		11/04/21 13:39	11/05/21 11:44	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S9G-2
Date Collected: 10/29/21 09:37
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-11
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
Aldrin	ND		1.6	0.14	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
alpha-BHC	ND		1.6	0.16	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
Chlordane (technical)	ND		19	9.1	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
delta-BHC	ND		1.6	0.34	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
Endosulfan sulfate	ND		1.6	0.34	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
Endrin	ND		1.6	0.19	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
Endrin aldehyde	ND		1.6	0.55	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
trans-Chlordane	ND		1.6	0.58	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
gamma-BHC (Lindane)	ND		1.6	0.14	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
Heptachlor	ND		1.6	0.15	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/09/21 14:45	11/21/21 23:39	1
Toxaphene	ND		65	22	ug/Kg		11/09/21 14:45	11/21/21 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*48*		*46 - 109*	*11/09/21 14:45*	*11/21/21 23:39*	*1*
DCB Decachlorobiphenyl	*44*	*S1-*	*46 - 109*	*11/09/21 14:45*	*11/21/21 23:39*	*1*
Tetrachloro-m-xylene	*62*		*47 - 107*	*11/09/21 14:45*	*11/21/21 23:39*	*1*
Tetrachloro-m-xylene	*63*		*47 - 107*	*11/09/21 14:45*	*11/21/21 23:39*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S7F-0.5

Date Collected: 10/29/21 10:17
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-12

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.5	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
4,4'-DDE	ND		33	4.1	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
4,4'-DDT	ND		33	4.9	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
Aldrin	ND		33	2.7	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
alpha-BHC	ND		33	3.1	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
beta-BHC	ND		33	4.3	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
Chlordane (technical)	ND		390	180	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
delta-BHC	ND		33	6.8	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
Dieldrin	ND		33	3.9	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
Endosulfan I	ND		33	3.5	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
Endosulfan II	ND		33	3.5	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
Endosulfan sulfate	ND		33	6.8	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
Endrin	ND		33	3.9	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
Endrin aldehyde	ND		33	11	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
Endrin ketone	ND		33	5.3	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
trans-Chlordane	ND		33	12	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
Heptachlor	ND		33	2.9	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
Methoxychlor	ND		66	11	ug/Kg		11/10/21 10:47	11/22/21 22:48	20
Toxaphene	ND		1300	440	ug/Kg		11/10/21 10:47	11/22/21 22:48	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*46 - 109*	*11/10/21 10:47*	*11/22/21 22:48*	*20*
DCB Decachlorobiphenyl	*47*		*46 - 109*	*11/10/21 10:47*	*11/22/21 22:48*	*20*
Tetrachloro-m-xylene	*103*		*47 - 107*	*11/10/21 10:47*	*11/22/21 22:48*	*20*
Tetrachloro-m-xylene	*71*		*47 - 107*	*11/10/21 10:47*	*11/22/21 22:48*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/10/21 10:52	11/18/21 15:45	1
PCB-1221	ND		32	3.5	ug/Kg		11/10/21 10:52	11/18/21 15:45	1
PCB-1232	ND		32	4.7	ug/Kg		11/10/21 10:52	11/18/21 15:45	1
PCB-1242	ND		32	5.7	ug/Kg		11/10/21 10:52	11/18/21 15:45	1
PCB-1248	ND		32	2.4	ug/Kg		11/10/21 10:52	11/18/21 15:45	1
PCB-1254	ND		32	3.7	ug/Kg		11/10/21 10:52	11/18/21 15:45	1
PCB-1260	ND		32	2.6	ug/Kg		11/10/21 10:52	11/18/21 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*65*		*52 - 138*	*11/10/21 10:52*	*11/18/21 15:45*	*1*
Tetrachloro-m-xylene	*66*		*56 - 114*	*11/10/21 10:52*	*11/18/21 15:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**87**		0.96	0.25	mg/Kg		11/04/21 13:39	11/05/21 11:47	1
Arsenic	**8.1**		1.9	1.3	mg/Kg		11/04/21 13:39	11/05/21 11:47	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S7F-2
Date Collected: 10/29/21 10:19
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-13
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
Aldrin	ND		16	1.3	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
alpha-BHC	ND		16	1.5	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
beta-BHC	ND		16	2.1	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
Chlordane (technical)	ND		190	89	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
delta-BHC	ND		16	3.3	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
Dieldrin	ND		16	1.9	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
Endosulfan I	ND		16	1.7	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
Endosulfan II	ND		16	1.7	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
Endosulfan sulfate	ND		16	3.3	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
Endrin	ND		16	1.9	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
Endrin aldehyde	ND		16	5.4	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
Endrin ketone	ND		16	2.6	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
trans-Chlordane	ND		16	5.7	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
Heptachlor	ND		16	1.4	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
Methoxychlor	ND		32	5.3	ug/Kg		11/09/21 14:45	11/21/21 23:58	10
Toxaphene	ND		630	210	ug/Kg		11/09/21 14:45	11/21/21 23:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*46 - 109*	*11/09/21 14:45*	*11/21/21 23:58*	*10*
DCB Decachlorobiphenyl	*63*		*46 - 109*	*11/09/21 14:45*	*11/21/21 23:58*	*10*
Tetrachloro-m-xylene	*101*		*47 - 107*	*11/09/21 14:45*	*11/21/21 23:58*	*10*
Tetrachloro-m-xylene	*77*		*47 - 107*	*11/09/21 14:45*	*11/21/21 23:58*	*10*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S8G-0.5

Date Collected: 10/29/21 10:21
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-14

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.5	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
4,4'-DDE	ND		33	4.1	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
4,4'-DDT	ND		33	4.8	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
Aldrin	ND		33	2.7	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
alpha-BHC	ND		33	3.1	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
beta-BHC	ND		33	4.3	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
Chlordane (technical)	ND		390	180	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
delta-BHC	ND		33	6.8	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
Dieldrin	ND		33	3.9	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
Endosulfan I	ND		33	3.5	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
Endosulfan II	ND		33	3.5	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
Endosulfan sulfate	ND		33	6.8	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
Endrin	ND		33	3.9	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
Endrin aldehyde	ND		33	11	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
Endrin ketone	ND		33	5.2	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
trans-Chlordane	ND		33	12	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
Heptachlor	ND		33	2.9	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
Methoxychlor	ND		66	11	ug/Kg		11/10/21 10:47	11/22/21 23:06	20
Toxaphene	ND		1300	430	ug/Kg		11/10/21 10:47	11/22/21 23:06	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*68*		*46 - 109*	*11/10/21 10:47*	*11/22/21 23:06*	*20*
DCB Decachlorobiphenyl	*59*		*46 - 109*	*11/10/21 10:47*	*11/22/21 23:06*	*20*
Tetrachloro-m-xylene	*116*	*S1+*	*47 - 107*	*11/10/21 10:47*	*11/22/21 23:06*	*20*
Tetrachloro-m-xylene	*74*		*47 - 107*	*11/10/21 10:47*	*11/22/21 23:06*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/10/21 10:52	11/18/21 16:05	1
PCB-1221	ND		32	3.5	ug/Kg		11/10/21 10:52	11/18/21 16:05	1
PCB-1232	ND		32	4.6	ug/Kg		11/10/21 10:52	11/18/21 16:05	1
PCB-1242	ND		32	5.7	ug/Kg		11/10/21 10:52	11/18/21 16:05	1
PCB-1248	ND		32	2.4	ug/Kg		11/10/21 10:52	11/18/21 16:05	1
PCB-1254	ND		32	3.7	ug/Kg		11/10/21 10:52	11/18/21 16:05	1
PCB-1260	ND		32	2.6	ug/Kg		11/10/21 10:52	11/18/21 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*64*		*52 - 138*	*11/10/21 10:52*	*11/18/21 16:05*	*1*
Tetrachloro-m-xylene	*69*		*56 - 114*	*11/10/21 10:52*	*11/18/21 16:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**60**		0.96	0.25	mg/Kg		11/04/21 13:39	11/05/21 11:51	1
Arsenic	**3.9**		1.9	1.3	mg/Kg		11/04/21 13:39	11/05/21 11:51	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S8G-2
Date Collected: 10/29/21 10:22
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-15
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.3	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
4,4'-DDE	ND		17	2.1	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
4,4'-DDT	ND		17	2.5	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
Aldrin	ND		17	1.4	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
alpha-BHC	ND		17	1.6	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
beta-BHC	ND		17	2.2	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
Chlordane (technical)	ND		200	93	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
delta-BHC	ND		17	3.4	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
Dieldrin	ND		17	2.0	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
Endosulfan I	ND		17	1.8	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
Endosulfan II	ND		17	1.8	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
Endosulfan sulfate	ND		17	3.4	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
Endrin	ND		17	2.0	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
Endrin aldehyde	ND		17	5.6	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
Endrin ketone	ND		17	2.7	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
trans-Chlordane	ND		17	5.9	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
Heptachlor	ND		17	1.5	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
Methoxychlor	ND		34	5.5	ug/Kg		11/09/21 14:45	11/22/21 00:17	10
Toxaphene	ND		660	220	ug/Kg		11/09/21 14:45	11/22/21 00:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*69*		*46 - 109*	*11/09/21 14:45*	*11/22/21 00:17*	*10*
DCB Decachlorobiphenyl	*55*		*46 - 109*	*11/09/21 14:45*	*11/22/21 00:17*	*10*
Tetrachloro-m-xylene	*106*		*47 - 107*	*11/09/21 14:45*	*11/22/21 00:17*	*10*
Tetrachloro-m-xylene	*89*		*47 - 107*	*11/09/21 14:45*	*11/22/21 00:17*	*10*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S7G-0.5

Date Collected: 10/29/21 10:31
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-16

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.4	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
4,4'-DDE	ND		33	4.1	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
4,4'-DDT	ND		33	4.8	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
Aldrin	ND		33	2.7	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
alpha-BHC	ND		33	3.1	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
beta-BHC	ND		33	4.2	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
Chlordane (technical)	ND		390	180	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
delta-BHC	ND		33	6.8	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
Dieldrin	ND		33	3.9	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
Endosulfan I	ND		33	3.5	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
Endosulfan II	ND		33	3.5	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
Endosulfan sulfate	ND		33	6.8	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
Endrin	ND		33	3.9	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
Endrin aldehyde	ND		33	11	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
Endrin ketone	ND		33	5.2	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
trans-Chlordane	ND		33	12	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
Heptachlor	ND		33	2.9	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
Methoxychlor	ND		66	11	ug/Kg		11/10/21 10:47	11/22/21 23:25	20
Toxaphene	ND		1300	430	ug/Kg		11/10/21 10:47	11/22/21 23:25	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*46 - 109*	*11/10/21 10:47*	*11/22/21 23:25*	*20*
DCB Decachlorobiphenyl	*61*		*46 - 109*	*11/10/21 10:47*	*11/22/21 23:25*	*20*
Tetrachloro-m-xylene	*109*	*S1+*	*47 - 107*	*11/10/21 10:47*	*11/22/21 23:25*	*20*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/10/21 10:47*	*11/22/21 23:25*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32	2.5	ug/Kg		11/10/21 10:52	11/18/21 16:25	1
PCB-1221	ND		32	3.5	ug/Kg		11/10/21 10:52	11/18/21 16:25	1
PCB-1232	ND		32	4.6	ug/Kg		11/10/21 10:52	11/18/21 16:25	1
PCB-1242	ND		32	5.7	ug/Kg		11/10/21 10:52	11/18/21 16:25	1
PCB-1248	ND		32	2.4	ug/Kg		11/10/21 10:52	11/18/21 16:25	1
PCB-1254	ND		32	3.7	ug/Kg		11/10/21 10:52	11/18/21 16:25	1
PCB-1260	ND		32	2.6	ug/Kg		11/10/21 10:52	11/18/21 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*52 - 138*	*11/10/21 10:52*	*11/18/21 16:25*	*1*
Tetrachloro-m-xylene	*60*		*56 - 114*	*11/10/21 10:52*	*11/18/21 16:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**150**		0.97	0.25	mg/Kg		11/04/21 13:39	11/05/21 11:55	1
Arsenic	**7.3**		1.9	1.3	mg/Kg		11/04/21 13:39	11/05/21 11:55	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S7G-2
Date Collected: 10/29/21 10:32
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-17
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
Aldrin	ND		1.6	0.13	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
Chlordane (technical)	ND		19	9.0	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
Endrin	ND		1.6	0.19	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
Endrin aldehyde	ND		1.6	0.54	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
trans-Chlordane	ND		1.6	0.57	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/10/21 11:54	11/21/21 17:40	1
Toxaphene	ND		64	21	ug/Kg		11/10/21 11:54	11/21/21 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*41*	*S1-*	*46 - 109*	*11/10/21 11:54*	*11/21/21 17:40*	*1*
DCB Decachlorobiphenyl	*62*		*46 - 109*	*11/10/21 11:54*	*11/21/21 17:40*	*1*
Tetrachloro-m-xylene	*63*		*47 - 107*	*11/10/21 11:54*	*11/21/21 17:40*	*1*
Tetrachloro-m-xylene	*60*		*47 - 107*	*11/10/21 11:54*	*11/21/21 17:40*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3/AOC8-S6H-0.5

Date Collected: 10/29/21 10:55
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-18

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		32	4.4	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
4,4'-DDE	ND		32	4.0	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
4,4'-DDT	ND		32	4.8	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
Aldrin	ND		32	2.7	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
alpha-BHC	ND		32	3.0	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
cis-Chlordane	ND		32	3.4	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
beta-BHC	ND		32	4.2	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
Chlordane (technical)	ND		380	180	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
delta-BHC	ND		32	6.7	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
Dieldrin	ND		32	3.8	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
Endosulfan I	ND		32	3.4	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
Endosulfan II	ND		32	3.4	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
Endosulfan sulfate	ND		32	6.7	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
Endrin	ND		32	3.8	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
Endrin aldehyde	ND		32	11	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
Endrin ketone	ND		32	5.1	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
trans-Chlordane	ND		32	11	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
gamma-BHC (Lindane)	ND		32	2.7	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
Heptachlor	ND		32	2.9	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
Heptachlor epoxide	ND		32	3.4	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
Methoxychlor	ND		65	11	ug/Kg		11/10/21 10:47	11/22/21 23:44	20
Toxaphene	ND		1300	430	ug/Kg		11/10/21 10:47	11/22/21 23:44	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*90*		*46 - 109*	*11/10/21 10:47*	*11/22/21 23:44*	*20*
DCB Decachlorobiphenyl	*66*		*46 - 109*	*11/10/21 10:47*	*11/22/21 23:44*	*20*
Tetrachloro-m-xylene	*119*	*S1+*	*47 - 107*	*11/10/21 10:47*	*11/22/21 23:44*	*20*
Tetrachloro-m-xylene	*82*		*47 - 107*	*11/10/21 10:47*	*11/22/21 23:44*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/10/21 10:52	11/18/21 16:45	1
PCB-1221	ND		31	3.4	ug/Kg		11/10/21 10:52	11/18/21 16:45	1
PCB-1232	ND		31	4.6	ug/Kg		11/10/21 10:52	11/18/21 16:45	1
PCB-1242	ND		31	5.6	ug/Kg		11/10/21 10:52	11/18/21 16:45	1
PCB-1248	ND		31	2.3	ug/Kg		11/10/21 10:52	11/18/21 16:45	1
PCB-1254	ND		31	3.6	ug/Kg		11/10/21 10:52	11/18/21 16:45	1
PCB-1260	ND		31	2.6	ug/Kg		11/10/21 10:52	11/18/21 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*71*		*52 - 138*	*11/10/21 10:52*	*11/18/21 16:45*	*1*
Tetrachloro-m-xylene	*74*		*56 - 114*	*11/10/21 10:52*	*11/18/21 16:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**83**		0.99	0.26	mg/Kg		11/04/21 13:39	11/05/21 11:58	1
Arsenic	**6.4**		2.0	1.3	mg/Kg		11/04/21 13:39	11/05/21 11:58	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3/AOC8-S6H-2
Date Collected: 10/29/21 10:56
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-19
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
Aldrin	ND		1.6	0.13	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
Chlordane (technical)	ND		19	9.0	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
delta-BHC	ND		1.6	0.34	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
Endosulfan sulfate	ND		1.6	0.34	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
Endrin	ND		1.6	0.19	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
Endrin aldehyde	ND		1.6	0.55	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
trans-Chlordane	ND		1.6	0.58	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/10/21 11:54	11/21/21 18:37	1
Toxaphene	ND		64	22	ug/Kg		11/10/21 11:54	11/21/21 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*37*	*S1-*	*46 - 109*	*11/10/21 11:54*	*11/21/21 18:37*	*1*
DCB Decachlorobiphenyl	*55*		*46 - 109*	*11/10/21 11:54*	*11/21/21 18:37*	*1*
Tetrachloro-m-xylene	*56*		*47 - 107*	*11/10/21 11:54*	*11/21/21 18:37*	*1*
Tetrachloro-m-xylene	*57*		*47 - 107*	*11/10/21 11:54*	*11/21/21 18:37*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S7H-0.5

Date Collected: 10/29/21 10:57
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-20

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.4	1.1	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
4,4'-DDE	ND		8.4	1.0	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
4,4'-DDT	ND		8.4	1.2	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
Aldrin	ND		8.4	0.69	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
alpha-BHC	ND		8.4	0.79	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
cis-Chlordane	ND		8.4	0.89	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
beta-BHC	ND		8.4	1.1	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
Chlordane (technical)	ND		99	46	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
delta-BHC	ND		8.4	1.7	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
Dieldrin	ND		8.4	0.99	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
Endosulfan I	ND		8.4	0.89	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
Endosulfan II	ND		8.4	0.89	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
Endosulfan sulfate	ND		8.4	1.7	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
Endrin	ND		8.4	0.99	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
Endrin aldehyde	ND		8.4	2.8	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
Endrin ketone	ND		8.4	1.3	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
trans-Chlordane	ND		8.4	3.0	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
gamma-BHC (Lindane)	ND		8.4	0.69	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
Heptachlor	ND		8.4	0.74	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
Heptachlor epoxide	ND		8.4	0.89	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
Methoxychlor	ND		17	2.8	ug/Kg		11/10/21 10:47	11/23/21 00:03	5
Toxaphene	ND		330	110	ug/Kg		11/10/21 10:47	11/23/21 00:03	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*61*		*46 - 109*	*11/10/21 10:47*	*11/23/21 00:03*	*5*
DCB Decachlorobiphenyl	*57*		*46 - 109*	*11/10/21 10:47*	*11/23/21 00:03*	*5*
Tetrachloro-m-xylene	*92*		*47 - 107*	*11/10/21 10:47*	*11/23/21 00:03*	*5*
Tetrachloro-m-xylene	*82*		*47 - 107*	*11/10/21 10:47*	*11/23/21 00:03*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/10/21 10:52	11/18/21 17:05	1
PCB-1221	ND		33	3.6	ug/Kg		11/10/21 10:52	11/18/21 17:05	1
PCB-1232	ND		33	4.7	ug/Kg		11/10/21 10:52	11/18/21 17:05	1
PCB-1242	ND		33	5.8	ug/Kg		11/10/21 10:52	11/18/21 17:05	1
PCB-1248	ND		33	2.4	ug/Kg		11/10/21 10:52	11/18/21 17:05	1
PCB-1254	ND		33	3.8	ug/Kg		11/10/21 10:52	11/18/21 17:05	1
PCB-1260	ND		33	2.7	ug/Kg		11/10/21 10:52	11/18/21 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*52 - 138*	*11/10/21 10:52*	*11/18/21 17:05*	*1*
Tetrachloro-m-xylene	*62*		*56 - 114*	*11/10/21 10:52*	*11/18/21 17:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.49	0.087	mg/Kg		11/04/21 13:39	11/05/21 12:02	1
Arsenic	**3.4**		1.9	1.3	mg/Kg		11/04/21 13:39	11/05/21 12:02	1
Barium	**130**		0.97	0.12	mg/Kg		11/04/21 13:39	11/05/21 12:02	1
Beryllium	**0.54**		0.19	0.029	mg/Kg		11/04/21 13:39	11/05/21 12:02	1
Cadmium	**0.35**		0.19	0.029	mg/Kg		11/04/21 13:39	11/05/21 12:02	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S7H-0.5
Date Collected: 10/29/21 10:57
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-20
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	5.3		0.49	0.24	mg/Kg		11/04/21 13:39	11/05/21 12:02	1
Chromium	26	B	0.49	0.14	mg/Kg		11/04/21 13:39	11/05/21 12:02	1
Copper	28	B	1.5	0.21	mg/Kg		11/04/21 13:39	11/05/21 12:02	1
Molybdenum	ND		1.9	0.73	mg/Kg		11/04/21 13:39	11/05/21 12:02	1
Nickel	20		0.97	0.23	mg/Kg		11/04/21 13:39	11/05/21 12:02	1
Lead	700		0.97	0.25	mg/Kg		11/04/21 13:39	11/05/21 12:02	1
Selenium	ND		1.9	1.4	mg/Kg		11/04/21 13:39	11/05/21 12:02	1
Antimony	13		1.9	0.91	mg/Kg		11/04/21 13:39	11/05/21 12:02	1
Thallium	ND		1.9	0.82	mg/Kg		11/04/21 13:39	11/05/21 12:02	1
Vanadium	25		0.49	0.18	mg/Kg		11/04/21 13:39	11/05/21 12:02	1
Zinc	150		1.9	0.18	mg/Kg		11/04/21 13:39	11/05/21 12:02	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.085	0.014	mg/Kg		11/12/21 05:53	11/12/21 11:50	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S7H-2
Date Collected: 10/29/21 10:58
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-21
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
Aldrin	ND		1.6	0.14	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
Chlordane (technical)	ND		19	9.1	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
delta-BHC	ND		1.6	0.34	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
Endosulfan sulfate	ND		1.6	0.34	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
Endrin	ND		1.6	0.19	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
Endrin aldehyde	ND		1.6	0.55	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
trans-Chlordane	ND		1.6	0.58	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
gamma-BHC (Lindane)	ND		1.6	0.14	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
Heptachlor	ND		1.6	0.15	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/10/21 11:54	11/21/21 18:55	1
Toxaphene	ND		65	22	ug/Kg		11/10/21 11:54	11/21/21 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*45*	*S1-*	*46 - 109*	*11/10/21 11:54*	*11/21/21 18:55*	*1*
DCB Decachlorobiphenyl	*66*		*46 - 109*	*11/10/21 11:54*	*11/21/21 18:55*	*1*
Tetrachloro-m-xylene	*66*		*47 - 107*	*11/10/21 11:54*	*11/21/21 18:55*	*1*
Tetrachloro-m-xylene	*61*		*47 - 107*	*11/10/21 11:54*	*11/21/21 18:55*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S8H-0.5

Date Collected: 10/29/21 10:59
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-22

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		32	4.3	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
4,4'-DDE	ND		32	3.9	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
4,4'-DDT	ND		32	4.7	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
Aldrin	ND		32	2.6	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
alpha-BHC	ND		32	3.0	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
cis-Chlordane	ND		32	3.4	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
beta-BHC	ND		32	4.1	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
Chlordane (technical)	ND		380	180	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
delta-BHC	ND		32	6.6	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
Dieldrin	ND		32	3.8	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
Endosulfan I	ND		32	3.4	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
Endosulfan II	ND		32	3.4	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
Endosulfan sulfate	ND		32	6.6	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
Endrin	ND		32	3.8	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
Endrin aldehyde	ND		32	11	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
Endrin ketone	ND		32	5.1	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
trans-Chlordane	ND		32	11	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
gamma-BHC (Lindane)	ND		32	2.6	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
Heptachlor	ND		32	2.8	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
Heptachlor epoxide	ND		32	3.4	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
Methoxychlor	ND		64	11	ug/Kg		11/10/21 10:47	11/23/21 00:22	20
Toxaphene	ND		1300	420	ug/Kg		11/10/21 10:47	11/23/21 00:22	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*98*		*46 - 109*	*11/10/21 10:47*	*11/23/21 00:22*	*20*
DCB Decachlorobiphenyl	*73*		*46 - 109*	*11/10/21 10:47*	*11/23/21 00:22*	*20*
Tetrachloro-m-xylene	*116*	*S1+*	*47 - 107*	*11/10/21 10:47*	*11/23/21 00:22*	*20*
Tetrachloro-m-xylene	*81*		*47 - 107*	*11/10/21 10:47*	*11/23/21 00:22*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/10/21 10:52	11/18/21 17:25	1
PCB-1221	ND		31	3.4	ug/Kg		11/10/21 10:52	11/18/21 17:25	1
PCB-1232	ND		31	4.5	ug/Kg		11/10/21 10:52	11/18/21 17:25	1
PCB-1242	ND		31	5.5	ug/Kg		11/10/21 10:52	11/18/21 17:25	1
PCB-1248	ND		31	2.3	ug/Kg		11/10/21 10:52	11/18/21 17:25	1
PCB-1254	ND		31	3.6	ug/Kg		11/10/21 10:52	11/18/21 17:25	1
PCB-1260	ND		31	2.5	ug/Kg		11/10/21 10:52	11/18/21 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*63*		*52 - 138*	*11/10/21 10:52*	*11/18/21 17:25*	*1*
Tetrachloro-m-xylene	*67*		*56 - 114*	*11/10/21 10:52*	*11/18/21 17:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**100**		0.98	0.25	mg/Kg		11/04/21 13:39	11/05/21 12:06	1
Arsenic	**8.0**		2.0	1.3	mg/Kg		11/04/21 13:39	11/05/21 12:06	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S8H-2
Date Collected: 10/29/21 11:00
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-23
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
4,4'-DDT	ND		1.7	0.24	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
Aldrin	ND		1.7	0.14	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
Chlordane (technical)	ND		20	9.2	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
Endrin	ND		1.7	0.20	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
Endrin ketone	ND		1.7	0.26	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
Methoxychlor	ND		3.3	0.55	ug/Kg		11/10/21 11:54	11/21/21 19:14	1
Toxaphene	ND		66	22	ug/Kg		11/10/21 11:54	11/21/21 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*37*	*S1-*	*46 - 109*	*11/10/21 11:54*	*11/21/21 19:14*	*1*
DCB Decachlorobiphenyl	*49*		*46 - 109*	*11/10/21 11:54*	*11/21/21 19:14*	*1*
Tetrachloro-m-xylene	*56*		*47 - 107*	*11/10/21 11:54*	*11/21/21 19:14*	*1*
Tetrachloro-m-xylene	*56*		*47 - 107*	*11/10/21 11:54*	*11/21/21 19:14*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3/AOC8-S9I-0.5

Date Collected: 10/29/21 11:14
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-24

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		17	2.3	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
4,4'-DDE	ND		17	2.1	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
4,4'-DDT	ND		17	2.5	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
Aldrin	ND		17	1.4	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
alpha-BHC	ND		17	1.6	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
cis-Chlordane	ND		17	1.8	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
beta-BHC	ND		17	2.2	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
Chlordane (technical)	ND		200	94	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
delta-BHC	ND		17	3.5	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
Dieldrin	ND		17	2.0	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
Endosulfan I	ND		17	1.8	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
Endosulfan II	ND		17	1.8	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
Endosulfan sulfate	ND		17	3.5	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
Endrin	ND		17	2.0	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
Endrin aldehyde	ND		17	5.7	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
Endrin ketone	ND		17	2.7	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
trans-Chlordane	ND		17	6.0	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
gamma-BHC (Lindane)	ND		17	1.4	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
Heptachlor	ND		17	1.5	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
Heptachlor epoxide	ND		17	1.8	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
Methoxychlor	ND		34	5.6	ug/Kg		11/10/21 10:47	11/23/21 21:06	10
Toxaphene	ND		670	220	ug/Kg		11/10/21 10:47	11/23/21 21:06	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*175*	*S1+*	*46 - 109*	*11/10/21 10:47*	*11/23/21 21:06*	*10*
DCB Decachlorobiphenyl	*68*		*46 - 109*	*11/10/21 10:47*	*11/23/21 21:06*	*10*
Tetrachloro-m-xylene	*88*		*47 - 107*	*11/10/21 10:47*	*11/23/21 21:06*	*10*
Tetrachloro-m-xylene	*63*		*47 - 107*	*11/10/21 10:47*	*11/23/21 21:06*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/10/21 10:52	11/18/21 17:45	1
PCB-1221	ND		33	3.6	ug/Kg		11/10/21 10:52	11/18/21 17:45	1
PCB-1232	ND		33	4.8	ug/Kg		11/10/21 10:52	11/18/21 17:45	1
PCB-1242	ND		33	5.9	ug/Kg		11/10/21 10:52	11/18/21 17:45	1
PCB-1248	ND		33	2.4	ug/Kg		11/10/21 10:52	11/18/21 17:45	1
PCB-1254	ND		33	3.8	ug/Kg		11/10/21 10:52	11/18/21 17:45	1
PCB-1260	ND		33	2.7	ug/Kg		11/10/21 10:52	11/18/21 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*67*		*52 - 138*	*11/10/21 10:52*	*11/18/21 17:45*	*1*
Tetrachloro-m-xylene	*74*		*56 - 114*	*11/10/21 10:52*	*11/18/21 17:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.50	0.089	mg/Kg		11/04/21 13:39	11/05/21 12:09	1
Arsenic	**7.6**		2.0	1.3	mg/Kg		11/04/21 13:39	11/05/21 12:09	1
Barium	**88**		0.99	0.12	mg/Kg		11/04/21 13:39	11/05/21 12:09	1
Beryllium	**0.43**		0.20	0.030	mg/Kg		11/04/21 13:39	11/05/21 12:09	1
Cadmium	**0.25**		0.20	0.030	mg/Kg		11/04/21 13:39	11/05/21 12:09	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3/AOC8-S9I-0.5
Date Collected: 10/29/21 11:14
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-24
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	5.7		0.50	0.25	mg/Kg		11/04/21 13:39	11/05/21 12:09	1
Chromium	23	B	0.50	0.14	mg/Kg		11/04/21 13:39	11/05/21 12:09	1
Copper	17	B	1.5	0.22	mg/Kg		11/04/21 13:39	11/05/21 12:09	1
Molybdenum	ND		2.0	0.74	mg/Kg		11/04/21 13:39	11/05/21 12:09	1
Nickel	17		0.99	0.24	mg/Kg		11/04/21 13:39	11/05/21 12:09	1
Lead	190		0.99	0.26	mg/Kg		11/04/21 13:39	11/05/21 12:09	1
Selenium	ND		2.0	1.4	mg/Kg		11/04/21 13:39	11/05/21 12:09	1
Antimony	8.9		2.0	0.93	mg/Kg		11/04/21 13:39	11/05/21 12:09	1
Thallium	0.85	J	2.0	0.83	mg/Kg		11/04/21 13:39	11/05/21 12:09	1
Vanadium	25		0.50	0.19	mg/Kg		11/04/21 13:39	11/05/21 12:09	1
Zinc	170		2.0	0.19	mg/Kg		11/04/21 13:39	11/05/21 12:09	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.082	0.013	mg/Kg		11/12/21 05:53	11/12/21 11:52	1

Client Sample ID: AOC3/AOC8-S9I-0.5 DUP

Lab Sample ID: 320-81044-25

Date Collected: 10/29/21 11:14

Matrix: Solid

Date Received: 10/29/21 14:21

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		16	2.2	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
4,4'-DDE	ND		16	2.0	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
4,4'-DDT	ND		16	2.4	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
Aldrin	ND		16	1.3	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
alpha-BHC	ND		16	1.5	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
cis-Chlordane	ND		16	1.7	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
beta-BHC	ND		16	2.1	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
Chlordane (technical)	ND		190	89	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
delta-BHC	ND		16	3.3	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
Dieldrin	ND		16	1.9	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
Endosulfan I	ND		16	1.7	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
Endosulfan II	ND		16	1.7	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
Endosulfan sulfate	ND		16	3.3	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
Endrin	ND		16	1.9	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
Endrin aldehyde	ND		16	5.4	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
Endrin ketone	ND		16	2.6	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
trans-Chlordane	ND		16	5.7	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
gamma-BHC (Lindane)	ND		16	1.3	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
Heptachlor	ND		16	1.4	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
Heptachlor epoxide	ND		16	1.7	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
Methoxychlor	ND		32	5.3	ug/Kg		11/10/21 10:47	11/23/21 21:25	10
Toxaphene	ND		640	210	ug/Kg		11/10/21 10:47	11/23/21 21:25	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*46 - 109*	*11/10/21 10:47*	*11/23/21 21:25*	*10*
DCB Decachlorobiphenyl	*46*		*46 - 109*	*11/10/21 10:47*	*11/23/21 21:25*	*10*
Tetrachloro-m-xylene	*90*		*47 - 107*	*11/10/21 10:47*	*11/23/21 21:25*	*10*
Tetrachloro-m-xylene	*64*		*47 - 107*	*11/10/21 10:47*	*11/23/21 21:25*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/10/21 10:52	11/18/21 18:05	1
PCB-1221	ND		31	3.4	ug/Kg		11/10/21 10:52	11/18/21 18:05	1
PCB-1232	ND		31	4.6	ug/Kg		11/10/21 10:52	11/18/21 18:05	1
PCB-1242	ND		31	5.6	ug/Kg		11/10/21 10:52	11/18/21 18:05	1
PCB-1248	ND		31	2.3	ug/Kg		11/10/21 10:52	11/18/21 18:05	1
PCB-1254	ND		31	3.6	ug/Kg		11/10/21 10:52	11/18/21 18:05	1
PCB-1260	ND		31	2.6	ug/Kg		11/10/21 10:52	11/18/21 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*73*		*52 - 138*	*11/10/21 10:52*	*11/18/21 18:05*	*1*
Tetrachloro-m-xylene	*75*		*56 - 114*	*11/10/21 10:52*	*11/18/21 18:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.49	0.088	mg/Kg		11/04/21 13:39	11/05/21 12:13	1
Arsenic	**4.4**		2.0	1.3	mg/Kg		11/04/21 13:39	11/05/21 12:13	1
Barium	**150**		0.98	0.12	mg/Kg		11/04/21 13:39	11/05/21 12:13	1
Beryllium	**0.49**		0.20	0.029	mg/Kg		11/04/21 13:39	11/05/21 12:13	1
Cadmium	**0.15**	**J**	0.20	0.029	mg/Kg		11/04/21 13:39	11/05/21 12:13	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3/AOC8-S9I-0.5 DUP

Lab Sample ID: 320-81044-25

Date Collected: 10/29/21 11:14

Matrix: Solid

Date Received: 10/29/21 14:21

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	4.3		0.49	0.25	mg/Kg		11/04/21 13:39	11/05/21 12:13	1
Chromium	28	B	0.49	0.14	mg/Kg		11/04/21 13:39	11/05/21 12:13	1
Copper	15	B	1.5	0.22	mg/Kg		11/04/21 13:39	11/05/21 12:13	1
Molybdenum	ND		2.0	0.74	mg/Kg		11/04/21 13:39	11/05/21 12:13	1
Nickel	16		0.98	0.24	mg/Kg		11/04/21 13:39	11/05/21 12:13	1
Lead	250		0.98	0.25	mg/Kg		11/04/21 13:39	11/05/21 12:13	1
Selenium	ND		2.0	1.4	mg/Kg		11/04/21 13:39	11/05/21 12:13	1
Antimony	11		2.0	0.92	mg/Kg		11/04/21 13:39	11/05/21 12:13	1
Thallium	ND		2.0	0.82	mg/Kg		11/04/21 13:39	11/05/21 12:13	1
Vanadium	22		0.49	0.19	mg/Kg		11/04/21 13:39	11/05/21 12:13	1
Zinc	74		2.0	0.19	mg/Kg		11/04/21 13:39	11/05/21 12:13	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20		0.083	0.014	mg/Kg		11/11/21 16:15	11/12/21 13:41	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3/AOC8-S9I-2
Date Collected: 10/29/21 11:15
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-26
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.2	0.44	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
4,4'-DDE	ND		3.2	0.40	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
4,4'-DDT	ND		3.2	0.48	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
Aldrin	ND		3.2	0.27	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
alpha-BHC	ND		3.2	0.31	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
cis-Chlordane	ND		3.2	0.34	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
beta-BHC	ND		3.2	0.42	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
Chlordane (technical)	ND		38	18	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
delta-BHC	ND		3.2	0.67	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
Dieldrin	ND		3.2	0.38	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
Endosulfan I	ND		3.2	0.34	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
Endosulfan II	ND		3.2	0.34	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
Endosulfan sulfate	ND		3.2	0.67	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
Endrin	ND		3.2	0.38	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
Endrin aldehyde	ND		3.2	1.1	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
Endrin ketone	ND		3.2	0.52	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
trans-Chlordane	ND		3.2	1.1	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
gamma-BHC (Lindane)	ND		3.2	0.27	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
Heptachlor	ND		3.2	0.29	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
Heptachlor epoxide	ND		3.2	0.34	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
Methoxychlor	ND		6.5	1.1	ug/Kg		11/10/21 11:54	11/21/21 19:33	2
Toxaphene	ND		130	43	ug/Kg		11/10/21 11:54	11/21/21 19:33	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*47*		*46 - 109*	*11/10/21 11:54*	*11/21/21 19:33*	*2*
DCB Decachlorobiphenyl	*34*	*S1-*	*46 - 109*	*11/10/21 11:54*	*11/21/21 19:33*	*2*
Tetrachloro-m-xylene	*65*		*47 - 107*	*11/10/21 11:54*	*11/21/21 19:33*	*2*
Tetrachloro-m-xylene	*60*		*47 - 107*	*11/10/21 11:54*	*11/21/21 19:33*	*2*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S8H-0.5

Date Collected: 10/29/21 11:16
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-27

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		32	4.4	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
4,4'-DDE	ND		32	4.0	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
4,4'-DDT	ND	F1	32	4.7	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
Aldrin	ND		32	2.7	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
alpha-BHC	ND		32	3.0	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
cis-Chlordane	ND		32	3.4	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
beta-BHC	ND		32	4.2	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
Chlordane (technical)	ND		380	180	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
delta-BHC	ND		32	6.6	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
Dieldrin	ND		32	3.8	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
Endosulfan I	ND	F1	32	3.4	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
Endosulfan II	ND		32	3.4	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
Endosulfan sulfate	ND	F1	32	6.6	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
Endrin	ND		32	3.8	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
Endrin aldehyde	ND	F1	32	11	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
Endrin ketone	ND		32	5.1	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
trans-Chlordane	ND	F2 F1	32	11	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
gamma-BHC (Lindane)	ND		32	2.7	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
Heptachlor	ND		32	2.8	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
Heptachlor epoxide	ND		32	3.4	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
Methoxychlor	ND	F1	65	11	ug/Kg		11/10/21 10:47	11/23/21 21:44	20
Toxaphene	ND		1300	430	ug/Kg		11/10/21 10:47	11/23/21 21:44	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*135*	*S1+*	*46 - 109*	*11/10/21 10:47*	*11/23/21 21:44*	*20*
DCB Decachlorobiphenyl	*13*	*S1-*	*46 - 109*	*11/10/21 10:47*	*11/23/21 21:44*	*20*
Tetrachloro-m-xylene	*97*		*47 - 107*	*11/10/21 10:47*	*11/23/21 21:44*	*20*
Tetrachloro-m-xylene	*48*		*47 - 107*	*11/10/21 10:47*	*11/23/21 21:44*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/10/21 10:52	11/18/21 18:25	1
PCB-1221	ND		31	3.4	ug/Kg		11/10/21 10:52	11/18/21 18:25	1
PCB-1232	ND		31	4.6	ug/Kg		11/10/21 10:52	11/18/21 18:25	1
PCB-1242	ND		31	5.6	ug/Kg		11/10/21 10:52	11/18/21 18:25	1
PCB-1248	ND		31	2.3	ug/Kg		11/10/21 10:52	11/18/21 18:25	1
PCB-1254	ND		31	3.6	ug/Kg		11/10/21 10:52	11/18/21 18:25	1
PCB-1260	ND		31	2.6	ug/Kg		11/10/21 10:52	11/18/21 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*58*		*52 - 138*	*11/10/21 10:52*	*11/18/21 18:25*	*1*
Tetrachloro-m-xylene	*67*		*56 - 114*	*11/10/21 10:52*	*11/18/21 18:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**14**		0.98	0.25	mg/Kg		11/04/21 13:39	11/05/21 12:24	1
Arsenic	**2.1**		2.0	1.3	mg/Kg		11/04/21 13:39	11/05/21 12:24	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S8H-2
Date Collected: 10/29/21 11:17
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-28
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
Aldrin	ND		1.6	0.13	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
Chlordane (technical)	ND		19	9.0	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
Endrin	ND		1.6	0.19	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
Endrin aldehyde	ND		1.6	0.54	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
trans-Chlordane	ND		1.6	0.57	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
Methoxychlor	ND		3.3	0.54	ug/Kg		11/10/21 11:54	11/21/21 19:52	1
Toxaphene	ND		64	21	ug/Kg		11/10/21 11:54	11/21/21 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*44*	*S1-*	*46 - 109*	*11/10/21 11:54*	*11/21/21 19:52*	*1*
DCB Decachlorobiphenyl	*44*	*S1-*	*46 - 109*	*11/10/21 11:54*	*11/21/21 19:52*	*1*
Tetrachloro-m-xylene	*63*		*47 - 107*	*11/10/21 11:54*	*11/21/21 19:52*	*1*
Tetrachloro-m-xylene	*59*		*47 - 107*	*11/10/21 11:54*	*11/21/21 19:52*	*1*

Client Sample ID: AOC3-S7I-0.5

Date Collected: 10/29/21 11:18
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-29

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		32	4.3	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
4,4'-DDE	ND		32	3.9	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
4,4'-DDT	ND		32	4.7	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
Aldrin	ND		32	2.6	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
alpha-BHC	ND		32	3.0	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
cis-Chlordane	ND		32	3.4	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
beta-BHC	ND		32	4.1	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
Chlordane (technical)	ND		380	180	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
delta-BHC	ND		32	6.6	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
Dieldrin	ND		32	3.8	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
Endosulfan I	ND		32	3.4	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
Endosulfan II	ND		32	3.4	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
Endosulfan sulfate	ND		32	6.6	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
Endrin	ND		32	3.8	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
Endrin aldehyde	ND		32	11	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
Endrin ketone	ND		32	5.1	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
trans-Chlordane	ND		32	11	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
gamma-BHC (Lindane)	ND		32	2.6	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
Heptachlor	ND		32	2.8	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
Heptachlor epoxide	ND		32	3.4	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
Methoxychlor	ND		64	11	ug/Kg		11/10/21 10:47	11/23/21 22:41	20
Toxaphene	ND		1300	420	ug/Kg		11/10/21 10:47	11/23/21 22:41	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/10/21 10:47*	*11/23/21 22:41*	*20*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/10/21 10:47*	*11/23/21 22:41*	*20*
Tetrachloro-m-xylene	*92*		*47 - 107*	*11/10/21 10:47*	*11/23/21 22:41*	*20*
Tetrachloro-m-xylene	*53*		*47 - 107*	*11/10/21 10:47*	*11/23/21 22:41*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	F1	31	2.4	ug/Kg		11/10/21 10:52	11/18/21 18:45	1
PCB-1221	ND		31	3.4	ug/Kg		11/10/21 10:52	11/18/21 18:45	1
PCB-1232	ND		31	4.5	ug/Kg		11/10/21 10:52	11/18/21 18:45	1
PCB-1242	ND		31	5.5	ug/Kg		11/10/21 10:52	11/18/21 18:45	1
PCB-1248	ND		31	2.3	ug/Kg		11/10/21 10:52	11/18/21 18:45	1
PCB-1254	ND		31	3.6	ug/Kg		11/10/21 10:52	11/18/21 18:45	1
PCB-1260	ND	F1	31	2.5	ug/Kg		11/10/21 10:52	11/18/21 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*51*	*S1-*	*52 - 138*	*11/10/21 10:52*	*11/18/21 18:45*	*1*
Tetrachloro-m-xylene	*56*		*56 - 114*	*11/10/21 10:52*	*11/18/21 18:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**110**		0.98	0.25	mg/Kg		11/04/21 13:39	11/05/21 10:42	1
Arsenic	**4.1**		2.0	1.3	mg/Kg		11/04/21 13:39	11/05/21 10:42	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S7I-2
Date Collected: 10/29/21 11:19
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-30
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
Aldrin	ND		1.7	0.14	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
Endrin	ND		1.7	0.20	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/10/21 11:54	11/21/21 20:11	1
Toxaphene	ND		67	22	ug/Kg		11/10/21 11:54	11/21/21 20:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*40*	*S1-*	*46 - 109*	*11/10/21 11:54*	*11/21/21 20:11*	*1*
DCB Decachlorobiphenyl	*49*		*46 - 109*	*11/10/21 11:54*	*11/21/21 20:11*	*1*
Tetrachloro-m-xylene	*57*		*47 - 107*	*11/10/21 11:54*	*11/21/21 20:11*	*1*
Tetrachloro-m-xylene	*55*		*47 - 107*	*11/10/21 11:54*	*11/21/21 20:11*	*1*

Client Sample ID: EB10292021

Date Collected: 10/29/21 12:00
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-31

Matrix: Water

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.049	0.012	ug/L		11/05/21 09:34	11/13/21 00:03	1
4,4'-DDE	ND		0.049	0.012	ug/L		11/05/21 09:34	11/13/21 00:03	1
4,4'-DDT	ND		0.049	0.012	ug/L		11/05/21 09:34	11/13/21 00:03	1
Aldrin	ND		0.049	0.0059	ug/L		11/05/21 09:34	11/13/21 00:03	1
alpha-BHC	ND		0.049	0.0069	ug/L		11/05/21 09:34	11/13/21 00:03	1
beta-BHC	ND		0.049	0.016	ug/L		11/05/21 09:34	11/13/21 00:03	1
gamma-BHC (Lindane)	ND		0.049	0.013	ug/L		11/05/21 09:34	11/13/21 00:03	1
delta-BHC	ND		0.049	0.023	ug/L		11/05/21 09:34	11/13/21 00:03	1
cis-Chlordane	ND		0.049	0.022	ug/L		11/05/21 09:34	11/13/21 00:03	1
trans-Chlordane	ND		0.049	0.012	ug/L		11/05/21 09:34	11/13/21 00:03	1
Dieldrin	ND		0.049	0.012	ug/L		11/05/21 09:34	11/13/21 00:03	1
Endosulfan I	ND		0.049	0.014	ug/L		11/05/21 09:34	11/13/21 00:03	1
Endosulfan II	ND		0.049	0.012	ug/L		11/05/21 09:34	11/13/21 00:03	1
Endosulfan sulfate	ND		0.049	0.012	ug/L		11/05/21 09:34	11/13/21 00:03	1
Endrin	ND		0.049	0.012	ug/L		11/05/21 09:34	11/13/21 00:03	1
Endrin aldehyde	ND		0.099	0.025	ug/L		11/05/21 09:34	11/13/21 00:03	1
Endrin ketone	ND		0.099	0.020	ug/L		11/05/21 09:34	11/13/21 00:03	1
Heptachlor	ND		0.049	0.0069	ug/L		11/05/21 09:34	11/13/21 00:03	1
Heptachlor epoxide	ND		0.049	0.014	ug/L		11/05/21 09:34	11/13/21 00:03	1
Methoxychlor	ND		0.099	0.041	ug/L		11/05/21 09:34	11/13/21 00:03	1
Toxaphene	ND		2.0	0.50	ug/L		11/05/21 09:34	11/13/21 00:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*44 - 114*	*11/05/21 09:34*	*11/13/21 00:03*	*1*
Tetrachloro-m-xylene	*76*		*44 - 114*	*11/05/21 09:34*	*11/13/21 00:03*	*1*
DCB Decachlorobiphenyl	*38*		*12 - 131*	*11/05/21 09:34*	*11/13/21 00:03*	*1*
DCB Decachlorobiphenyl	*62*		*12 - 131*	*11/05/21 09:34*	*11/13/21 00:03*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.010	0.0058	mg/L		11/10/21 14:08	11/12/21 17:27	1
Arsenic	ND		0.10	0.022	mg/L		11/10/21 14:08	11/12/21 17:27	1
Barium	ND		0.010	0.0016	mg/L		11/10/21 14:08	11/12/21 17:27	1
Beryllium	ND		0.010	0.0026	mg/L		11/10/21 14:08	11/12/21 17:27	1
Cadmium	ND		0.010	0.0012	mg/L		11/10/21 14:08	11/12/21 17:27	1
Cobalt	ND		0.050	0.0023	mg/L		11/10/21 14:08	11/12/21 17:27	1
Chromium	ND		0.050	0.0086	mg/L		11/10/21 14:08	11/12/21 17:27	1
Copper	ND		0.050	0.0085	mg/L		11/10/21 14:08	11/12/21 17:27	1
Molybdenum	ND		0.050	0.024	mg/L		11/10/21 14:08	11/12/21 17:27	1
Nickel	ND		0.050	0.0045	mg/L		11/10/21 14:08	11/12/21 17:27	1
Antimony	ND		0.10	0.021	mg/L		11/10/21 14:08	11/12/21 17:27	1
Selenium	ND		0.10	0.034	mg/L		11/10/21 14:08	11/12/21 17:27	1
Thallium	ND		0.050	0.019	mg/L		11/10/21 14:08	11/12/21 17:27	1
Vanadium	ND		0.010	0.0017	mg/L		11/10/21 14:08	11/12/21 17:27	1
Zinc	ND		0.25	0.014	mg/L		11/10/21 14:08	11/12/21 17:27	1
Lead	ND		0.050	0.0080	mg/L		11/10/21 14:08	11/12/21 17:27	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00050	0.00014	mg/L		11/12/21 06:21	11/12/21 12:47	1

Surrogate Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCBP1 (46-109)	DCBP2 (46-109)	TCX1 (47-107)	TCX2 (47-107)
320-81044-1	AOC3-S1I-0.5	83	74	124 S1+	103
320-81044-2	AOC3-S1I-2	47	41 S1-	73	70
320-81044-3	AOC3-S2I-0.5	0 S1-	0 S1-	144 S1+	82
320-81044-4	AOC3-S2I-2	55	33 S1-	64	59
320-81044-5	AOC3-S6I-0.5	80	56	108 S1+	71
320-81044-6	AOC3-S6I-0.5-DUP	72	78	109 S1+	66
320-81044-7	AOC3-S6I-2	40 S1-	36 S1-	57	55
320-81044-8	AOC3-S8F-0.5	74	54	106	92
320-81044-9	AOC3-S8F-2	44 S1-	47	68	69
320-81044-10	AOC3-S9G-0.5	64	52	82	71
320-81044-11	AOC3-S9G-2	48	44 S1-	62	63
320-81044-12	AOC3-S7F-0.5	86	47	103	71
320-81044-13	AOC3-S7F-2	66	63	101	77
320-81044-14	AOC3-S8G-0.5	68	59	116 S1+	74
320-81044-15	AOC3-S8G-2	69	55	106	89
320-81044-16	AOC3-S7G-0.5	80	61	109 S1+	69
320-81044-17	AOC3-S7G-2	41 S1-	62	63	60
320-81044-17 MS	AOC3-S7G-2	45 S1-		68	
320-81044-17 MSD	AOC3-S7G-2	46		65	
320-81044-18	AOC3/AOC8-S6H-0.5	90	66	119 S1+	82
320-81044-19	AOC3/AOC8-S6H-2	37 S1-	55	56	57
320-81044-20	AOC3-S7H-0.5	61	57	92	82
320-81044-21	AOC3-S7H-2	45 S1-	66	66	61
320-81044-22	AOC3-S8H-0.5	98	73	116 S1+	81
320-81044-23	AOC3-S8H-2	37 S1-	49	56	56
320-81044-24	AOC3/AOC8-S9I-0.5	175 S1+	68	88	63
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	96	46	90	64
320-81044-26	AOC3/AOC8-S9I-2	47	34 S1-	65	60
320-81044-27	AOC3-S8H-0.5	135 S1+	13 S1-	97	48
320-81044-27 MS	AOC3-S8H-0.5		0 S1-		44 S1-
320-81044-27 MSD	AOC3-S8H-0.5		4 S1-		45 S1-
320-81044-28	AOC3-S8H-2	44 S1-	44 S1-	63	59
320-81044-29	AOC3-S7I-0.5	0 S1-	0 S1-	92	53
320-81044-30	AOC3-S7I-2	40 S1-	49	57	55
LCS 320-541359/2-A	Lab Control Sample	52 p		77	
LCS 320-541556/2-A	Lab Control Sample	48		79	
LCS 320-541586/2-A	Lab Control Sample	47		79	
MB 320-541359/1-A	Method Blank	64	90	76	72
MB 320-541556/1-A	Method Blank	55	77	73	75
MB 320-541586/1-A	Method Blank	57	83	71	72

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Ninyo & Moore
Job ID: 320-81044-1
Project/Site: Cole School PEA

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCBP1	DCBP2
Lab Sample ID	Client Sample ID	(44-114)	(44-114)	(12-131)	(12-131)
320-81044-31	EB10292021	76	76	38	62
LCS 320-540231/2-A	Lab Control Sample	76		50	
LCSD 320-540231/3-A	Lab Control Sample Dup	79		49	
MB 320-540231/1-A	Method Blank	74	74	45	53

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX2
Lab Sample ID	Client Sample ID	(52-138)	(56-114)
320-81044-1	AOC3-S1I-0.5	72	75
320-81044-3	AOC3-S2I-0.5	85	77
320-81044-5	AOC3-S6I-0.5	53	56
320-81044-6	AOC3-S6I-0.5-DUP	47 S1-	52 S1-
320-81044-8	AOC3-S8F-0.5	51 S1-	59
320-81044-10	AOC3-S9G-0.5	62	61
320-81044-12	AOC3-S7F-0.5	65	66
320-81044-14	AOC3-S8G-0.5	64	69
320-81044-16	AOC3-S7G-0.5	55	60
320-81044-18	AOC3/AOC8-S6H-0.5	71	74
320-81044-20	AOC3-S7H-0.5	56	62
320-81044-22	AOC3-S8H-0.5	63	67
320-81044-24	AOC3/AOC8-S9I-0.5	67	74
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	73	75
320-81044-27	AOC3-S8H-0.5	58	67
320-81044-29	AOC3-S7I-0.5	51 S1-	56
320-81044-29 MS	AOC3-S7I-0.5	45 S1-	49 S1-
320-81044-29 MSD	AOC3-S7I-0.5	48 S1-	55 S1-
LCS 320-541557/2-A	Lab Control Sample	81	71
MB 320-541557/1-A	Method Blank	73	64

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 320-540231/1-A
Matrix: Water
Analysis Batch: 542188

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540231

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.025	0.0060	ug/L		11/05/21 09:34	11/12/21 22:48	1
4,4'-DDE	ND		0.025	0.0060	ug/L		11/05/21 09:34	11/12/21 22:48	1
4,4'-DDT	ND		0.025	0.0060	ug/L		11/05/21 09:34	11/12/21 22:48	1
Aldrin	ND		0.025	0.0030	ug/L		11/05/21 09:34	11/12/21 22:48	1
alpha-BHC	ND		0.025	0.0035	ug/L		11/05/21 09:34	11/12/21 22:48	1
beta-BHC	ND		0.025	0.0080	ug/L		11/05/21 09:34	11/12/21 22:48	1
cis-Chlordane	ND		0.025	0.011	ug/L		11/05/21 09:34	11/12/21 22:48	1
delta-BHC	ND		0.025	0.012	ug/L		11/05/21 09:34	11/12/21 22:48	1
Dieldrin	ND		0.025	0.0060	ug/L		11/05/21 09:34	11/12/21 22:48	1
Endosulfan I	ND		0.025	0.0070	ug/L		11/05/21 09:34	11/12/21 22:48	1
Endosulfan II	ND		0.025	0.0060	ug/L		11/05/21 09:34	11/12/21 22:48	1
Endosulfan sulfate	ND		0.025	0.0060	ug/L		11/05/21 09:34	11/12/21 22:48	1
Endrin	ND		0.025	0.0060	ug/L		11/05/21 09:34	11/12/21 22:48	1
Endrin aldehyde	ND		0.050	0.013	ug/L		11/05/21 09:34	11/12/21 22:48	1
Endrin ketone	ND		0.050	0.010	ug/L		11/05/21 09:34	11/12/21 22:48	1
trans-Chlordane	ND		0.025	0.0060	ug/L		11/05/21 09:34	11/12/21 22:48	1
gamma-BHC (Lindane)	ND		0.025	0.0065	ug/L		11/05/21 09:34	11/12/21 22:48	1
Heptachlor	ND		0.025	0.0035	ug/L		11/05/21 09:34	11/12/21 22:48	1
Heptachlor epoxide	ND		0.025	0.0070	ug/L		11/05/21 09:34	11/12/21 22:48	1
Methoxychlor	ND		0.050	0.021	ug/L		11/05/21 09:34	11/12/21 22:48	1
Toxaphene	ND		1.0	0.26	ug/L		11/05/21 09:34	11/12/21 22:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*45*		*12 - 131*	*11/05/21 09:34*	*11/12/21 22:48*	*1*
DCB Decachlorobiphenyl	*53*		*12 - 131*	*11/05/21 09:34*	*11/12/21 22:48*	*1*
Tetrachloro-m-xylene	*74*		*44 - 114*	*11/05/21 09:34*	*11/12/21 22:48*	*1*
Tetrachloro-m-xylene	*74*		*44 - 114*	*11/05/21 09:34*	*11/12/21 22:48*	*1*

Lab Sample ID: LCS 320-540231/2-A
Matrix: Water
Analysis Batch: 542188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540231

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.500	0.433		ug/L		87	65 - 141
4,4'-DDE	0.500	0.406		ug/L		81	60 - 134
4,4'-DDT	0.500	0.420		ug/L		84	69 - 127
Aldrin	0.500	0.390		ug/L		78	56 - 119
alpha-BHC	0.500	0.400		ug/L		80	63 - 137
beta-BHC	0.500	0.417		ug/L		83	64 - 125
cis-Chlordane	0.500	0.403		ug/L		81	63 - 127
delta-BHC	0.500	0.416		ug/L		83	61 - 140
Dieldrin	0.500	0.410		ug/L		82	63 - 135
Endosulfan I	0.500	0.330		ug/L		66	37 - 133
Endosulfan II	0.500	0.386		ug/L		77	54 - 126
Endosulfan sulfate	0.500	0.427		ug/L		85	59 - 124
Endrin	0.500	0.413		ug/L		83	67 - 136
Endrin aldehyde	0.500	0.346		ug/L		69	41 - 112
Endrin ketone	0.500	0.405		ug/L		81	57 - 128

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 320-540231/2-A
Matrix: Water
Analysis Batch: 542188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540231

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-Chlordane	0.500	0.397		ug/L		79	59 - 128
gamma-BHC (Lindane)	0.500	0.413		ug/L		83	68 - 135
Heptachlor	0.500	0.385		ug/L		77	63 - 126
Heptachlor epoxide	0.500	0.397		ug/L		79	67 - 129
Methoxychlor	0.500	0.423		ug/L		85	71 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*50*		*12 - 131*
Tetrachloro-m-xylene	*76*		*44 - 114*

Lab Sample ID: LCSD 320-540231/3-A
Matrix: Water
Analysis Batch: 542188

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540231

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.500	0.462		ug/L		92	65 - 141	7	30
4,4'-DDE	0.500	0.432		ug/L		86	60 - 134	6	30
4,4'-DDT	0.500	0.447		ug/L		89	69 - 127	6	30
Aldrin	0.500	0.393		ug/L		79	56 - 119	1	30
alpha-BHC	0.500	0.427		ug/L		85	63 - 137	6	30
beta-BHC	0.500	0.444		ug/L		89	64 - 125	6	30
cis-Chlordane	0.500	0.432		ug/L		86	63 - 127	7	30
delta-BHC	0.500	0.442		ug/L		88	61 - 140	6	30
Dieldrin	0.500	0.440		ug/L		88	63 - 135	7	30
Endosulfan I	0.500	0.356		ug/L		71	37 - 133	8	30
Endosulfan II	0.500	0.410		ug/L		82	54 - 126	6	30
Endosulfan sulfate	0.500	0.453		ug/L		91	59 - 124	6	30
Endrin	0.500	0.441		ug/L		88	67 - 136	7	30
Endrin aldehyde	0.500	0.368		ug/L		74	41 - 112	6	30
Endrin ketone	0.500	0.433		ug/L		87	57 - 128	7	30
trans-Chlordane	0.500	0.424		ug/L		85	59 - 128	7	30
gamma-BHC (Lindane)	0.500	0.440		ug/L		88	68 - 135	6	30
Heptachlor	0.500	0.396		ug/L		79	63 - 126	3	30
Heptachlor epoxide	0.500	0.427		ug/L		85	67 - 129	7	30
Methoxychlor	0.500	0.448		ug/L		90	71 - 125	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*49*		*12 - 131*
Tetrachloro-m-xylene	*79*		*44 - 114*

Lab Sample ID: MB 320-541359/1-A
Matrix: Solid
Analysis Batch: 544089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541359

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
4,4'-DDE	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
4,4'-DDT	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 320-541359/1-A
Matrix: Solid
Analysis Batch: 544089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541359

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
alpha-BHC	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
beta-BHC	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Chlordane (technical)	ND		20		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
cis-Chlordane	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
delta-BHC	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Dieldrin	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Endosulfan I	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Endosulfan II	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Endosulfan sulfate	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Endrin	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Endrin aldehyde	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Endrin ketone	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
trans-Chlordane	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
gamma-BHC (Lindane)	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Heptachlor	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Heptachlor epoxide	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Methoxychlor	ND		3.4		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Toxaphene	ND		67		ug/Kg		11/09/21 14:45	11/19/21 13:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*64*		*46 - 109*	*11/09/21 14:45*	*11/19/21 13:40*	*1*
DCB Decachlorobiphenyl	*90*		*46 - 109*	*11/09/21 14:45*	*11/19/21 13:40*	*1*
Tetrachloro-m-xylene	*76*		*47 - 107*	*11/09/21 14:45*	*11/19/21 13:40*	*1*
Tetrachloro-m-xylene	*72*		*47 - 107*	*11/09/21 14:45*	*11/19/21 13:40*	*1*

Lab Sample ID: LCS 320-541359/2-A
Matrix: Solid
Analysis Batch: 544089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541359

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	13.0		ug/Kg		78	53 - 117
4,4'-DDE	16.7	13.4		ug/Kg		80	58 - 115
4,4'-DDT	16.7	14.3		ug/Kg		86	53 - 128
Aldrin	16.7	13.0		ug/Kg		78	55 - 109
alpha-BHC	16.7	13.1		ug/Kg		78	54 - 111
beta-BHC	16.7	12.8		ug/Kg		77	53 - 115
cis-Chlordane	16.7	12.4		ug/Kg		75	54 - 113
delta-BHC	16.7	13.0		ug/Kg		78	39 - 124
Dieldrin	16.7	13.2		ug/Kg		79	54 - 117
Endosulfan I	16.7	11.1		ug/Kg		66	42 - 118
Endosulfan II	16.7	12.5		ug/Kg		75	48 - 118
Endosulfan sulfate	16.7	14.0		ug/Kg		84	51 - 113
Endrin	16.7	13.4		ug/Kg		80	58 - 115
Endrin aldehyde	16.7	12.8		ug/Kg		77	40 - 100
Endrin ketone	16.7	13.3		ug/Kg		80	51 - 118
trans-Chlordane	16.7	12.2		ug/Kg		73	55 - 114
gamma-BHC (Lindane)	16.7	13.1		ug/Kg		78	54 - 112

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 320-541359/2-A
Matrix: Solid
Analysis Batch: 544089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541359

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Heptachlor	16.7	12.8		ug/Kg		77	50 - 118
Heptachlor epoxide	16.7	12.7		ug/Kg		76	56 - 113
Methoxychlor	16.7	14.1		ug/Kg		84	52 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*52*	*p*	*46 - 109*
Tetrachloro-m-xylene	*77*		*47 - 107*

Lab Sample ID: MB 320-541556/1-A
Matrix: Solid
Analysis Batch: 544910

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541556

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
Aldrin	ND		1.7	0.14	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
Endrin	ND		1.7	0.20	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/10/21 10:47	11/22/21 15:28	1
Toxaphene	ND		67	22	ug/Kg		11/10/21 10:47	11/22/21 15:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*46 - 109*	*11/10/21 10:47*	*11/22/21 15:28*	*1*
DCB Decachlorobiphenyl	*77*		*46 - 109*	*11/10/21 10:47*	*11/22/21 15:28*	*1*
Tetrachloro-m-xylene	*73*		*47 - 107*	*11/10/21 10:47*	*11/22/21 15:28*	*1*
Tetrachloro-m-xylene	*75*		*47 - 107*	*11/10/21 10:47*	*11/22/21 15:28*	*1*

Lab Sample ID: LCS 320-541556/2-A
Matrix: Solid
Analysis Batch: 544910

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541556

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	13.5		ug/Kg		81	53 - 117

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 320-541556/2-A
Matrix: Solid
Analysis Batch: 544910

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541556

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDE	16.7	13.8		ug/Kg		83	58 - 115
4,4'-DDT	16.7	14.4		ug/Kg		86	53 - 128
Aldrin	16.7	13.3		ug/Kg		80	55 - 109
alpha-BHC	16.7	13.4		ug/Kg		80	54 - 111
beta-BHC	16.7	13.3		ug/Kg		80	53 - 115
cis-Chlordane	16.7	12.8		ug/Kg		77	54 - 113
delta-BHC	16.7	13.4		ug/Kg		80	39 - 124
Dieldrin	16.7	13.6		ug/Kg		82	54 - 117
Endosulfan I	16.7	11.2		ug/Kg		67	42 - 118
Endosulfan II	16.7	12.8		ug/Kg		77	48 - 118
Endosulfan sulfate	16.7	13.9		ug/Kg		84	51 - 113
Endrin	16.7	13.9		ug/Kg		83	58 - 115
Endrin aldehyde	16.7	12.9		ug/Kg		78	40 - 100
Endrin ketone	16.7	13.8		ug/Kg		83	51 - 118
trans-Chlordane	16.7	12.5		ug/Kg		75	55 - 114
gamma-BHC (Lindane)	16.7	13.4		ug/Kg		81	54 - 112
Heptachlor	16.7	13.1		ug/Kg		79	50 - 118
Heptachlor epoxide	16.7	13.0		ug/Kg		78	56 - 113
Methoxychlor	16.7	14.3		ug/Kg		86	52 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*48*		*46 - 109*
Tetrachloro-m-xylene	*79*		*47 - 107*

Lab Sample ID: 320-81044-27 MS
Matrix: Solid
Analysis Batch: 545312

Client Sample ID: AOC3-S8H-0.5
Prep Type: Total/NA
Prep Batch: 541556

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.6	13.3	J	ug/Kg		80	53 - 117
4,4'-DDE	ND		16.6	10.9	J	ug/Kg		66	58 - 115
4,4'-DDT	ND	F1	16.6	7.93	J F1	ug/Kg		48	53 - 128
Aldrin	ND		16.6	10.7	J	ug/Kg		64	55 - 109
alpha-BHC	ND		16.6	11.4	J	ug/Kg		69	54 - 111
beta-BHC	ND		16.6	10.7	J	ug/Kg		64	53 - 115
cis-Chlordane	ND		16.6	10.2	J	ug/Kg		61	54 - 113
delta-BHC	ND		16.6	11.1	J	ug/Kg		67	39 - 124
Dieldrin	ND		16.6	10.1	J	ug/Kg		61	54 - 117
Endosulfan I	ND	F1	16.6	6.34	J F1	ug/Kg		38	42 - 118
Endosulfan II	ND		16.6	8.58	J	ug/Kg		52	48 - 118
Endosulfan sulfate	ND	F1	16.6	ND	F1	ug/Kg		0	51 - 113
Endrin	ND		16.6	9.89	J	ug/Kg		59	58 - 115
Endrin aldehyde	ND	F1	16.6	ND	F1	ug/Kg		0	40 - 100
Endrin ketone	ND		16.6	9.20	J	ug/Kg		55	51 - 118
trans-Chlordane	ND	F2 F1	16.6	32.8	J F1	ug/Kg		197	55 - 114
gamma-BHC (Lindane)	ND		16.6	12.7	J	ug/Kg		76	54 - 112
Heptachlor	ND		16.6	11.5	J	ug/Kg		69	50 - 118
Heptachlor epoxide	ND		16.6	10.7	J	ug/Kg		64	56 - 113

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-81044-27 MS
Matrix: Solid
Analysis Batch: 545312

Client Sample ID: AOC3-S8H-0.5
Prep Type: Total/NA
Prep Batch: 541556

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methoxychlor	ND	F1	16.6	ND	F1	ug/Kg		0	52 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*
Tetrachloro-m-xylene	*44*	*S1-*	*47 - 107*

Lab Sample ID: 320-81044-27 MSD
Matrix: Solid
Analysis Batch: 545312

Client Sample ID: AOC3-S8H-0.5
Prep Type: Total/NA
Prep Batch: 541556

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		15.9	12.6	J	ug/Kg		79	53 - 117	6	30
4,4'-DDE	ND		15.9	10.5	J	ug/Kg		66	58 - 115	4	30
4,4'-DDT	ND	F1	15.9	7.56	J F1	ug/Kg		47	53 - 128	5	30
Aldrin	ND		15.9	10.3	J	ug/Kg		64	55 - 109	4	30
alpha-BHC	ND		15.9	11.4	J	ug/Kg		71	54 - 111	0	30
beta-BHC	ND		15.9	13.1	J	ug/Kg		82	53 - 115	20	30
cis-Chlordane	ND		15.9	9.96	J	ug/Kg		62	54 - 113	3	30
delta-BHC	ND		15.9	10.8	J	ug/Kg		68	39 - 124	3	30
Dieldrin	ND		15.9	10.4	J	ug/Kg		65	54 - 117	3	30
Endosulfan I	ND	F1	15.9	6.40	J F1	ug/Kg		40	42 - 118	1	30
Endosulfan II	ND		15.9	8.26	J	ug/Kg		52	48 - 118	4	30
Endosulfan sulfate	ND	F1	15.9	ND	F1	ug/Kg		0	51 - 113	NC	30
Endrin	ND		15.9	10.1	J	ug/Kg		63	58 - 115	2	30
Endrin aldehyde	ND	F1	15.9	ND	F1	ug/Kg		0	40 - 100	NC	30
Endrin ketone	ND		15.9	9.35	J	ug/Kg		59	51 - 118	2	30
trans-Chlordane	ND	F2 F1	15.9	11.2	J F2	ug/Kg		70	55 - 114	98	30
gamma-BHC (Lindane)	ND		15.9	12.3	J	ug/Kg		77	54 - 112	3	30
Heptachlor	ND		15.9	11.5	J	ug/Kg		72	50 - 118	0	30
Heptachlor epoxide	ND		15.9	10.1	J	ug/Kg		64	56 - 113	5	30
Methoxychlor	ND	F1	15.9	ND	F1	ug/Kg		0	52 - 123	NC	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*4*	*S1-*	*46 - 109*
Tetrachloro-m-xylene	*45*	*S1-*	*47 - 107*

Lab Sample ID: MB 320-541586/1-A
Matrix: Solid
Analysis Batch: 544753

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541586

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
Aldrin	ND		1.7	0.14	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/10/21 11:54	11/21/21 16:43	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 320-541586/1-A
Matrix: Solid
Analysis Batch: 544753

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541586

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
Endrin	ND		1.7	0.20	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/10/21 11:54	11/21/21 16:43	1
Toxaphene	ND		67	22	ug/Kg		11/10/21 11:54	11/21/21 16:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*46 - 109*	*11/10/21 11:54*	*11/21/21 16:43*	*1*
DCB Decachlorobiphenyl	*83*		*46 - 109*	*11/10/21 11:54*	*11/21/21 16:43*	*1*
Tetrachloro-m-xylene	*71*		*47 - 107*	*11/10/21 11:54*	*11/21/21 16:43*	*1*
Tetrachloro-m-xylene	*72*		*47 - 107*	*11/10/21 11:54*	*11/21/21 16:43*	*1*

Lab Sample ID: LCS 320-541586/2-A
Matrix: Solid
Analysis Batch: 544753

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541586

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	13.2		ug/Kg		79	53 - 117
4,4'-DDE	16.7	13.4		ug/Kg		81	58 - 115
4,4'-DDT	16.7	14.3		ug/Kg		86	53 - 128
Aldrin	16.7	13.0		ug/Kg		78	55 - 109
alpha-BHC	16.7	13.2		ug/Kg		79	54 - 111
beta-BHC	16.7	13.2		ug/Kg		79	53 - 115
cis-Chlordane	16.7	12.5		ug/Kg		75	54 - 113
delta-BHC	16.7	13.2		ug/Kg		79	39 - 124
Dieldrin	16.7	13.4		ug/Kg		80	54 - 117
Endosulfan I	16.7	11.0		ug/Kg		66	42 - 118
Endosulfan II	16.7	12.6		ug/Kg		75	48 - 118
Endosulfan sulfate	16.7	13.9		ug/Kg		84	51 - 113
Endrin	16.7	13.5		ug/Kg		81	58 - 115
Endrin aldehyde	16.7	12.7		ug/Kg		76	40 - 100
Endrin ketone	16.7	13.5		ug/Kg		81	51 - 118
trans-Chlordane	16.7	12.5		ug/Kg		75	55 - 114
gamma-BHC (Lindane)	16.7	13.3		ug/Kg		80	54 - 112
Heptachlor	16.7	12.9		ug/Kg		78	50 - 118
Heptachlor epoxide	16.7	12.7		ug/Kg		76	56 - 113
Methoxychlor	16.7	14.0		ug/Kg		84	52 - 123

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 320-541586/2-A
Matrix: Solid
Analysis Batch: 544753

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541586

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	47		46 - 109
Tetrachloro-m-xylene	79		47 - 107

Lab Sample ID: 320-81044-17 MS
Matrix: Solid
Analysis Batch: 544753

Client Sample ID: AOC3-S7G-2
Prep Type: Total/NA
Prep Batch: 541586

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.0	10.8		ug/Kg		67	53 - 117
4,4'-DDE	ND		16.0	10.8		ug/Kg		67	58 - 115
4,4'-DDT	ND		16.0	11.3		ug/Kg		71	53 - 128
Aldrin	ND		16.0	10.3		ug/Kg		64	55 - 109
alpha-BHC	ND		16.0	10.1		ug/Kg		63	54 - 111
beta-BHC	ND		16.0	10.5		ug/Kg		66	53 - 115
cis-Chlordane	ND		16.0	10.3		ug/Kg		64	54 - 113
delta-BHC	ND		16.0	9.98		ug/Kg		62	39 - 124
Dieldrin	ND		16.0	10.6		ug/Kg		66	54 - 117
Endosulfan I	ND		16.0	8.31		ug/Kg		52	42 - 118
Endosulfan II	ND		16.0	9.78		ug/Kg		61	48 - 118
Endosulfan sulfate	ND		16.0	10.4		ug/Kg		65	51 - 113
Endrin	ND		16.0	10.8		ug/Kg		67	58 - 115
Endrin aldehyde	ND		16.0	8.65		ug/Kg		54	40 - 100
Endrin ketone	ND		16.0	10.2		ug/Kg		64	51 - 118
trans-Chlordane	ND		16.0	9.79		ug/Kg		61	55 - 114
gamma-BHC (Lindane)	ND		16.0	10.4		ug/Kg		65	54 - 112
Heptachlor	ND		16.0	10.3		ug/Kg		64	50 - 118
Heptachlor epoxide	ND		16.0	10.0		ug/Kg		62	56 - 113
Methoxychlor	ND		16.0	11.0		ug/Kg		69	52 - 123

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	45	S1-	46 - 109
Tetrachloro-m-xylene	68		47 - 107

Lab Sample ID: 320-81044-17 MSD
Matrix: Solid
Analysis Batch: 544753

Client Sample ID: AOC3-S7G-2
Prep Type: Total/NA
Prep Batch: 541586

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.2	11.0		ug/Kg		67	53 - 117	2	30
4,4'-DDE	ND		16.2	10.7		ug/Kg		66	58 - 115	1	30
4,4'-DDT	ND		16.2	11.4		ug/Kg		70	53 - 128	1	30
Aldrin	ND		16.2	10.5		ug/Kg		65	55 - 109	2	30
alpha-BHC	ND		16.2	10.2		ug/Kg		63	54 - 111	1	30
beta-BHC	ND		16.2	10.6		ug/Kg		65	53 - 115	0	30
cis-Chlordane	ND		16.2	10.3		ug/Kg		64	54 - 113	0	30
delta-BHC	ND		16.2	10.2		ug/Kg		63	39 - 124	2	30
Dieldrin	ND		16.2	10.7		ug/Kg		66	54 - 117	1	30
Endosulfan I	ND		16.2	8.31		ug/Kg		51	42 - 118	0	30

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-81044-17 MSD
Matrix: Solid
Analysis Batch: 544753

Client Sample ID: AOC3-S7G-2
Prep Type: Total/NA
Prep Batch: 541586

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Endosulfan II	ND		16.2	9.87		ug/Kg		61	48 - 118	1	30
Endosulfan sulfate	ND		16.2	10.4		ug/Kg		64	51 - 113	0	30
Endrin	ND		16.2	10.8		ug/Kg		67	58 - 115	1	30
Endrin aldehyde	ND		16.2	8.41		ug/Kg		52	40 - 100	3	30
Endrin ketone	ND		16.2	10.3		ug/Kg		63	51 - 118	0	30
trans-Chlordane	ND		16.2	9.90		ug/Kg		61	55 - 114	1	30
gamma-BHC (Lindane)	ND		16.2	10.5		ug/Kg		65	54 - 112	1	30
Heptachlor	ND		16.2	10.6		ug/Kg		65	50 - 118	3	30
Heptachlor epoxide	ND		16.2	10.1		ug/Kg		62	56 - 113	1	30
Methoxychlor	ND		16.2	11.1		ug/Kg		69	52 - 123	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*46*		*46 - 109*
Tetrachloro-m-xylene	*65*		*47 - 107*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 320-541557/1-A
Matrix: Solid
Analysis Batch: 543860

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541557

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.6	ug/Kg		11/10/21 10:52	11/18/21 13:05	1
PCB-1221	ND		33	3.6	ug/Kg		11/10/21 10:52	11/18/21 13:05	1
PCB-1232	ND		33	4.8	ug/Kg		11/10/21 10:52	11/18/21 13:05	1
PCB-1242	ND		33	5.9	ug/Kg		11/10/21 10:52	11/18/21 13:05	1
PCB-1248	ND		33	2.4	ug/Kg		11/10/21 10:52	11/18/21 13:05	1
PCB-1254	ND		33	3.8	ug/Kg		11/10/21 10:52	11/18/21 13:05	1
PCB-1260	ND		33	2.7	ug/Kg		11/10/21 10:52	11/18/21 13:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*73*		*52 - 138*	*11/10/21 10:52*	*11/18/21 13:05*	*1*
Tetrachloro-m-xylene	*64*		*56 - 114*	*11/10/21 10:52*	*11/18/21 13:05*	*1*

Lab Sample ID: LCS 320-541557/2-A
Matrix: Solid
Analysis Batch: 543860

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541557

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			66.7	56.4		ug/Kg		85	58 - 124		
PCB-1260			66.7	54.6		ug/Kg		82	55 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*81*		*52 - 138*
Tetrachloro-m-xylene	*71*		*56 - 114*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 320-81044-29 MS
Matrix: Solid
Analysis Batch: 543860

Client Sample ID: AOC3-S7I-0.5
Prep Type: Total/NA
Prep Batch: 541557

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND	F1	65.1	33.1	F1	ug/Kg		51	58 - 124
PCB-1260	ND	F1	65.1	28.4	J F1	ug/Kg		44	55 - 138

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*45*	*S1-*	*52 - 138*
Tetrachloro-m-xylene	*49*	*S1-*	*56 - 114*

Lab Sample ID: 320-81044-29 MSD
Matrix: Solid
Analysis Batch: 543860

Client Sample ID: AOC3-S7I-0.5
Prep Type: Total/NA
Prep Batch: 541557

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND	F1	64.0	37.0		ug/Kg		58	58 - 124	11	20
PCB-1260	ND	F1	64.0	29.7	J F1	ug/Kg		46	55 - 138	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*48*	*S1-*	*52 - 138*
Tetrachloro-m-xylene	*55*	*S1-*	*56 - 114*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 570-193286/1-A
Matrix: Water
Analysis Batch: 193607

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 193286

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.010	0.0058	mg/L		11/10/21 14:08	11/11/21 11:19	1
Arsenic	ND		0.10	0.022	mg/L		11/10/21 14:08	11/11/21 11:19	1
Barium	ND		0.010	0.0016	mg/L		11/10/21 14:08	11/11/21 11:19	1
Beryllium	ND		0.010	0.0026	mg/L		11/10/21 14:08	11/11/21 11:19	1
Cadmium	ND		0.010	0.0012	mg/L		11/10/21 14:08	11/11/21 11:19	1
Cobalt	ND		0.050	0.0023	mg/L		11/10/21 14:08	11/11/21 11:19	1
Chromium	ND		0.050	0.0086	mg/L		11/10/21 14:08	11/11/21 11:19	1
Copper	ND		0.050	0.0085	mg/L		11/10/21 14:08	11/11/21 11:19	1
Molybdenum	ND		0.050	0.024	mg/L		11/10/21 14:08	11/11/21 11:19	1
Nickel	ND		0.050	0.0045	mg/L		11/10/21 14:08	11/11/21 11:19	1
Antimony	ND		0.10	0.021	mg/L		11/10/21 14:08	11/11/21 11:19	1
Selenium	ND		0.10	0.034	mg/L		11/10/21 14:08	11/11/21 11:19	1
Thallium	ND		0.050	0.019	mg/L		11/10/21 14:08	11/11/21 11:19	1
Vanadium	ND		0.010	0.0017	mg/L		11/10/21 14:08	11/11/21 11:19	1
Zinc	ND		0.25	0.014	mg/L		11/10/21 14:08	11/11/21 11:19	1
Lead	ND		0.050	0.0080	mg/L		11/10/21 14:08	11/11/21 11:19	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 570-193286/2-A
Matrix: Water
Analysis Batch: 193607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 193286

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.250	0.230		mg/L		92	80 - 120
Arsenic	0.500	0.442		mg/L		88	80 - 120
Barium	0.500	0.547		mg/L		109	80 - 120
Beryllium	0.500	0.498		mg/L		100	80 - 120
Cadmium	0.500	0.525		mg/L		105	80 - 120
Cobalt	0.500	0.519		mg/L		104	80 - 120
Chromium	0.500	0.512		mg/L		102	80 - 120
Copper	0.500	0.538		mg/L		108	80 - 120
Molybdenum	0.501	0.493		mg/L		98	80 - 120
Nickel	0.500	0.531		mg/L		106	80 - 120
Antimony	0.500	0.512		mg/L		102	80 - 120
Selenium	0.500	0.482		mg/L		96	80 - 120
Thallium	0.500	0.498		mg/L		100	80 - 120
Vanadium	0.500	0.513		mg/L		103	80 - 120
Zinc	0.500	0.520		mg/L		104	80 - 120
Lead	0.500	0.531		mg/L		106	80 - 120

Lab Sample ID: LCSD 570-193286/3-A
Matrix: Water
Analysis Batch: 193607

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 193286

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.250	0.231		mg/L		92	80 - 120	0	20
Arsenic	0.500	0.436		mg/L		87	80 - 120	1	20
Barium	0.500	0.548		mg/L		110	80 - 120	0	20
Beryllium	0.500	0.498		mg/L		100	80 - 120	0	20
Cadmium	0.500	0.521		mg/L		104	80 - 120	1	20
Cobalt	0.500	0.516		mg/L		103	80 - 120	1	20
Chromium	0.500	0.512		mg/L		102	80 - 120	0	20
Copper	0.500	0.541		mg/L		108	80 - 120	1	20
Molybdenum	0.501	0.501		mg/L		100	80 - 120	2	20
Nickel	0.500	0.527		mg/L		105	80 - 120	1	20
Antimony	0.500	0.506		mg/L		101	80 - 120	1	20
Selenium	0.500	0.500		mg/L		100	80 - 120	4	20
Thallium	0.500	0.491		mg/L		98	80 - 120	1	20
Vanadium	0.500	0.515		mg/L		103	80 - 120	0	20
Zinc	0.500	0.515		mg/L		103	80 - 120	1	20
Lead	0.500	0.526		mg/L		105	80 - 120	1	20

Lab Sample ID: MB 320-539936/1-A
Matrix: Solid
Analysis Batch: 540856

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539936

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.50	0.090	mg/Kg		11/04/21 13:39	11/05/21 10:56	1
Barium	ND		1.0	0.12	mg/Kg		11/04/21 13:39	11/05/21 10:56	1
Beryllium	ND		0.20	0.030	mg/Kg		11/04/21 13:39	11/05/21 10:56	1
Cadmium	ND		0.20	0.030	mg/Kg		11/04/21 13:39	11/05/21 10:56	1
Cobalt	ND		0.50	0.25	mg/Kg		11/04/21 13:39	11/05/21 10:56	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 320-539936/1-A
Matrix: Solid
Analysis Batch: 540856

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539936

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.154	J	0.50	0.14	mg/Kg		11/04/21 13:39	11/05/21 10:56	1
Copper	0.559	J	1.5	0.22	mg/Kg		11/04/21 13:39	11/05/21 10:56	1
Molybdenum	ND		2.0	0.75	mg/Kg		11/04/21 13:39	11/05/21 10:56	1
Nickel	ND		1.0	0.24	mg/Kg		11/04/21 13:39	11/05/21 10:56	1
Lead	ND		1.0	0.26	mg/Kg		11/04/21 13:39	11/05/21 10:56	1
Selenium	ND		2.0	1.4	mg/Kg		11/04/21 13:39	11/05/21 10:56	1
Antimony	ND		2.0	0.94	mg/Kg		11/04/21 13:39	11/05/21 10:56	1
Thallium	ND		2.0	0.84	mg/Kg		11/04/21 13:39	11/05/21 10:56	1
Vanadium	ND		0.50	0.19	mg/Kg		11/04/21 13:39	11/05/21 10:56	1
Zinc	ND		2.0	0.19	mg/Kg		11/04/21 13:39	11/05/21 10:56	1
Arsenic	ND		2.0	1.3	mg/Kg		11/04/21 13:39	11/05/21 10:56	1

Lab Sample ID: LCS 320-539936/2-A
Matrix: Solid
Analysis Batch: 540856

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539936

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.05	4.60		mg/Kg		91	80 - 120
Barium	50.0	46.1		mg/Kg		92	80 - 120
Beryllium	25.0	22.5		mg/Kg		90	80 - 120
Cadmium	25.0	22.6		mg/Kg		90	80 - 120
Cobalt	25.0	22.5		mg/Kg		90	80 - 120
Chromium	25.0	22.7		mg/Kg		91	80 - 120
Copper	25.0	22.2		mg/Kg		89	80 - 120
Molybdenum	25.0	22.2		mg/Kg		89	80 - 120
Nickel	25.0	22.3		mg/Kg		89	80 - 120
Lead	25.0	22.5		mg/Kg		90	80 - 120
Selenium	50.0	42.8		mg/Kg		85	80 - 120
Antimony	50.0	44.6		mg/Kg		89	80 - 120
Thallium	50.0	43.5		mg/Kg		87	80 - 120
Vanadium	25.0	22.4		mg/Kg		90	80 - 120
Zinc	49.9	47.7		mg/Kg		96	80 - 120
Arsenic	50.0	43.3		mg/Kg		87	80 - 120

Lab Sample ID: 320-81044-1 MS
Matrix: Solid
Analysis Batch: 540856

Client Sample ID: AOC3-S1I-0.5
Prep Type: Total/NA
Prep Batch: 539936

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND	F1	5.00	4.27		mg/Kg		85	80 - 120
Barium	210		49.5	153	4	mg/Kg		-122	80 - 120
Beryllium	0.45		24.8	22.6		mg/Kg		89	80 - 120
Cadmium	0.18	J	24.8	22.4		mg/Kg		90	80 - 120
Cobalt	4.9		24.8	26.9		mg/Kg		89	80 - 120
Chromium	24	B	24.8	50.8		mg/Kg		109	80 - 120
Copper	17	F1 B	24.7	37.3		mg/Kg		81	80 - 120
Molybdenum	ND		24.8	21.9		mg/Kg		88	80 - 120
Nickel	17		24.8	41.8		mg/Kg		100	80 - 120
Lead	260		24.8	294	4	mg/Kg		148	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 320-81044-1 MS
Matrix: Solid
Analysis Batch: 540856

Client Sample ID: AOC3-S1I-0.5
Prep Type: Total/NA
Prep Batch: 539936

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	ND		49.5	43.5		mg/Kg		88	80 - 120
Antimony	9.2	F1	49.5	38.7	F1	mg/Kg		60	80 - 120
Thallium	ND		49.5	43.2		mg/Kg		87	80 - 120
Vanadium	19		24.8	46.3		mg/Kg		109	80 - 120
Zinc	85	F1	49.4	131		mg/Kg		93	80 - 120
Arsenic	3.7		49.5	46.3		mg/Kg		86	80 - 120

Lab Sample ID: 320-81044-1 MSD
Matrix: Solid
Analysis Batch: 540856

Client Sample ID: AOC3-S1I-0.5
Prep Type: Total/NA
Prep Batch: 539936

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND	F1	4.86	3.82	F1	mg/Kg		79	80 - 120	11	35
Barium	210		48.1	136	4	mg/Kg		-161	80 - 120	12	35
Beryllium	0.45		24.0	20.4		mg/Kg		83	80 - 120	10	35
Cadmium	0.18	J	24.0	20.4		mg/Kg		84	80 - 120	9	35
Cobalt	4.9		24.0	24.7		mg/Kg		82	80 - 120	9	35
Chromium	24	B	24.0	44.8		mg/Kg		87	80 - 120	13	35
Copper	17	F1 B	24.0	34.3	F1	mg/Kg		71	80 - 120	8	35
Molybdenum	ND		24.0	20.0		mg/Kg		83	80 - 120	9	35
Nickel	17		24.0	38.3		mg/Kg		88	80 - 120	9	35
Lead	260		24.0	236	4	mg/Kg		-88	80 - 120	22	35
Selenium	ND		48.1	39.0		mg/Kg		81	80 - 120	11	35
Antimony	9.2	F1	48.0	35.1	F1	mg/Kg		54	80 - 120	10	35
Thallium	ND		48.1	39.2		mg/Kg		81	80 - 120	10	35
Vanadium	19		24.0	41.8		mg/Kg		94	80 - 120	10	35
Zinc	85	F1	48.0	113	F1	mg/Kg		57	80 - 120	15	35
Arsenic	3.7		48.1	42.3		mg/Kg		80	80 - 120	9	35

Lab Sample ID: MB 320-539961/1-A
Matrix: Solid
Analysis Batch: 540322

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539961

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.26	mg/Kg		11/04/21 13:39	11/05/21 09:49	1
Arsenic	ND		2.0	1.3	mg/Kg		11/04/21 13:39	11/05/21 09:49	1

Lab Sample ID: LCS 320-539961/2-A
Matrix: Solid
Analysis Batch: 540322

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539961

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	25.0	22.9		mg/Kg		92	80 - 120
Arsenic	50.0	42.8		mg/Kg		86	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 570-193769/1-A
Matrix: Water
Analysis Batch: 193866

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 193769

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00050	0.00014	mg/L		11/12/21 06:21	11/12/21 12:30	1

Lab Sample ID: LCS 570-193769/2-A
Matrix: Water
Analysis Batch: 193866

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 193769

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0100	0.00993		mg/L		99	80 - 120

Lab Sample ID: LCSD 570-193769/3-A
Matrix: Water
Analysis Batch: 193866

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 193769

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0100	0.00986		mg/L		99	80 - 120	1	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 570-193629/1-A
Matrix: Solid
Analysis Batch: 193866

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 193629

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.083	0.014	mg/Kg		11/11/21 16:15	11/12/21 12:56	1

Lab Sample ID: LCS 570-193629/2-A
Matrix: Solid
Analysis Batch: 193866

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 193629

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.843		mg/Kg		101	85 - 121

Lab Sample ID: LCSD 570-193629/3-A
Matrix: Solid
Analysis Batch: 193866

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 193629

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.794	0.818		mg/Kg		103	85 - 121	3	10

Lab Sample ID: MB 570-193755/1-A
Matrix: Solid
Analysis Batch: 193866

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 193755

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.083	0.014	mg/Kg		11/12/21 05:53	11/12/21 11:15	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 570-193755/2-A
Matrix: Solid
Analysis Batch: 193866

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 193755

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.820	0.781		mg/Kg		95	85 - 121		

Lab Sample ID: LCSD 570-193755/3-A
Matrix: Solid
Analysis Batch: 193866

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 193755

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.833	0.811		mg/Kg		97	85 - 121	4	10

GC Semi VOA

Prep Batch: 540231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-31	EB10292021	Total/NA	Water	3510C	
MB 320-540231/1-A	Method Blank	Total/NA	Water	3510C	
LCS 320-540231/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 320-540231/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 541359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-2	AOC3-S1I-2	Total/NA	Solid	3546	
320-81044-4	AOC3-S2I-2	Total/NA	Solid	3546	
320-81044-7	AOC3-S6I-2	Total/NA	Solid	3546	
320-81044-9	AOC3-S8F-2	Total/NA	Solid	3546	
320-81044-11	AOC3-S9G-2	Total/NA	Solid	3546	
320-81044-13	AOC3-S7F-2	Total/NA	Solid	3546	
320-81044-15	AOC3-S8G-2	Total/NA	Solid	3546	
MB 320-541359/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-541359/2-A	Lab Control Sample	Total/NA	Solid	3546	

Prep Batch: 541556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-1	AOC3-S1I-0.5	Total/NA	Solid	3546	
320-81044-3	AOC3-S2I-0.5	Total/NA	Solid	3546	
320-81044-5	AOC3-S6I-0.5	Total/NA	Solid	3546	
320-81044-6	AOC3-S6I-0.5-DUP	Total/NA	Solid	3546	
320-81044-8	AOC3-S8F-0.5	Total/NA	Solid	3546	
320-81044-10	AOC3-S9G-0.5	Total/NA	Solid	3546	
320-81044-12	AOC3-S7F-0.5	Total/NA	Solid	3546	
320-81044-14	AOC3-S8G-0.5	Total/NA	Solid	3546	
320-81044-16	AOC3-S7G-0.5	Total/NA	Solid	3546	
320-81044-18	AOC3/AOC8-S6H-0.5	Total/NA	Solid	3546	
320-81044-20	AOC3-S7H-0.5	Total/NA	Solid	3546	
320-81044-22	AOC3-S8H-0.5	Total/NA	Solid	3546	
320-81044-24	AOC3/AOC8-S9I-0.5	Total/NA	Solid	3546	
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	Total/NA	Solid	3546	
320-81044-27	AOC3-S8H-0.5	Total/NA	Solid	3546	
320-81044-29	AOC3-S7I-0.5	Total/NA	Solid	3546	
MB 320-541556/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-541556/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-81044-27 MS	AOC3-S8H-0.5	Total/NA	Solid	3546	
320-81044-27 MSD	AOC3-S8H-0.5	Total/NA	Solid	3546	

Prep Batch: 541557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-1	AOC3-S1I-0.5	Total/NA	Solid	3546	
320-81044-3	AOC3-S2I-0.5	Total/NA	Solid	3546	
320-81044-5	AOC3-S6I-0.5	Total/NA	Solid	3546	
320-81044-6	AOC3-S6I-0.5-DUP	Total/NA	Solid	3546	
320-81044-8	AOC3-S8F-0.5	Total/NA	Solid	3546	
320-81044-10	AOC3-S9G-0.5	Total/NA	Solid	3546	
320-81044-12	AOC3-S7F-0.5	Total/NA	Solid	3546	
320-81044-14	AOC3-S8G-0.5	Total/NA	Solid	3546	
320-81044-16	AOC3-S7G-0.5	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 541557 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-18	AOC3/AOC8-S6H-0.5	Total/NA	Solid	3546	
320-81044-20	AOC3-S7H-0.5	Total/NA	Solid	3546	
320-81044-22	AOC3-S8H-0.5	Total/NA	Solid	3546	
320-81044-24	AOC3/AOC8-S9I-0.5	Total/NA	Solid	3546	
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	Total/NA	Solid	3546	
320-81044-27	AOC3-S8H-0.5	Total/NA	Solid	3546	
320-81044-29	AOC3-S7I-0.5	Total/NA	Solid	3546	
MB 320-541557/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-541557/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-81044-29 MS	AOC3-S7I-0.5	Total/NA	Solid	3546	
320-81044-29 MSD	AOC3-S7I-0.5	Total/NA	Solid	3546	

Prep Batch: 541586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-17	AOC3-S7G-2	Total/NA	Solid	3546	
320-81044-19	AOC3/AOC8-S6H-2	Total/NA	Solid	3546	
320-81044-21	AOC3-S7H-2	Total/NA	Solid	3546	
320-81044-23	AOC3-S8H-2	Total/NA	Solid	3546	
320-81044-26	AOC3/AOC8-S9I-2	Total/NA	Solid	3546	
320-81044-28	AOC3-S8H-2	Total/NA	Solid	3546	
320-81044-30	AOC3-S7I-2	Total/NA	Solid	3546	
MB 320-541586/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-541586/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-81044-17 MS	AOC3-S7G-2	Total/NA	Solid	3546	
320-81044-17 MSD	AOC3-S7G-2	Total/NA	Solid	3546	

Analysis Batch: 542188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-31	EB10292021	Total/NA	Water	8081A	540231
MB 320-540231/1-A	Method Blank	Total/NA	Water	8081A	540231
LCS 320-540231/2-A	Lab Control Sample	Total/NA	Water	8081A	540231
LCSD 320-540231/3-A	Lab Control Sample Dup	Total/NA	Water	8081A	540231

Analysis Batch: 543860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-1	AOC3-S1I-0.5	Total/NA	Solid	8082	541557
320-81044-3	AOC3-S2I-0.5	Total/NA	Solid	8082	541557
320-81044-5	AOC3-S6I-0.5	Total/NA	Solid	8082	541557
320-81044-6	AOC3-S6I-0.5-DUP	Total/NA	Solid	8082	541557
320-81044-8	AOC3-S8F-0.5	Total/NA	Solid	8082	541557
320-81044-10	AOC3-S9G-0.5	Total/NA	Solid	8082	541557
320-81044-12	AOC3-S7F-0.5	Total/NA	Solid	8082	541557
320-81044-14	AOC3-S8G-0.5	Total/NA	Solid	8082	541557
320-81044-16	AOC3-S7G-0.5	Total/NA	Solid	8082	541557
320-81044-18	AOC3/AOC8-S6H-0.5	Total/NA	Solid	8082	541557
320-81044-20	AOC3-S7H-0.5	Total/NA	Solid	8082	541557
320-81044-22	AOC3-S8H-0.5	Total/NA	Solid	8082	541557
320-81044-24	AOC3/AOC8-S9I-0.5	Total/NA	Solid	8082	541557
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	Total/NA	Solid	8082	541557
320-81044-27	AOC3-S8H-0.5	Total/NA	Solid	8082	541557
320-81044-29	AOC3-S7I-0.5	Total/NA	Solid	8082	541557

GC Semi VOA (Continued)

Analysis Batch: 543860 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-541557/1-A	Method Blank	Total/NA	Solid	8082	541557
LCS 320-541557/2-A	Lab Control Sample	Total/NA	Solid	8082	541557
320-81044-29 MS	AOC3-S7I-0.5	Total/NA	Solid	8082	541557
320-81044-29 MSD	AOC3-S7I-0.5	Total/NA	Solid	8082	541557

Analysis Batch: 544089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-541359/1-A	Method Blank	Total/NA	Solid	8081A	541359
LCS 320-541359/2-A	Lab Control Sample	Total/NA	Solid	8081A	541359

Analysis Batch: 544753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-2	AOC3-S1I-2	Total/NA	Solid	8081A	541359
320-81044-4	AOC3-S2I-2	Total/NA	Solid	8081A	541359
320-81044-7	AOC3-S6I-2	Total/NA	Solid	8081A	541359
320-81044-9	AOC3-S8F-2	Total/NA	Solid	8081A	541359
320-81044-11	AOC3-S9G-2	Total/NA	Solid	8081A	541359
320-81044-13	AOC3-S7F-2	Total/NA	Solid	8081A	541359
320-81044-15	AOC3-S8G-2	Total/NA	Solid	8081A	541359
320-81044-17	AOC3-S7G-2	Total/NA	Solid	8081A	541586
320-81044-19	AOC3/AOC8-S6H-2	Total/NA	Solid	8081A	541586
320-81044-21	AOC3-S7H-2	Total/NA	Solid	8081A	541586
320-81044-23	AOC3-S8H-2	Total/NA	Solid	8081A	541586
320-81044-26	AOC3/AOC8-S9I-2	Total/NA	Solid	8081A	541586
320-81044-28	AOC3-S8H-2	Total/NA	Solid	8081A	541586
320-81044-30	AOC3-S7I-2	Total/NA	Solid	8081A	541586
MB 320-541586/1-A	Method Blank	Total/NA	Solid	8081A	541586
LCS 320-541586/2-A	Lab Control Sample	Total/NA	Solid	8081A	541586
320-81044-17 MS	AOC3-S7G-2	Total/NA	Solid	8081A	541586
320-81044-17 MSD	AOC3-S7G-2	Total/NA	Solid	8081A	541586

Analysis Batch: 544910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-1	AOC3-S1I-0.5	Total/NA	Solid	8081A	541556
320-81044-3	AOC3-S2I-0.5	Total/NA	Solid	8081A	541556
320-81044-5	AOC3-S6I-0.5	Total/NA	Solid	8081A	541556
320-81044-6	AOC3-S6I-0.5-DUP	Total/NA	Solid	8081A	541556
320-81044-8	AOC3-S8F-0.5	Total/NA	Solid	8081A	541556
320-81044-10	AOC3-S9G-0.5	Total/NA	Solid	8081A	541556
320-81044-12	AOC3-S7F-0.5	Total/NA	Solid	8081A	541556
320-81044-14	AOC3-S8G-0.5	Total/NA	Solid	8081A	541556
320-81044-16	AOC3-S7G-0.5	Total/NA	Solid	8081A	541556
320-81044-18	AOC3/AOC8-S6H-0.5	Total/NA	Solid	8081A	541556
320-81044-20	AOC3-S7H-0.5	Total/NA	Solid	8081A	541556
320-81044-22	AOC3-S8H-0.5	Total/NA	Solid	8081A	541556
MB 320-541556/1-A	Method Blank	Total/NA	Solid	8081A	541556
LCS 320-541556/2-A	Lab Control Sample	Total/NA	Solid	8081A	541556

Analysis Batch: 545312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-24	AOC3/AOC8-S9I-0.5	Total/NA	Solid	8081A	541556

GC Semi VOA (Continued)

Analysis Batch: 545312 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	Total/NA	Solid	8081A	541556
320-81044-27	AOC3-S8H-0.5	Total/NA	Solid	8081A	541556
320-81044-29	AOC3-S7I-0.5	Total/NA	Solid	8081A	541556
320-81044-27 MS	AOC3-S8H-0.5	Total/NA	Solid	8081A	541556
320-81044-27 MSD	AOC3-S8H-0.5	Total/NA	Solid	8081A	541556

Metals

Prep Batch: 193286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-31	EB10292021	Total/NA	Water	3010A	
MB 570-193286/1-A	Method Blank	Total/NA	Water	3010A	
LCS 570-193286/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 570-193286/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	

Analysis Batch: 193607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-193286/1-A	Method Blank	Total/NA	Water	6010B	193286
LCS 570-193286/2-A	Lab Control Sample	Total/NA	Water	6010B	193286
LCSD 570-193286/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	193286

Prep Batch: 193629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	Total/NA	Solid	7471A	
MB 570-193629/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 570-193629/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 570-193629/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	

Prep Batch: 193755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-5	AOC3-S6I-0.5	Total/NA	Solid	7471A	
320-81044-6	AOC3-S6I-0.5-DUP	Total/NA	Solid	7471A	
320-81044-20	AOC3-S7H-0.5	Total/NA	Solid	7471A	
320-81044-24	AOC3/AOC8-S9I-0.5	Total/NA	Solid	7471A	
MB 570-193755/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 570-193755/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 570-193755/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	

Prep Batch: 193769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-31	EB10292021	Total/NA	Water	7470A	
MB 570-193769/1-A	Method Blank	Total/NA	Water	7470A	
LCS 570-193769/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 570-193769/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	

Analysis Batch: 193866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-5	AOC3-S6I-0.5	Total/NA	Solid	7471A	193755
320-81044-6	AOC3-S6I-0.5-DUP	Total/NA	Solid	7471A	193755
320-81044-20	AOC3-S7H-0.5	Total/NA	Solid	7471A	193755
320-81044-24	AOC3/AOC8-S9I-0.5	Total/NA	Solid	7471A	193755

Metals (Continued)

Analysis Batch: 193866 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	Total/NA	Solid	7471A	193629
320-81044-31	EB10292021	Total/NA	Water	7470A	193769
MB 570-193629/1-A	Method Blank	Total/NA	Solid	7471A	193629
MB 570-193755/1-A	Method Blank	Total/NA	Solid	7471A	193755
MB 570-193769/1-A	Method Blank	Total/NA	Water	7470A	193769
LCS 570-193629/2-A	Lab Control Sample	Total/NA	Solid	7471A	193629
LCS 570-193755/2-A	Lab Control Sample	Total/NA	Solid	7471A	193755
LCS 570-193769/2-A	Lab Control Sample	Total/NA	Water	7470A	193769
LCSD 570-193629/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	193629
LCSD 570-193755/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	193755
LCSD 570-193769/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	193769

Analysis Batch: 193907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-31	EB10292021	Total/NA	Water	6010B	193286

Prep Batch: 539936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-1	AOC3-S1I-0.5	Total/NA	Solid	3050B	
320-81044-3	AOC3-S2I-0.5	Total/NA	Solid	3050B	
320-81044-5	AOC3-S6I-0.5	Total/NA	Solid	3050B	
320-81044-6	AOC3-S6I-0.5-DUP	Total/NA	Solid	3050B	
320-81044-8	AOC3-S8F-0.5	Total/NA	Solid	3050B	
320-81044-10	AOC3-S9G-0.5	Total/NA	Solid	3050B	
320-81044-12	AOC3-S7F-0.5	Total/NA	Solid	3050B	
320-81044-14	AOC3-S8G-0.5	Total/NA	Solid	3050B	
320-81044-16	AOC3-S7G-0.5	Total/NA	Solid	3050B	
320-81044-18	AOC3/AOC8-S6H-0.5	Total/NA	Solid	3050B	
320-81044-20	AOC3-S7H-0.5	Total/NA	Solid	3050B	
320-81044-22	AOC3-S8H-0.5	Total/NA	Solid	3050B	
320-81044-24	AOC3/AOC8-S9I-0.5	Total/NA	Solid	3050B	
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	Total/NA	Solid	3050B	
320-81044-27	AOC3-S8H-0.5	Total/NA	Solid	3050B	
MB 320-539936/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-539936/2-A	Lab Control Sample	Total/NA	Solid	3050B	
320-81044-1 MS	AOC3-S1I-0.5	Total/NA	Solid	3050B	
320-81044-1 MSD	AOC3-S1I-0.5	Total/NA	Solid	3050B	

Prep Batch: 539961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-29	AOC3-S7I-0.5	Total/NA	Solid	3050B	
MB 320-539961/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-539961/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 540322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-29	AOC3-S7I-0.5	Total/NA	Solid	6010B	539961
MB 320-539961/1-A	Method Blank	Total/NA	Solid	6010B	539961
LCS 320-539961/2-A	Lab Control Sample	Total/NA	Solid	6010B	539961

QC Association Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Metals

Analysis Batch: 540856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-1	AOC3-S1I-0.5	Total/NA	Solid	6010B	539936
320-81044-3	AOC3-S2I-0.5	Total/NA	Solid	6010B	539936
320-81044-5	AOC3-S6I-0.5	Total/NA	Solid	6010B	539936
320-81044-6	AOC3-S6I-0.5-DUP	Total/NA	Solid	6010B	539936
320-81044-8	AOC3-S8F-0.5	Total/NA	Solid	6010B	539936
320-81044-10	AOC3-S9G-0.5	Total/NA	Solid	6010B	539936
320-81044-12	AOC3-S7F-0.5	Total/NA	Solid	6010B	539936
320-81044-14	AOC3-S8G-0.5	Total/NA	Solid	6010B	539936
320-81044-16	AOC3-S7G-0.5	Total/NA	Solid	6010B	539936
320-81044-18	AOC3/AOC8-S6H-0.5	Total/NA	Solid	6010B	539936
320-81044-20	AOC3-S7H-0.5	Total/NA	Solid	6010B	539936
320-81044-22	AOC3-S8H-0.5	Total/NA	Solid	6010B	539936
320-81044-24	AOC3/AOC8-S9I-0.5	Total/NA	Solid	6010B	539936
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	Total/NA	Solid	6010B	539936
320-81044-27	AOC3-S8H-0.5	Total/NA	Solid	6010B	539936
MB 320-539936/1-A	Method Blank	Total/NA	Solid	6010B	539936
LCS 320-539936/2-A	Lab Control Sample	Total/NA	Solid	6010B	539936
320-81044-1 MS	AOC3-S1I-0.5	Total/NA	Solid	6010B	539936
320-81044-1 MSD	AOC3-S1I-0.5	Total/NA	Solid	6010B	539936

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S1I-0.5
Lab Sample ID: 320-81044-1
Date Collected: 10/29/21 08:38
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.00 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		10			544910	11/22/21 20:54	K1D	TAL SAC
Total/NA	Prep	3546			15.00 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 13:45	K1D	TAL SAC
Total/NA	Prep	3050B			1.01 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 11:03	GSH	TAL SAC

Client Sample ID: AOC3-S1I-2
Lab Sample ID: 320-81044-2
Date Collected: 10/29/21 08:40
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.66 g	5 mL	541359	11/09/21 14:45	PT	TAL SAC
Total/NA	Analysis	8081A		1			544753	11/21/21 22:23	AO	TAL SAC

Client Sample ID: AOC3-S2I-0.5
Lab Sample ID: 320-81044-3
Date Collected: 10/29/21 08:41
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.52 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		50			544910	11/22/21 21:13	K1D	TAL SAC
Total/NA	Prep	3546			15.52 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		5			543860	11/18/21 14:05	K1D	TAL SAC
Total/NA	Prep	3050B			1.01 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 11:21	GSH	TAL SAC

Client Sample ID: AOC3-S2I-2
Lab Sample ID: 320-81044-4
Date Collected: 10/29/21 08:42
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.46 g	5 mL	541359	11/09/21 14:45	PT	TAL SAC
Total/NA	Analysis	8081A		1			544753	11/21/21 22:42	AO	TAL SAC

Client Sample ID: AOC3-S6I-0.5
Lab Sample ID: 320-81044-5
Date Collected: 10/29/21 09:02
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.04 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		20			544910	11/22/21 21:32	K1D	TAL SAC
Total/NA	Prep	3546			15.04 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 14:25	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 11:25	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S6I-0.5
Date Collected: 10/29/21 09:02
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			.62 g	100 mL	193755	11/12/21 05:53	WL8G	ECL 1
Total/NA	Analysis	7471A		1			193866	11/12/21 11:46	VWJ7	ECL 1

Client Sample ID: AOC3-S6I-0.5-DUP
Date Collected: 10/29/21 09:02
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.17 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		20			544910	11/22/21 21:51	K1D	TAL SAC
Total/NA	Prep	3546			15.17 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 14:45	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 11:29	GSH	TAL SAC
Total/NA	Prep	7471A			.60 g	100 mL	193755	11/12/21 05:53	WL8G	ECL 1
Total/NA	Analysis	7471A		1			193866	11/12/21 11:48	VWJ7	ECL 1

Client Sample ID: AOC3-S6I-2
Date Collected: 10/29/21 09:05
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.81 g	5 mL	541359	11/09/21 14:45	PT	TAL SAC
Total/NA	Analysis	8081A		1			544753	11/21/21 23:01	AO	TAL SAC

Client Sample ID: AOC3-S8F-0.5
Date Collected: 10/29/21 09:32
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.23 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		10			544910	11/22/21 22:10	K1D	TAL SAC
Total/NA	Prep	3546			15.23 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 15:05	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 11:40	GSH	TAL SAC

Client Sample ID: AOC3-S8F-2
Date Collected: 10/29/21 09:33
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.66 g	5 mL	541359	11/09/21 14:45	PT	TAL SAC
Total/NA	Analysis	8081A		1			544753	11/21/21 23:20	AO	TAL SAC

Client Sample ID: AOC3-S9G-0.5

Lab Sample ID: 320-81044-10

Date Collected: 10/29/21 09:36

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.45 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		5			544910	11/22/21 22:29	K1D	TAL SAC
Total/NA	Prep	3546			15.45 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 15:25	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 11:44	GSH	TAL SAC

Client Sample ID: AOC3-S9G-2

Lab Sample ID: 320-81044-11

Date Collected: 10/29/21 09:37

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.48 g	5 mL	541359	11/09/21 14:45	PT	TAL SAC
Total/NA	Analysis	8081A		1			544753	11/21/21 23:39	AO	TAL SAC

Client Sample ID: AOC3-S7F-0.5

Lab Sample ID: 320-81044-12

Date Collected: 10/29/21 10:17

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.42 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		20			544910	11/22/21 22:48	K1D	TAL SAC
Total/NA	Prep	3546			15.42 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 15:45	K1D	TAL SAC
Total/NA	Prep	3050B			1.04 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 11:47	GSH	TAL SAC

Client Sample ID: AOC3-S7F-2

Lab Sample ID: 320-81044-13

Date Collected: 10/29/21 10:19

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.83 g	5 mL	541359	11/09/21 14:45	PT	TAL SAC
Total/NA	Analysis	8081A		10			544753	11/21/21 23:58	AO	TAL SAC

Client Sample ID: AOC3-S8G-0.5

Lab Sample ID: 320-81044-14

Date Collected: 10/29/21 10:21

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.48 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		20			544910	11/22/21 23:06	K1D	TAL SAC
Total/NA	Prep	3546			15.48 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 16:05	K1D	TAL SAC
Total/NA	Prep	3050B			1.04 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 11:51	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S8G-2

Lab Sample ID: 320-81044-15
Date Collected: 10/29/21 10:22
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.22 g	5 mL	541359	11/09/21 14:45	PT	TAL SAC
Total/NA	Analysis	8081A		10			544753	11/22/21 00:17	AO	TAL SAC

Client Sample ID: AOC3-S7G-0.5

Lab Sample ID: 320-81044-16
Date Collected: 10/29/21 10:31
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.53 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		20			544910	11/22/21 23:25	K1D	TAL SAC
Total/NA	Prep	3546			15.53 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 16:25	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 11:55	GSH	TAL SAC

Client Sample ID: AOC3-S7G-2

Lab Sample ID: 320-81044-17
Date Collected: 10/29/21 10:32
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.69 g	5 mL	541586	11/10/21 11:54	SJ	TAL SAC
Total/NA	Analysis	8081A		1			544753	11/21/21 17:40	AO	TAL SAC

Client Sample ID: AOC3/AOC8-S6H-0.5

Lab Sample ID: 320-81044-18
Date Collected: 10/29/21 10:55
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.75 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		20			544910	11/22/21 23:44	K1D	TAL SAC
Total/NA	Prep	3546			15.75 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 16:45	K1D	TAL SAC
Total/NA	Prep	3050B			1.01 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 11:58	GSH	TAL SAC

Client Sample ID: AOC3/AOC8-S6H-2

Lab Sample ID: 320-81044-19
Date Collected: 10/29/21 10:56
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.61 g	5 mL	541586	11/10/21 11:54	SJ	TAL SAC
Total/NA	Analysis	8081A		1			544753	11/21/21 18:37	AO	TAL SAC

Client Sample ID: AOC3-S7H-0.5

Lab Sample ID: 320-81044-20

Date Collected: 10/29/21 10:57

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.22 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		5			544910	11/23/21 00:03	K1D	TAL SAC
Total/NA	Prep	3546			15.22 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 17:05	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 12:02	GSH	TAL SAC
Total/NA	Prep	7471A			.59 g	100 mL	193755	11/12/21 05:53	WL8G	ECL 1
Total/NA	Analysis	7471A		1			193866	11/12/21 11:50	VWJ7	ECL 1

Client Sample ID: AOC3-S7H-2

Lab Sample ID: 320-81044-21

Date Collected: 10/29/21 10:58

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.50 g	5 mL	541586	11/10/21 11:54	SJ	TAL SAC
Total/NA	Analysis	8081A		1			544753	11/21/21 18:55	AO	TAL SAC

Client Sample ID: AOC3-S8H-0.5

Lab Sample ID: 320-81044-22

Date Collected: 10/29/21 10:59

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.97 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		20			544910	11/23/21 00:22	K1D	TAL SAC
Total/NA	Prep	3546			15.97 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 17:25	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 12:06	GSH	TAL SAC

Client Sample ID: AOC3-S8H-2

Lab Sample ID: 320-81044-23

Date Collected: 10/29/21 11:00

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.31 g	5 mL	541586	11/10/21 11:54	SJ	TAL SAC
Total/NA	Analysis	8081A		1			544753	11/21/21 19:14	AO	TAL SAC

Client Sample ID: AOC3/AOC8-S9I-0.5

Lab Sample ID: 320-81044-24

Date Collected: 10/29/21 11:14

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.04 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		10			545312	11/23/21 21:06	K1D	TAL SAC
Total/NA	Prep	3546			15.04 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 17:45	K1D	TAL SAC

Client Sample ID: AOC3/AOC8-S9I-0.5

Lab Sample ID: 320-81044-24

Date Collected: 10/29/21 11:14

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 12:09	GSH	TAL SAC
Total/NA	Prep	7471A			.61 g	100 mL	193755	11/12/21 05:53	WL8G	ECL 1
Total/NA	Analysis	7471A		1			193866	11/12/21 11:52	VWJ7	ECL 1

Client Sample ID: AOC3/AOC8-S9I-0.5 DUP

Lab Sample ID: 320-81044-25

Date Collected: 10/29/21 11:14

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.77 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		10			545312	11/23/21 21:25	K1D	TAL SAC
Total/NA	Prep	3546			15.77 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 18:05	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 12:13	GSH	TAL SAC
Total/NA	Prep	7471A			0.60 g	100 mL	193629	11/11/21 16:15	WL8G	ECL 1
Total/NA	Analysis	7471A		1			193866	11/12/21 13:41	VWJ7	ECL 1

Client Sample ID: AOC3/AOC8-S9I-2

Lab Sample ID: 320-81044-26

Date Collected: 10/29/21 11:15

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.72 g	5 mL	541586	11/10/21 11:54	SJ	TAL SAC
Total/NA	Analysis	8081A		2			544753	11/21/21 19:33	AO	TAL SAC

Client Sample ID: AOC3-S8H-0.5

Lab Sample ID: 320-81044-27

Date Collected: 10/29/21 11:16

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.79 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		20			545312	11/23/21 21:44	K1D	TAL SAC
Total/NA	Prep	3546			15.79 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 18:25	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	539936	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 12:24	GSH	TAL SAC

Client Sample ID: AOC3-S8H-2

Lab Sample ID: 320-81044-28

Date Collected: 10/29/21 11:17

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.69 g	5 mL	541586	11/10/21 11:54	SJ	TAL SAC
Total/NA	Analysis	8081A		1			544753	11/21/21 19:52	AO	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Client Sample ID: AOC3-S7I-0.5

Lab Sample ID: 320-81044-29

Date Collected: 10/29/21 11:18

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.95 g	5 mL	541556	11/10/21 10:47	TL	TAL SAC
Total/NA	Analysis	8081A		20			545312	11/23/21 22:41	K1D	TAL SAC
Total/NA	Prep	3546			15.95 g	5 mL	541557	11/10/21 10:52	TL	TAL SAC
Total/NA	Analysis	8082		1			543860	11/18/21 18:45	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	539961	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540322	11/05/21 10:42	SP	TAL SAC

Client Sample ID: AOC3-S7I-2

Lab Sample ID: 320-81044-30

Date Collected: 10/29/21 11:19

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.11 g	5 mL	541586	11/10/21 11:54	SJ	TAL SAC
Total/NA	Analysis	8081A		1			544753	11/21/21 20:11	AO	TAL SAC

Client Sample ID: EB10292021

Lab Sample ID: 320-81044-31

Date Collected: 10/29/21 12:00

Matrix: Water

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			506.7 mL	10 mL	540231	11/05/21 09:34	AS	TAL SAC
Total/NA	Analysis	8081A		1			542188	11/13/21 00:03	K1D	TAL SAC
Total/NA	Prep	3010A			50 mL	50 mL	193286	11/10/21 14:08	WL8G	ECL 1
Total/NA	Analysis	6010B		1			193907	11/12/21 17:27	ULPF	ECL 1
Total/NA	Prep	7470A			50 mL	100 mL	193769	11/12/21 06:21	WL8G	ECL 1
Total/NA	Analysis	7470A		1			193866	11/12/21 12:47	VWJ7	ECL 1

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

Laboratory: Eurofins Calscience LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2944	09-30-22

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Method	Method Description	Protocol	Laboratory
8081A	Organochlorine Pesticides (GC)	SW846	TAL SAC
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL SAC
6010B	Metals (ICP)	SW846	ECL 1
6010B	Metals (ICP)	SW846	TAL SAC
7470A	Mercury (CVAA)	SW846	ECL 1
7471A	Mercury (CVAA)	SW846	ECL 1
3010A	Preparation, Total Metals	SW846	ECL 1
3050B	Preparation, Metals	SW846	TAL SAC
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL SAC
3546	Microwave Extraction	SW846	TAL SAC
7470A	Preparation, Mercury	SW846	ECL 1
7471A	Preparation, Mercury	SW846	ECL 1

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-81044-1	AOC3-S1I-0.5	Solid	10/29/21 08:38	10/29/21 14:21
320-81044-2	AOC3-S1I-2	Solid	10/29/21 08:40	10/29/21 14:21
320-81044-3	AOC3-S2I-0.5	Solid	10/29/21 08:41	10/29/21 14:21
320-81044-4	AOC3-S2I-2	Solid	10/29/21 08:42	10/29/21 14:21
320-81044-5	AOC3-S6I-0.5	Solid	10/29/21 09:02	10/29/21 14:21
320-81044-6	AOC3-S6I-0.5-DUP	Solid	10/29/21 09:02	10/29/21 14:21
320-81044-7	AOC3-S6I-2	Solid	10/29/21 09:05	10/29/21 14:21
320-81044-8	AOC3-S8F-0.5	Solid	10/29/21 09:32	10/29/21 14:21
320-81044-9	AOC3-S8F-2	Solid	10/29/21 09:33	10/29/21 14:21
320-81044-10	AOC3-S9G-0.5	Solid	10/29/21 09:36	10/29/21 14:21
320-81044-11	AOC3-S9G-2	Solid	10/29/21 09:37	10/29/21 14:21
320-81044-12	AOC3-S7F-0.5	Solid	10/29/21 10:17	10/29/21 14:21
320-81044-13	AOC3-S7F-2	Solid	10/29/21 10:19	10/29/21 14:21
320-81044-14	AOC3-S8G-0.5	Solid	10/29/21 10:21	10/29/21 14:21
320-81044-15	AOC3-S8G-2	Solid	10/29/21 10:22	10/29/21 14:21
320-81044-16	AOC3-S7G-0.5	Solid	10/29/21 10:31	10/29/21 14:21
320-81044-17	AOC3-S7G-2	Solid	10/29/21 10:32	10/29/21 14:21
320-81044-18	AOC3/AOC8-S6H-0.5	Solid	10/29/21 10:55	10/29/21 14:21
320-81044-19	AOC3/AOC8-S6H-2	Solid	10/29/21 10:56	10/29/21 14:21
320-81044-20	AOC3-S7H-0.5	Solid	10/29/21 10:57	10/29/21 14:21
320-81044-21	AOC3-S7H-2	Solid	10/29/21 10:58	10/29/21 14:21
320-81044-22	AOC3-S8H-0.5	Solid	10/29/21 10:59	10/29/21 14:21
320-81044-23	AOC3-S8H-2	Solid	10/29/21 11:00	10/29/21 14:21
320-81044-24	AOC3/AOC8-S9I-0.5	Solid	10/29/21 11:14	10/29/21 14:21
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	Solid	10/29/21 11:14	10/29/21 14:21
320-81044-26	AOC3/AOC8-S9I-2	Solid	10/29/21 11:15	10/29/21 14:21
320-81044-27	AOC3-S8H-0.5	Solid	10/29/21 11:16	10/29/21 14:21
320-81044-28	AOC3-S8H-2	Solid	10/29/21 11:17	10/29/21 14:21
320-81044-29	AOC3-S7I-0.5	Solid	10/29/21 11:18	10/29/21 14:21
320-81044-30	AOC3-S7I-2	Solid	10/29/21 11:19	10/29/21 14:21
320-81044-31	EB10292021	Water	10/29/21 12:00	10/29/21 14:21

Eurofins TestAmerica, Sacramento
880 Riverside Parkway

West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

320-81044

201258

eurofins

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

Client Contact	**Project Manager:** Nathan Diem	**Site Contact:** Daysi Nemeno	**Date:** 10/29/21
Ninyo & Moore	**Email** ndiem@ninyoandmoore.com	**Lab Contact:** Justinn Gonzales	**Carrier:** Test America
2020 Challenger Drive, Suite 103	**Tel/Fax:** (510) 343-3000 ext. 15226		**COC No:** 1
Alameda California 94501	**Analysis Turnaround Time**		1 of 3 COCs
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS		**Sampler:** DNR
(510) 343-3001	TAT if different from Below ____		**For Lab Use Only:**
Project Name: Cole School PEA	☐ 2 weeks		Walk-in Client:
Site: 11101 Union Street, Oakland	☐ 1 week		Lab Sampling
P O # 403668001	☐ 2 days		Job / SDG No.
	☐ 1 day		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3-S1I-0.5	10/29/21	0838	G	Soil	1							X	X		X	
AOC3-S1I-2		0840										X				
AOC3-S2I-0.5		0841										X	X		X	
AOC3-S2I-2		0842										X				
AOC3-S6I-0.5		0902								X		X	X			
AOC3-S6I-0.5 DUP		0902								X		X	X			
AOC3-S6I-2		0905										X				
AOC3-S8F-0.5		0932										X	X		X	
AOC3-S8F-2		0933										X				
AOC3-S9G-0.5		0936										X	X		X	
AOC3-S9G-2		0937										X				

320-81044 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH, 6= Other

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for ____ Months

Special Instructions/QC Requirements & Comments.

Hold samples for additional analyses

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.		Cooler Temp. (°C): Obs'd.	Corr'd:	Therm ID No.
Relinquished by: Daysi Nemeno	Company: NMW	Date/Time: 10/29/21 1307	Received by:	Company: ETA SS	Date/Time: 10/29/21 13:07
Relinquished by:	Company: ETA SS	Date/Time: 10/29/21 14:24	Received by:	Company: ETA SS	Date/Time: 10-29-21/1424
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

1.0 c° 1.8° 0.8°

12/15/2021 (Rev. 1)

Eurofins TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

320-81044

201258

eurofins

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Noriega	Date: 10/29/21	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: TestAmerica	2 of 3 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNP
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes.
AOC3-S7F-0.5	10/29/21	1017	G	Soil	1							X	X		X	
AOC3-S7F-2	10/29/21	1019										X				
AOC3-S8G-0.5		1021										X	X		X	
AOC3-S8G-2		1022										X				
AOC3-S7G-0.5		1031										X	X		X	
AOC3-S7G-2		1032										X				
AOC3/AOC8-S6H-0.5		1055										X	X	X	X	
AOC3/AOC8-S6H-2		1056										X		X		
AOC3-S7H-0.5		1057								X	DNP	X	X			
AOC3-S7H-2		1058										X				
AOC3-S8H-0.5		1059										X	X		X	

Preservation Used. 1= Ice, 2= HCl, 3= H2SO4; 4=HNO3; 5=NaOH, 6= Other _____

Possible Hazard Identification.
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.

Hold samples for additional analyses

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.		Cooler Temp (°C): Obs'd. _____ Corr'd: _____ Therm ID No.: _____		
Relinquished by: Daysi Noriega	Company: NMM	Date/Time: 10/29/21 1307	Received by: G. Fick	Company: ETA SS	Date/Time: 10/29/21 1307
Relinquished by: A. Jones	Company: ETA SS	Date/Time: 10/29/21 1421	Received by: Justinn Mulley	Company: ETA SS	Date/Time: 10-29-21 1421
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

Chain of Custody Record

320-81044

901258

eurofins

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Herrera	Date: 10/29/21
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226		COC No: 1 of 3 COCs
Alameda, California 94501	**Analysis Turnaround Time**		Sampler: DNP
(510) 343-3000	☐ CALENDAR DAYS ☑ WORKING DAYS		For Lab Use Only:
(510) 343-3001	TAT if different from Below _____		Walk-in Client:
Project Name: Cole School PEA	☑ 2 weeks		Lab Sampling
Site: 11101 Union Street, Oakland	☐ 1 week		Job / SDG No.
P O # 403668001	☐ 2 days		
	☐ 1 day		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3-S8H-2	10/29/21	1100	G	Soil	1							X				
AOC3/AOC8-S9I-0.5		1114								X		X	X	X		
AOC3/AOC8-S9I-0.5DUP		1114								X		X	X	X		
AOC3/AOC8-S9I-2		1115										X		X		
AOC3-S8H-0.5		1116										X	X		X	
AOC3-S8H-2		1117										X				
AOC3-S7I-0.5		1118										X	X		X	
AOC3-S7I-2		1119										X				
EB10292021		1200		H_2O	3					X		X	X	X		

Preservation Used 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification.
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.
Hold samples for additional analyses

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No		Cooler Temp. (°C): Obs'd _____ Corr'd _____ Therm ID No. _____		
Relinquished by: DNP Herrera	Company: NMI	Date/Time: 10/29/21 1307	Received by: [signature]	Company: EM SJ	Date/Time: 10/29/21 1307
Relinquished by: [signature]	Company: EM SJ	Date/Time: 10/29/21 14 21	Received by: [signature]	Company: EM SJ	Date/Time: 10-29-21 1421
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247576.1
Client Contact: Shipping/Receiving	Phone	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81044-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, As	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B CAM 17 List, minus Mercury	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	6010B/3010A CAM 17 List, minus Mercury	7470A/7470A_Prep Mercury Only	8081A/3510C_LVI Pesticides, Standard List	8082/3510C_LVI PCBs, Standard List				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
AOC3-S1I-0.5 (320-81044-1)	10/29/21	08:38 Pacific		Solid			X	X	X												1	
AOC3-S1I-2 (320-81044-2)	10/29/21	08:40 Pacific		Solid				X													1	
AOC3-S2I-0.5 (320-81044-3)	10/29/21	08:41 Pacific		Solid			X	X	X												1	
AOC3-S2I-2 (320-81044-4)	10/29/21	08:42 Pacific		Solid				X													1	
AOC3-S6I-0.5 (320-81044-5)	10/29/21	09:02 Pacific		Solid				X	X	X											1	
AOC3-S6I-0.5-DUP (320-81044-6)	10/29/21	09:02 Pacific		Solid				X	X	X											1	
AOC3-S6I-2 (320-81044-7)	10/29/21	09:05 Pacific		Solid				X													1	
AOC3-S8F-0.5 (320-81044-8)	10/29/21	09:32 Pacific		Solid			X	X	X												1	
AOC3-S8F-2 (320-81044-9)	10/29/21	09:33 Pacific		Solid				X													1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	11-1-21 1615	ST	[signature]	11-1-21 1615	DCS
2	[signature]	11-1-21 1930	DCS	[signature]	11/1/21 1930	EESAC
3						

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.6

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s)	COC No: 320-247576.2
Client Contact: Shipping/Receiving	Phone	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 2 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81044-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, As	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B CAM 17 List, minus Mercury	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	6010B/3010A CAM 17 List, minus Mercury	7470A/7470A_Prep Mercury Only	8081A/3510C_LVI Pesticides, Standard List	8082/3510C_LVI PCBs, Standard List	Total Number of containers	Special Instructions/Note:
			Preservation Code:															
AOC3-S9G-0.5 (320-81044-10)	10/29/21	09:36 Pacific		Solid			X	X	X								1	
AOC3-S9G-2 (320-81044-11)	10/29/21	09:37 Pacific		Solid				X									1	
AOC3-S7F-0.5 (320-81044-12)	10/29/21	10:17 Pacific		Solid			X	X	X								1	
AOC3-S7F-2 (320-81044-13)	10/29/21	10:19 Pacific		Solid				X									1	
AOC3-S8G-0.5 (320-81044-14)	10/29/21	10:21 Pacific		Solid			X	X	X								1	
AOC3-S8G-2 (320-81044-15)	10/29/21	10:22 Pacific		Solid				X									1	
AOC3-S7G-0.5 (320-81044-16)	10/29/21	10:31 Pacific		Solid			X	X	X								1	
AOC3-S7G-2 (320-81044-17)	10/29/21	10:32 Pacific		Solid				X									1	
AOC3/AOC8-S6H-0.5 (320-81044-18)	10/29/21	10:55 Pacific		Solid			X	X	X		X						1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	11-1-21 1615	ES	[signature]	11-1-21 1615	DES
2	[signature]	11-1-21 1930	DES	[signature]	11/1/21-1930	EESAC
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247576.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 3 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81044-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, As	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B CAM 17 List, minus Mercury	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	6010B/3010A CAM 17 List, minus Mercury	7470A/7470A_Prep Mercury Only	8081A/3510C_LVI Pesticides, Standard List	8082/3510C_LVI PCBs, Standard List	Total Number of containers	Special Instructions/Note:
			Preservation Code:															
AOC3/AOC8-S6H-2 (320-81044-19)	10/29/21	10:56 Pacific		Solid				X			X						1	
AOC3-S7H-0.5 (320-81044-20)	10/29/21	10:57 Pacific		Solid				X	X	X							1	
AOC3-S7H-2 (320-81044-21)	10/29/21	10:58 Pacific		Solid				X									1	
AOC3-S8H-0.5 (320-81044-22)	10/29/21	10:59 Pacific		Solid			X	X	X								1	
AOC3-S8H-2 (320-81044-23)	10/29/21	11:00 Pacific		Solid				X									1	
AOC3/AOC8-S9I-0.5 (320-81044-24)	10/29/21	11:14 Pacific		Solid				X	X	X	X						1	
AOC3/AOC8-S9I-0.5-DUP (320-81044-25)	10/29/21	11:14 Pacific		Solid				X	X	X	X						1	
AOC3/AOC8-S9I-2 (320-81044-26)	10/29/21	11:15 Pacific		Solid				X			X						1	
AOC3-S8H-0.5 (320-81044-27)	10/29/21	11:16 Pacific		Solid			X	X	X								1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10-1-21 1615	ST		10-1-21 1615	DCS
2		10-1-21 1930	DCS		10/1/21-1930	EETSAC
3						

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247576.4
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 4 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81044-1
Address: 880 Riverside Parkway.	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, As	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B CAM 17 List, minus Mercury	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	6010B/3010A CAM 17 List, minus Mercury	7470A/7470A_Prep Mercury Only	8081A/3510C_LVI Pesticides, Standard List	8082/3510C_LVI PCBs, Standard List				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
AOC3-S8H-2 (320-81044-28)	10/29/21	11:17 Pacific		Solid				X													1	
AOC3-S7I-0.5 (320-81044-29)	10/29/21	11:18 Pacific		Solid			X	X	X												1	
AOC3-S7I-2 (320-81044-30)	10/29/21	11:19 Pacific		Solid				X													1	
EB10292021 (320-81044-31)	10/29/21	12:00 Pacific		Water								X	X	X	X	X					~~1~~ 2 sm 11-6-21	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	11-1-21 1615	ST	[signature]	11-1-21 1615	DLS
2	[signature]	11-1-21 1830	DLS	[signature]	11/1/21 1430	EESAT
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

TestAmerica CUSTODY SEAL

Date 11/1/21 Signature

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Part # 69-434 MTW EXP 07/22

320-81044 Waybill

ORIGIN ID:LVKA (928) 484-1919
SAMPLE RECEIVING
EUROFINS TEST AMERICA
780 MONTAGUE EXPRESSWAY
SUITE 602
SAN JOSE, CA 95131
UNITED STATES US

SHIP DATE: 01NOV21
ACTWGT: 30.05 LB
CAD: 0795504/CAFE3507
DIMS: 28x16x15 IN

BILL SENDER

TO SAMPLE RECEIVING
EUROFINS CALSCIENCE, LLC
7440 LINCOLN WAY

GARDEN GROVE CA 92841
(714) 895-5494 REF:
INV:
PO: DEPT:

5PDC1/A822/6F4D

FedEx Express

JP1102012101ee

TUE - 02 NOV 11:30A
PRIORITY OVERNIGHT

TRK# 0201 5047 2941 7677

92 APVA

92841
CA-US SNA

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605
Phone 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247590 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Justinn Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 1
Company: Eurofins Calscience LLC		Accreditations Required (See note): State - California		Job #: 320-81044-1
Address: 7440 Lincoln Way, ,	Due Date Requested: 11/14/2021			
City: Garden Grove	TAT Requested (days):			
State, Zip: CA, 92841	PO #:			
Phone: 714-895-5494(Tel) 714-894-7501(Fax)	WO #:			
Email	Project #: 32017058			
Project Name: Cole School PEA	SSOW#:			
Site				

Analysis Requested

Preservation Codes

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M Hexane, N None, O AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S H2SO4, T TSP Dodecahydrate, U - Acetone, V - MCAA, W pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7471A/7471A_Prep Mercury	6010B/3010A California Administrative Manual List	7470A/7470A_Prep Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
AOC3-S6I-0 5 (320-81044-5)	10/29/21	09:02 Pacific		Solid			X			1	
AOC3-S6I-0 5-DUP (320-81044-6)	10/29/21	09 02 Pacific		Solid			X			1	
AOC3-S7H-0 5 (320-81044-20)	10/29/21	10 57 Pacific		Solid			X			1	
AOC3/AOC8-S9I-0 5 (320-81044-24)	10/29/21	11 14 Pacific		Solid			X			1	
AOC3/AOC8-S9I-0 5-DUP (320-81044-25)	10/29/21	11 14 Pacific		Solid			X			1	
EB10292021 (320-81044-31)	10/29/21	12:00 Pacific		Water				X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested. I, II, III, IV, Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by	Date:	Time.	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		11/1/21 1600	TestAmerica		11/2/21 1020	Kcc
2						
3						

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No. N/A	Cooler Temperature(s) °C and Other Remarks 1.9/2.8 SW

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81044-1

Login Number: 81044
List Number: 1
Creator: Mullen, Joan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81044-1

Login Number: 81044
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81044-1

Login Number: 81044
List Number: 3
Creator: Ortiz-Luis, Michael

List Source: Eurofins Calscience LLC
List Creation: 11/02/21 02:36 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-81044-2
Client Project/Site: Cole School PEA
Revision: 1

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/15/2021 11:45:45 AM

Justinn Gonzales, Project Manager I
(925)484-1919
Justinn.Gonzales@Eurofinset.com

LINKS

Review your project results through TotalAccess

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Qualifiers

Dioxin

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
q	The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 320-81044-2

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-81044-2

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 11/23/2021. The report (revision 1) is being revised due to: Report samples to MDL or EDL for 8290A per client request. Total TEQ also added.

Receipt
The samples were received on 10/29/2021 2:21 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.8º C, 1.0º C and 1.8º C.

Dioxin
Method 8290A: The scheduled automatic ending resolution check did not print due to loss of communication to the SIOS data acquisition computer. Upon arrival to the laboratory, the analyst rebooted the SIOS and performed a manual ending resolution check. Although this ending resolution check was performed past the 12 hour analytical clock, all associated samples were analyzed within the 12 hour analytical clock and the resolution check indicates the instrument maintained greater than 10,000 resolution. No further corrective action was taken. AOC3/AOC8-S9I-0.5 (320-81044-24), AOC3/AOC8-S9I-0.5 DUP (320-81044-25), (CCV 320-544985/17) and (CCV 320-544985/2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Dioxin Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Client Sample ID: AOC3/AOC8-S6H-2 — Lab Sample ID: 320-81044-19

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDF	0.20	J	0.96	0.027	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.30	J B	4.8	0.088	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.077	J B	4.8	0.044	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.090	J B	4.8	0.044	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDF	0.17	J B	4.8	0.050	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	1.0	J B	4.8	0.037	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.28	J	4.8	0.060	pg/g	1		8290A	Total/NA
OCDD	9.8	B	9.6	0.10	pg/g	1		8290A	Total/NA
OCDF	0.56	J B	9.6	0.070	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S9I-0.5 — Lab Sample ID: 320-81044-24

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,7,8-PeCDD	0.23	J	4.8	0.11	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDF	0.45	J	4.8	0.14	pg/g	1		8290A	Total/NA
2,3,4,7,8-PeCDF	0.70	J	4.8	0.15	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.41	J B	4.8	0.11	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	0.34	J B	4.8	0.11	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	0.45	J	4.8	0.098	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.39	J B	4.8	0.088	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.62	J B	4.8	0.088	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDF	0.17	J B	4.8	0.099	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.66	J	4.8	0.094	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	3.6	J B	4.8	0.038	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	1.7	J	4.8	0.079	pg/g	1		8290A	Total/NA
1,2,3,4,7,8,9-HpCDF	0.18	J q	4.8	0.090	pg/g	1		8290A	Total/NA
OCDD	22	B	9.6	0.083	pg/g	1		8290A	Total/NA
OCDF	1.6	J B	9.6	0.070	pg/g	1		8290A	Total/NA
2,3,7,8-TCDF - RA	0.89	J	0.96	0.11	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S9I-0.5 DUP — Lab Sample ID: 320-81044-25

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,7,8-PeCDF	0.42	J	4.8	0.14	pg/g	1		8290A	Total/NA
2,3,4,7,8-PeCDF	0.56	J	4.8	0.15	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.41	J B	4.8	0.12	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	0.37	J B	4.8	0.12	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	0.50	J	4.8	0.11	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.41	J B	4.8	0.090	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.49	J B	4.8	0.090	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDF	0.15	J q B	4.8	0.10	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.55	J	4.8	0.096	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	3.7	J B	4.8	0.059	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	1.5	J	4.8	0.093	pg/g	1		8290A	Total/NA
OCDD	26	B	9.7	0.12	pg/g	1		8290A	Total/NA
OCDF	1.5	J B	9.7	0.10	pg/g	1		8290A	Total/NA
2,3,7,8-TCDF - RA	0.84	J	0.97	0.18	pg/g	1		8290A	Total/NA

Client Sample ID: AOC3/AOC8-S9I-2 — Lab Sample ID: 320-81044-26

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDF	0.21	J q	1.0	0.038	pg/g	1		8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Client Sample ID: AOC3/AOC8-S9I-2 (Continued)

Lab Sample ID: 320-81044-26

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,4,7,8-HxCDD	0.46	J B	5.0	0.096	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	0.45	J B	5.0	0.096	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.14	J q B	5.0	0.055	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.14	J q B	5.0	0.055	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.11	J q	5.0	0.059	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	0.69	J B	5.0	0.047	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.38	J	5.0	0.083	pg/g	1		8290A	Total/NA
OCDD	5.2	J B	10	0.11	pg/g	1		8290A	Total/NA
OCDF	0.74	J B	10	0.082	pg/g	1		8290A	Total/NA

Client Sample ID: EB10292021

Lab Sample ID: 320-81044-31

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDF	0.43	J	9.7	0.18	pg/L	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	2.3	J q B	49	0.49	pg/L	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	0.87	J B	49	0.13	pg/L	1		8290A	Total/NA
OCDD	5.7	J q B	97	0.37	pg/L	1		8290A	Total/NA
OCDF	1.6	J B	97	0.38	pg/L	1		8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AOC3/AOC8-S6H-2

Date Collected: 10/29/21 10:56
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-19

Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.96	0.070	pg/g		11/02/21 10:24	11/19/21 05:36	1
2,3,7,8-TCDF	**0.20**	**J**	0.96	0.027	pg/g		11/02/21 10:24	11/19/21 05:36	1
1,2,3,7,8-PeCDD	ND		4.8	0.088	pg/g		11/02/21 10:24	11/19/21 05:36	1
1,2,3,7,8-PeCDF	ND		4.8	0.052	pg/g		11/02/21 10:24	11/19/21 05:36	1
2,3,4,7,8-PeCDF	ND		4.8	0.054	pg/g		11/02/21 10:24	11/19/21 05:36	1
1,2,3,4,7,8-HxCDD	**0.30**	**J B**	4.8	0.088	pg/g		11/02/21 10:24	11/19/21 05:36	1
1,2,3,6,7,8-HxCDD	ND		4.8	0.088	pg/g		11/02/21 10:24	11/19/21 05:36	1
1,2,3,7,8,9-HxCDD	ND		4.8	0.080	pg/g		11/02/21 10:24	11/19/21 05:36	1
1,2,3,4,7,8-HxCDF	**0.077**	**J B**	4.8	0.044	pg/g		11/02/21 10:24	11/19/21 05:36	1
1,2,3,6,7,8-HxCDF	**0.090**	**J B**	4.8	0.044	pg/g		11/02/21 10:24	11/19/21 05:36	1
1,2,3,7,8,9-HxCDF	**0.17**	**J B**	4.8	0.050	pg/g		11/02/21 10:24	11/19/21 05:36	1
2,3,4,6,7,8-HxCDF	ND		4.8	0.047	pg/g		11/02/21 10:24	11/19/21 05:36	1
1,2,3,4,6,7,8-HpCDD	**1.0**	**J B**	4.8	0.037	pg/g		11/02/21 10:24	11/19/21 05:36	1
1,2,3,4,6,7,8-HpCDF	**0.28**	**J**	4.8	0.060	pg/g		11/02/21 10:24	11/19/21 05:36	1
1,2,3,4,7,8,9-HpCDF	ND		4.8	0.069	pg/g		11/02/21 10:24	11/19/21 05:36	1
OCDD	**9.8**	**B**	9.6	0.10	pg/g		11/02/21 10:24	11/19/21 05:36	1
OCDF	**0.56**	**J B**	9.6	0.070	pg/g		11/02/21 10:24	11/19/21 05:36	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*80*		*40 - 135*	*11/02/21 10:24*	*11/19/21 05:36*	*1*
13C-2,3,7,8-TCDF	*71*		*40 - 135*	*11/02/21 10:24*	*11/19/21 05:36*	*1*
13C-1,2,3,7,8-PeCDD	*63*		*40 - 135*	*11/02/21 10:24*	*11/19/21 05:36*	*1*
13C-1,2,3,7,8-PeCDF	*74*		*40 - 135*	*11/02/21 10:24*	*11/19/21 05:36*	*1*
13C-1,2,3,6,7,8-HxCDD	*79*		*40 - 135*	*11/02/21 10:24*	*11/19/21 05:36*	*1*
13C-1,2,3,4,7,8-HxCDF	*84*		*40 - 135*	*11/02/21 10:24*	*11/19/21 05:36*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*80*		*40 - 135*	*11/02/21 10:24*	*11/19/21 05:36*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*82*		*40 - 135*	*11/02/21 10:24*	*11/19/21 05:36*	*1*
13C-OCDD	*84*		*40 - 135*	*11/02/21 10:24*	*11/19/21 05:36*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Client Sample ID: AOC3/AOC8-S9I-0.5
Date Collected: 10/29/21 11:14
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-24
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.96	0.11	pg/g		11/02/21 10:24	11/19/21 13:14	1
1,2,3,7,8-PeCDD	0.23	J	4.8	0.11	pg/g		11/02/21 10:24	11/19/21 13:14	1
1,2,3,7,8-PeCDF	0.45	J	4.8	0.14	pg/g		11/02/21 10:24	11/19/21 13:14	1
2,3,4,7,8-PeCDF	0.70	J	4.8	0.15	pg/g		11/02/21 10:24	11/19/21 13:14	1
1,2,3,4,7,8-HxCDD	0.41	J B	4.8	0.11	pg/g		11/02/21 10:24	11/19/21 13:14	1
1,2,3,6,7,8-HxCDD	0.34	J B	4.8	0.11	pg/g		11/02/21 10:24	11/19/21 13:14	1
1,2,3,7,8,9-HxCDD	0.45	J	4.8	0.098	pg/g		11/02/21 10:24	11/19/21 13:14	1
1,2,3,4,7,8-HxCDF	0.39	J B	4.8	0.088	pg/g		11/02/21 10:24	11/19/21 13:14	1
1,2,3,6,7,8-HxCDF	0.62	J B	4.8	0.088	pg/g		11/02/21 10:24	11/19/21 13:14	1
1,2,3,7,8,9-HxCDF	0.17	J B	4.8	0.099	pg/g		11/02/21 10:24	11/19/21 13:14	1
2,3,4,6,7,8-HxCDF	0.66	J	4.8	0.094	pg/g		11/02/21 10:24	11/19/21 13:14	1
1,2,3,4,6,7,8-HpCDD	3.6	J B	4.8	0.038	pg/g		11/02/21 10:24	11/19/21 13:14	1
1,2,3,4,6,7,8-HpCDF	1.7	J	4.8	0.079	pg/g		11/02/21 10:24	11/19/21 13:14	1
1,2,3,4,7,8,9-HpCDF	0.18	J q	4.8	0.090	pg/g		11/02/21 10:24	11/19/21 13:14	1
OCDD	22	B	9.6	0.083	pg/g		11/02/21 10:24	11/19/21 13:14	1
OCDF	1.6	J B	9.6	0.070	pg/g		11/02/21 10:24	11/19/21 13:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*77*		*40 - 135*	*11/02/21 10:24*	*11/19/21 13:14*	*1*
13C-1,2,3,7,8-PeCDD	*88*		*40 - 135*	*11/02/21 10:24*	*11/19/21 13:14*	*1*
13C-1,2,3,7,8-PeCDF	*83*		*40 - 135*	*11/02/21 10:24*	*11/19/21 13:14*	*1*
13C-1,2,3,6,7,8-HxCDD	*77*		*40 - 135*	*11/02/21 10:24*	*11/19/21 13:14*	*1*
13C-1,2,3,4,7,8-HxCDF	*81*		*40 - 135*	*11/02/21 10:24*	*11/19/21 13:14*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*76*		*40 - 135*	*11/02/21 10:24*	*11/19/21 13:14*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*78*		*40 - 135*	*11/02/21 10:24*	*11/19/21 13:14*	*1*
13C-OCDD	*85*		*40 - 135*	*11/02/21 10:24*	*11/19/21 13:14*	*1*

Method: 8290A - Dioxins and Furans (HRGC/HRMS) - RA

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDF	0.89	J	0.96	0.11	pg/g		11/02/21 10:24	11/21/21 23:11	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDF	*89*		*40 - 135*	*11/02/21 10:24*	*11/21/21 23:11*	*1*

Client Sample ID: AOC3/AOC8-S9I-0.5 DUP
Date Collected: 10/29/21 11:14
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-25
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.97	0.10	pg/g		11/02/21 10:24	11/19/21 14:02	1
1,2,3,7,8-PeCDD	ND		4.8	0.12	pg/g		11/02/21 10:24	11/19/21 14:02	1
1,2,3,7,8-PeCDF	**0.42**	**J**	4.8	0.14	pg/g		11/02/21 10:24	11/19/21 14:02	1
2,3,4,7,8-PeCDF	**0.56**	**J**	4.8	0.15	pg/g		11/02/21 10:24	11/19/21 14:02	1
1,2,3,4,7,8-HxCDD	**0.41**	**J B**	4.8	0.12	pg/g		11/02/21 10:24	11/19/21 14:02	1
1,2,3,6,7,8-HxCDD	**0.37**	**J B**	4.8	0.12	pg/g		11/02/21 10:24	11/19/21 14:02	1
1,2,3,7,8,9-HxCDD	**0.50**	**J**	4.8	0.11	pg/g		11/02/21 10:24	11/19/21 14:02	1
1,2,3,4,7,8-HxCDF	**0.41**	**J B**	4.8	0.090	pg/g		11/02/21 10:24	11/19/21 14:02	1
1,2,3,6,7,8-HxCDF	**0.49**	**J B**	4.8	0.090	pg/g		11/02/21 10:24	11/19/21 14:02	1
1,2,3,7,8,9-HxCDF	**0.15**	**J q B**	4.8	0.10	pg/g		11/02/21 10:24	11/19/21 14:02	1
2,3,4,6,7,8-HxCDF	**0.55**	**J**	4.8	0.096	pg/g		11/02/21 10:24	11/19/21 14:02	1
1,2,3,4,6,7,8-HpCDD	**3.7**	**J B**	4.8	0.059	pg/g		11/02/21 10:24	11/19/21 14:02	1
1,2,3,4,6,7,8-HpCDF	**1.5**	**J**	4.8	0.093	pg/g		11/02/21 10:24	11/19/21 14:02	1
1,2,3,4,7,8,9-HpCDF	ND		4.8	0.11	pg/g		11/02/21 10:24	11/19/21 14:02	1
OCDD	**26**	**B**	9.7	0.12	pg/g		11/02/21 10:24	11/19/21 14:02	1
OCDF	**1.5**	**J B**	9.7	0.10	pg/g		11/02/21 10:24	11/19/21 14:02	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*78*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:02*	*1*
13C-1,2,3,7,8-PeCDD	*86*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:02*	*1*
13C-1,2,3,7,8-PeCDF	*76*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:02*	*1*
13C-1,2,3,6,7,8-HxCDD	*79*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:02*	*1*
13C-1,2,3,4,7,8-HxCDF	*70*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:02*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*80*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:02*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*76*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:02*	*1*
13C-OCDD	*78*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:02*	*1*

Method: 8290A - Dioxins and Furans (HRGC/HRMS) - RA

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDF	**0.84**	**J**	0.97	0.18	pg/g		11/02/21 10:24	11/21/21 23:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDF	*92*		*40 - 135*	*11/02/21 10:24*	*11/21/21 23:49*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Client Sample ID: AOC3/AOC8-S9I-2
Date Collected: 10/29/21 11:15
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-26
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.0	0.082	pg/g		11/02/21 10:24	11/19/21 14:50	1
2,3,7,8-TCDF	**0.21**	**J q**	1.0	0.038	pg/g		11/02/21 10:24	11/19/21 14:50	1
1,2,3,7,8-PeCDD	ND		5.0	0.10	pg/g		11/02/21 10:24	11/19/21 14:50	1
1,2,3,7,8-PeCDF	ND		5.0	0.072	pg/g		11/02/21 10:24	11/19/21 14:50	1
2,3,4,7,8-PeCDF	ND		5.0	0.075	pg/g		11/02/21 10:24	11/19/21 14:50	1
1,2,3,4,7,8-HxCDD	**0.46**	**J B**	5.0	0.096	pg/g		11/02/21 10:24	11/19/21 14:50	1
1,2,3,6,7,8-HxCDD	**0.45**	**J B**	5.0	0.096	pg/g		11/02/21 10:24	11/19/21 14:50	1
1,2,3,7,8,9-HxCDD	ND		5.0	0.088	pg/g		11/02/21 10:24	11/19/21 14:50	1
1,2,3,4,7,8-HxCDF	**0.14**	**J q B**	5.0	0.055	pg/g		11/02/21 10:24	11/19/21 14:50	1
1,2,3,6,7,8-HxCDF	**0.14**	**J q B**	5.0	0.055	pg/g		11/02/21 10:24	11/19/21 14:50	1
1,2,3,7,8,9-HxCDF	ND		5.0	0.063	pg/g		11/02/21 10:24	11/19/21 14:50	1
2,3,4,6,7,8-HxCDF	**0.11**	**J q**	5.0	0.059	pg/g		11/02/21 10:24	11/19/21 14:50	1
1,2,3,4,6,7,8-HpCDD	**0.69**	**J B**	5.0	0.047	pg/g		11/02/21 10:24	11/19/21 14:50	1
1,2,3,4,6,7,8-HpCDF	**0.38**	**J**	5.0	0.083	pg/g		11/02/21 10:24	11/19/21 14:50	1
1,2,3,4,7,8,9-HpCDF	ND		5.0	0.094	pg/g		11/02/21 10:24	11/19/21 14:50	1
OCDD	**5.2**	**J B**	10	0.11	pg/g		11/02/21 10:24	11/19/21 14:50	1
OCDF	**0.74**	**J B**	10	0.082	pg/g		11/02/21 10:24	11/19/21 14:50	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*80*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:50*	*1*
13C-2,3,7,8-TCDF	*76*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:50*	*1*
13C-1,2,3,7,8-PeCDD	*76*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:50*	*1*
13C-1,2,3,7,8-PeCDF	*76*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:50*	*1*
13C-1,2,3,6,7,8-HxCDD	*83*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:50*	*1*
13C-1,2,3,4,7,8-HxCDF	*82*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:50*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*84*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:50*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*80*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:50*	*1*
13C-OCDD	*81*		*40 - 135*	*11/02/21 10:24*	*11/19/21 14:50*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Client Sample ID: EB10292021
Date Collected: 10/29/21 12:00
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-31
Matrix: Water

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		9.7	0.40	pg/L		11/03/21 06:26	11/12/21 11:53	1
2,3,7,8-TCDF	**0.43**	**J**	9.7	0.18	pg/L		11/03/21 06:26	11/12/21 11:53	1
1,2,3,7,8-PeCDD	ND		49	0.43	pg/L		11/03/21 06:26	11/12/21 11:53	1
1,2,3,7,8-PeCDF	ND		49	0.40	pg/L		11/03/21 06:26	11/12/21 11:53	1
2,3,4,7,8-PeCDF	ND		49	0.40	pg/L		11/03/21 06:26	11/12/21 11:53	1
1,2,3,4,7,8-HxCDD	**2.3**	**J q B**	49	0.49	pg/L		11/03/21 06:26	11/12/21 11:53	1
1,2,3,6,7,8-HxCDD	ND		49	0.47	pg/L		11/03/21 06:26	11/12/21 11:53	1
1,2,3,7,8,9-HxCDD	ND		49	0.42	pg/L		11/03/21 06:26	11/12/21 11:53	1
1,2,3,4,7,8-HxCDF	ND		49	0.54	pg/L		11/03/21 06:26	11/12/21 11:53	1
1,2,3,6,7,8-HxCDF	ND		49	0.52	pg/L		11/03/21 06:26	11/12/21 11:53	1
1,2,3,7,8,9-HxCDF	ND		49	0.56	pg/L		11/03/21 06:26	11/12/21 11:53	1
2,3,4,6,7,8-HxCDF	ND		49	0.53	pg/L		11/03/21 06:26	11/12/21 11:53	1
1,2,3,4,6,7,8-HpCDD	**0.87**	**J B**	49	0.13	pg/L		11/03/21 06:26	11/12/21 11:53	1
1,2,3,4,6,7,8-HpCDF	ND		49	0.25	pg/L		11/03/21 06:26	11/12/21 11:53	1
1,2,3,4,7,8,9-HpCDF	ND		49	0.32	pg/L		11/03/21 06:26	11/12/21 11:53	1
OCDD	**5.7**	**J q B**	97	0.37	pg/L		11/03/21 06:26	11/12/21 11:53	1
OCDF	**1.6**	**J B**	97	0.38	pg/L		11/03/21 06:26	11/12/21 11:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*85*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:53*	*1*
13C-2,3,7,8-TCDF	*87*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:53*	*1*
13C-1,2,3,7,8-PeCDD	*85*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:53*	*1*
13C-1,2,3,7,8-PeCDF	*89*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:53*	*1*
13C-1,2,3,6,7,8-HxCDD	*88*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:53*	*1*
13C-1,2,3,4,7,8-HxCDF	*102*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:53*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*112*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:53*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*97*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:53*	*1*
13C-OCDD	*119*		*40 - 135*	*11/03/21 06:26*	*11/12/21 11:53*	*1*

Toxicity Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Client Sample ID: AOC3/AOC8-S6H-2 — Lab Sample ID: 320-81044-19

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.96	0.070	pg/g	1	0.00	8290A
2,3,7,8-TCDF	**0.20**	**J**	0.96	0.027	pg/g	0.1	**0.020**	8290A
1,2,3,7,8-PeCDD	ND		4.8	0.088	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	ND		4.8	0.052	pg/g	0.03	0.00	8290A
2,3,4,7,8-PeCDF	ND		4.8	0.054	pg/g	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	**0.30**	**J B**	4.8	0.088	pg/g	0.1	**0.030**	8290A
1,2,3,6,7,8-HxCDD	ND		4.8	0.088	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDD	ND		4.8	0.080	pg/g	0.1	0.00	8290A
1,2,3,4,7,8-HxCDF	**0.077**	**J B**	4.8	0.044	pg/g	0.1	**0.0077**	8290A
1,2,3,6,7,8-HxCDF	**0.090**	**J B**	4.8	0.044	pg/g	0.1	**0.0090**	8290A
1,2,3,7,8,9-HxCDF	**0.17**	**J B**	4.8	0.050	pg/g	0.1	**0.017**	8290A
2,3,4,6,7,8-HxCDF	ND		4.8	0.047	pg/g	0.1	0.00	8290A
1,2,3,4,6,7,8-HpCDD	**1.0**	**J B**	4.8	0.037	pg/g	0.01	**0.010**	8290A
1,2,3,4,6,7,8-HpCDF	**0.28**	**J**	4.8	0.060	pg/g	0.01	**0.0028**	8290A
1,2,3,4,7,8,9-HpCDF	ND		4.8	0.069	pg/g	0.01	0.00	8290A
OCDD	**9.8**	**B**	9.6	0.10	pg/g	0.0003	**0.0029**	8290A
OCDF	**0.56**	**J B**	9.6	0.070	pg/g	0.0003	**0.00017**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.10	TEQ

Client Sample ID: AOC3/AOC8-S9I-0.5 — Lab Sample ID: 320-81044-24

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.96	0.11	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDD	**0.23**	**J**	4.8	0.11	pg/g	1	**0.23**	8290A
1,2,3,7,8-PeCDF	**0.45**	**J**	4.8	0.14	pg/g	0.03	**0.014**	8290A
2,3,4,7,8-PeCDF	**0.70**	**J**	4.8	0.15	pg/g	0.3	**0.21**	8290A
1,2,3,4,7,8-HxCDD	**0.41**	**J B**	4.8	0.11	pg/g	0.1	**0.041**	8290A
1,2,3,6,7,8-HxCDD	**0.34**	**J B**	4.8	0.11	pg/g	0.1	**0.034**	8290A
1,2,3,7,8,9-HxCDD	**0.45**	**J**	4.8	0.098	pg/g	0.1	**0.045**	8290A
1,2,3,4,7,8-HxCDF	**0.39**	**J B**	4.8	0.088	pg/g	0.1	**0.039**	8290A
1,2,3,6,7,8-HxCDF	**0.62**	**J B**	4.8	0.088	pg/g	0.1	**0.062**	8290A
1,2,3,7,8,9-HxCDF	**0.17**	**J B**	4.8	0.099	pg/g	0.1	**0.017**	8290A
2,3,4,6,7,8-HxCDF	**0.66**	**J**	4.8	0.094	pg/g	0.1	**0.066**	8290A
1,2,3,4,6,7,8-HpCDD	**3.6**	**J B**	4.8	0.038	pg/g	0.01	**0.036**	8290A
1,2,3,4,6,7,8-HpCDF	**1.7**	**J**	4.8	0.079	pg/g	0.01	**0.017**	8290A
1,2,3,4,7,8,9-HpCDF	**0.18**	**J q**	4.8	0.090	pg/g	0.01	**0.0018**	8290A
OCDD	**22**	**B**	9.6	0.083	pg/g	0.0003	**0.0066**	8290A
OCDF	**1.6**	**J B**	9.6	0.070	pg/g	0.0003	**0.00048**	8290A
2,3,7,8-TCDF - RA	**0.89**	**J**	0.96	0.11	pg/g	0.1	**0.089**	8290A

TEF Reference:
WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Toxicity Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Client Sample ID: AOC3/AOC8-S9I-0.5 (Continued) — Lab Sample ID: 320-81044-24

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.91	TEQ

Client Sample ID: AOC3/AOC8-S9I-0.5 DUP — Lab Sample ID: 320-81044-25

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.97	0.10	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDD	ND		4.8	0.12	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	**0.42**	**J**	4.8	0.14	pg/g	0.03	**0.013**	8290A
2,3,4,7,8-PeCDF	**0.56**	**J**	4.8	0.15	pg/g	0.3	**0.17**	8290A
1,2,3,4,7,8-HxCDD	**0.41**	**J B**	4.8	0.12	pg/g	0.1	**0.041**	8290A
1,2,3,6,7,8-HxCDD	**0.37**	**J B**	4.8	0.12	pg/g	0.1	**0.037**	8290A
1,2,3,7,8,9-HxCDD	**0.50**	**J**	4.8	0.11	pg/g	0.1	**0.050**	8290A
1,2,3,4,7,8-HxCDF	**0.41**	**J B**	4.8	0.090	pg/g	0.1	**0.041**	8290A
1,2,3,6,7,8-HxCDF	**0.49**	**J B**	4.8	0.090	pg/g	0.1	**0.049**	8290A
1,2,3,7,8,9-HxCDF	**0.15**	**J q B**	4.8	0.10	pg/g	0.1	**0.015**	8290A
2,3,4,6,7,8-HxCDF	**0.55**	**J**	4.8	0.096	pg/g	0.1	**0.055**	8290A
1,2,3,4,6,7,8-HpCDD	**3.7**	**J B**	4.8	0.059	pg/g	0.01	**0.037**	8290A
1,2,3,4,6,7,8-HpCDF	**1.5**	**J**	4.8	0.093	pg/g	0.01	**0.015**	8290A
1,2,3,4,7,8,9-HpCDF	ND		4.8	0.11	pg/g	0.01	0.00	8290A
OCDD	**26**	**B**	9.7	0.12	pg/g	0.0003	**0.0078**	8290A
OCDF	**1.5**	**J B**	9.7	0.10	pg/g	0.0003	**0.00045**	8290A
2,3,7,8-TCDF - RA	**0.84**	**J**	0.97	0.18	pg/g	0.1	**0.084**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.62	TEQ

Client Sample ID: AOC3/AOC8-S9I-2 — Lab Sample ID: 320-81044-26

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		1.0	0.082	pg/g	1	0.00	8290A
2,3,7,8-TCDF	**0.21**	**J q**	1.0	0.038	pg/g	0.1	**0.021**	8290A
1,2,3,7,8-PeCDD	ND		5.0	0.10	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	ND		5.0	0.072	pg/g	0.03	0.00	8290A
2,3,4,7,8-PeCDF	ND		5.0	0.075	pg/g	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	**0.46**	**J B**	5.0	0.096	pg/g	0.1	**0.046**	8290A
1,2,3,6,7,8-HxCDD	**0.45**	**J B**	5.0	0.096	pg/g	0.1	**0.045**	8290A
1,2,3,7,8,9-HxCDD	ND		5.0	0.088	pg/g	0.1	0.00	8290A
1,2,3,4,7,8-HxCDF	**0.14**	**J q B**	5.0	0.055	pg/g	0.1	**0.014**	8290A
1,2,3,6,7,8-HxCDF	**0.14**	**J q B**	5.0	0.055	pg/g	0.1	**0.014**	8290A
1,2,3,7,8,9-HxCDF	ND		5.0	0.063	pg/g	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	**0.11**	**J q**	5.0	0.059	pg/g	0.1	**0.011**	8290A

TEF Reference:
WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Toxicity Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Client Sample ID: AOC3/AOC8-S9I-2 (Continued)

Lab Sample ID: 320-81044-26

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
1,2,3,4,6,7,8-HpCDD	0.69	J B	5.0	0.047	pg/g	0.01	0.0069	8290A
1,2,3,4,6,7,8-HpCDF	0.38	J	5.0	0.083	pg/g	0.01	0.0038	8290A
1,2,3,4,7,8,9-HpCDF	ND		5.0	0.094	pg/g	0.01	0.00	8290A
OCDD	5.2	J B	10	0.11	pg/g	0.0003	0.0016	8290A
OCDF	0.74	J B	10	0.082	pg/g	0.0003	0.00022	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.16	TEQ

Client Sample ID: EB10292021

Lab Sample ID: 320-81044-31

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		9.7	0.40	pg/L	1	0.00	8290A
2,3,7,8-TCDF	0.43	J	9.7	0.18	pg/L	0.1	0.043	8290A
1,2,3,7,8-PeCDD	ND		49	0.43	pg/L	1	0.00	8290A
1,2,3,7,8-PeCDF	ND		49	0.40	pg/L	0.03	0.00	8290A
2,3,4,7,8-PeCDF	ND		49	0.40	pg/L	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	2.3	J q B	49	0.49	pg/L	0.1	0.23	8290A
1,2,3,6,7,8-HxCDD	ND		49	0.47	pg/L	0.1	0.00	8290A
1,2,3,7,8,9-HxCDD	ND		49	0.42	pg/L	0.1	0.00	8290A
1,2,3,4,7,8-HxCDF	ND		49	0.54	pg/L	0.1	0.00	8290A
1,2,3,6,7,8-HxCDF	ND		49	0.52	pg/L	0.1	0.00	8290A
1,2,3,7,8,9-HxCDF	ND		49	0.56	pg/L	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	ND		49	0.53	pg/L	0.1	0.00	8290A
1,2,3,4,6,7,8-HpCDD	0.87	J B	49	0.13	pg/L	0.01	0.0087	8290A
1,2,3,4,6,7,8-HpCDF	ND		49	0.25	pg/L	0.01	0.00	8290A
1,2,3,4,7,8,9-HpCDF	ND		49	0.32	pg/L	0.01	0.00	8290A
OCDD	5.7	J q B	97	0.37	pg/L	0.0003	0.0017	8290A
OCDF	1.6	J B	97	0.38	pg/L	0.0003	0.00048	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/L		0.28	TEQ

TEF Reference:
WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Isotope Dilution Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (40-135)	TCDF (40-135)	PeCDD (40-135)	PeCDF (40-135)	HxDD (40-135)	HxCDF (40-135)	HpCDD (40-135)	HpCDF (40-135)
320-81044-19	AOC3/AOC8-S6H-2	80	71	63	74	79	84	80	82
320-81044-24	AOC3/AOC8-S9I-0.5	77		88	83	77	81	76	78
320-81044-24 - RA	AOC3/AOC8-S9I-0.5		89						
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	78		86	76	79	70	80	76
320-81044-25 - RA	AOC3/AOC8-S9I-0.5 DUP		92						
320-81044-26	AOC3/AOC8-S9I-2	80	76	76	76	83	82	84	80
LCS 320-539149/2-A	Lab Control Sample	72	73	75	66	76	80	73	72
LCSD 320-539149/3-A	Lab Control Sample Dup	74	75	72	76	74	76	77	73
MB 320-539149/1-A	Method Blank	72	82	87	90	63	72	66	68

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	OCDD (40-135)							
320-81044-19	AOC3/AOC8-S6H-2	84							
320-81044-24	AOC3/AOC8-S9I-0.5	85							
320-81044-24 - RA	AOC3/AOC8-S9I-0.5								
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	78							
320-81044-25 - RA	AOC3/AOC8-S9I-0.5 DUP								
320-81044-26	AOC3/AOC8-S9I-2	81							
LCS 320-539149/2-A	Lab Control Sample	75							
LCSD 320-539149/3-A	Lab Control Sample Dup	72							
MB 320-539149/1-A	Method Blank	65							

Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF = 13C-1,2,3,7,8-PeCDF
HxDD = 13C-1,2,3,6,7,8-HxCDD
HxCDF = 13C-1,2,3,4,7,8-HxCDF
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
OCDD = 13C-OCDD

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (40-135)	TCDF (40-135)	PeCDD (40-135)	PeCDF (40-135)	HxDD (40-135)	HxCDF (40-135)	HpCDD (40-135)	HpCDF (40-135)
320-81044-31	EB10292021	85	87	85	89	88	102	112	97
LCS 320-539427/2-A	Lab Control Sample	84	85	95	92	83	91	108	98
LCSD 320-539427/3-A	Lab Control Sample Dup	90	92	100	94	88	89	102	98
MB 320-539427/1-A	Method Blank	69	74	74	77	75	81	91	80

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	OCDD (40-135)							
320-81044-31	EB10292021	119							
LCS 320-539427/2-A	Lab Control Sample	91							
LCSD 320-539427/3-A	Lab Control Sample Dup	96							
MB 320-539427/1-A	Method Blank	95							

Isotope Dilution Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF = 13C-1,2,3,7,8-PeCDF
HxDD = 13C-1,2,3,6,7,8-HxCDD
HxCDF = 13C-1,2,3,4,7,8-HxCDF
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
OCDD = 13C-OCDD

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 320-539149/1-A
Matrix: Solid
Analysis Batch: 544394

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539149

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.0	0.13	pg/g		11/02/21 10:24	11/18/21 23:13	1
2,3,7,8-TCDF	ND		1.0	0.034	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,7,8-PeCDD	ND		5.0	0.12	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,7,8-PeCDF	ND		5.0	0.066	pg/g		11/02/21 10:24	11/18/21 23:13	1
2,3,4,7,8-PeCDF	ND		5.0	0.068	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,4,7,8-HxCDD	0.377	J	5.0	0.14	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,6,7,8-HxCDD	0.201	J q	5.0	0.14	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,7,8,9-HxCDD	ND		5.0	0.13	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,4,7,8-HxCDF	0.163	J	5.0	0.059	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,6,7,8-HxCDF	0.176	J	5.0	0.059	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,7,8,9-HxCDF	0.258	J	5.0	0.066	pg/g		11/02/21 10:24	11/18/21 23:13	1
2,3,4,6,7,8-HxCDF	ND		5.0	0.063	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,4,6,7,8-HpCDD	0.312	J	5.0	0.031	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,4,6,7,8-HpCDF	ND		5.0	0.094	pg/g		11/02/21 10:24	11/18/21 23:13	1
1,2,3,4,7,8,9-HpCDF	ND		5.0	0.11	pg/g		11/02/21 10:24	11/18/21 23:13	1
OCDD	0.871	J q	10	0.11	pg/g		11/02/21 10:24	11/18/21 23:13	1
OCDF	0.478	J	10	0.089	pg/g		11/02/21 10:24	11/18/21 23:13	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*72*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-2,3,7,8-TCDF	*82*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-1,2,3,7,8-PeCDD	*87*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-1,2,3,7,8-PeCDF	*90*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-1,2,3,6,7,8-HxCDD	*63*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-1,2,3,4,7,8-HxCDF	*72*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*66*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*68*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*
13C-OCDD	*65*		*40 - 135*	*11/02/21 10:24*	*11/18/21 23:13*	*1*

Lab Sample ID: LCS 320-539149/2-A
Matrix: Solid
Analysis Batch: 544394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	20.0	23.3		pg/g		117	77 - 130
2,3,7,8-TCDF	20.0	24.0		pg/g		120	79 - 137
1,2,3,7,8-PeCDD	100	112		pg/g		112	79 - 134
1,2,3,7,8-PeCDF	100	118		pg/g		118	81 - 134
2,3,4,7,8-PeCDF	100	117		pg/g		117	76 - 132
1,2,3,4,7,8-HxCDD	100	110		pg/g		110	65 - 144
1,2,3,6,7,8-HxCDD	100	111		pg/g		111	73 - 147
1,2,3,7,8,9-HxCDD	100	112		pg/g		112	80 - 143
1,2,3,4,7,8-HxCDF	100	109		pg/g		109	72 - 140
1,2,3,6,7,8-HxCDF	100	110		pg/g		110	63 - 152
1,2,3,7,8,9-HxCDF	100	113		pg/g		113	72 - 152
2,3,4,6,7,8-HxCDF	100	112		pg/g		112	72 - 151
1,2,3,4,6,7,8-HpCDD	100	110		pg/g		110	86 - 134
1,2,3,4,6,7,8-HpCDF	100	115		pg/g		115	81 - 137
1,2,3,4,7,8,9-HpCDF	100	115		pg/g		115	79 - 139

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-539149/2-A
Matrix: Solid
Analysis Batch: 544394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539149

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
OCDD			200	220		pg/g		110	80 - 137		
OCDF			200	224		pg/g		112	75 - 141		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*72*		*40 - 135*
13C-2,3,7,8-TCDF	*73*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*75*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*66*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*76*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*80*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*73*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*72*		*40 - 135*
13C-OCDD	*75*		*40 - 135*

Lab Sample ID: LCSD 320-539149/3-A
Matrix: Solid
Analysis Batch: 544394

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 539149

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,7,8-TCDD			20.0	22.4		pg/g		112	77 - 130	4	20
2,3,7,8-TCDF			20.0	22.9		pg/g		115	79 - 137	5	20
1,2,3,7,8-PeCDD			100	111		pg/g		111	79 - 134	1	20
1,2,3,7,8-PeCDF			100	111		pg/g		111	81 - 134	7	20
2,3,4,7,8-PeCDF			100	110		pg/g		110	76 - 132	6	20
1,2,3,4,7,8-HxCDD			100	108		pg/g		108	65 - 144	2	20
1,2,3,6,7,8-HxCDD			100	110		pg/g		110	73 - 147	1	20
1,2,3,7,8,9-HxCDD			100	111		pg/g		111	80 - 143	1	20
1,2,3,4,7,8-HxCDF			100	108		pg/g		108	72 - 140	1	20
1,2,3,6,7,8-HxCDF			100	107		pg/g		107	63 - 152	3	20
1,2,3,7,8,9-HxCDF			100	109		pg/g		109	72 - 152	3	20
2,3,4,6,7,8-HxCDF			100	108		pg/g		108	72 - 151	4	20
1,2,3,4,6,7,8-HpCDD			100	107		pg/g		107	86 - 134	3	20
1,2,3,4,6,7,8-HpCDF			100	111		pg/g		111	81 - 137	4	20
1,2,3,4,7,8,9-HpCDF			100	112		pg/g		112	79 - 139	2	20
OCDD			200	229		pg/g		115	80 - 137	4	20
OCDF			200	239		pg/g		119	75 - 141	6	20

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*74*		*40 - 135*
13C-2,3,7,8-TCDF	*75*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*72*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*76*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*74*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*76*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*77*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*73*		*40 - 135*
13C-OCDD	*72*		*40 - 135*

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-539427/1-A
Matrix: Water
Analysis Batch: 542008

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539427

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10	0.77	pg/L		11/03/21 06:26	11/12/21 04:23	1
2,3,7,8-TCDF	ND		10	0.31	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,7,8-PeCDD	ND		50	0.81	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,7,8-PeCDF	ND		50	0.55	pg/L		11/03/21 06:26	11/12/21 04:23	1
2,3,4,7,8-PeCDF	ND		50	0.56	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,4,7,8-HxCDD	3.68	J	50	0.82	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,6,7,8-HxCDD	ND		50	0.79	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,7,8,9-HxCDD	2.18	J	50	0.70	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,4,7,8-HxCDF	ND		50	0.77	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,6,7,8-HxCDF	ND		50	0.74	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,7,8,9-HxCDF	1.20	J	50	0.79	pg/L		11/03/21 06:26	11/12/21 04:23	1
2,3,4,6,7,8-HxCDF	1.61	J	50	0.75	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,4,6,7,8-HpCDD	3.97	J	50	0.32	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,4,6,7,8-HpCDF	2.14	J	50	0.44	pg/L		11/03/21 06:26	11/12/21 04:23	1
1,2,3,4,7,8,9-HpCDF	1.83	J q	50	0.55	pg/L		11/03/21 06:26	11/12/21 04:23	1
OCDD	24.3	J	100	0.74	pg/L		11/03/21 06:26	11/12/21 04:23	1
OCDF	7.30	J q	100	0.62	pg/L		11/03/21 06:26	11/12/21 04:23	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*69*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-2,3,7,8-TCDF	*74*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-1,2,3,7,8-PeCDD	*74*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-1,2,3,7,8-PeCDF	*77*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-1,2,3,6,7,8-HxCDD	*75*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-1,2,3,4,7,8-HxCDF	*81*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*91*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*80*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*
13C-OCDD	*95*		*40 - 135*	*11/03/21 06:26*	*11/12/21 04:23*	*1*

Lab Sample ID: LCS 320-539427/2-A
Matrix: Water
Analysis Batch: 542532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539427

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	200	224		pg/L		112	64 - 142
2,3,7,8-TCDF	200	223		pg/L		111	71 - 142
1,2,3,7,8-PeCDD	1000	1130		pg/L		113	71 - 140
1,2,3,7,8-PeCDF	1000	1120		pg/L		112	76 - 135
2,3,4,7,8-PeCDF	1000	1110		pg/L		111	74 - 137
1,2,3,4,7,8-HxCDD	1000	1200		pg/L		120	56 - 146
1,2,3,6,7,8-HxCDD	1000	1180		pg/L		118	73 - 144
1,2,3,7,8,9-HxCDD	1000	1180		pg/L		118	71 - 151
1,2,3,4,7,8-HxCDF	1000	1080		pg/L		108	75 - 131
1,2,3,6,7,8-HxCDF	1000	1060		pg/L		106	76 - 133
1,2,3,7,8,9-HxCDF	1000	1110		pg/L		111	77 - 142
2,3,4,6,7,8-HxCDF	1000	1070		pg/L		107	80 - 137
1,2,3,4,6,7,8-HpCDD	1000	1070		pg/L		107	78 - 139
1,2,3,4,6,7,8-HpCDF	1000	1100		pg/L		110	79 - 133
1,2,3,4,7,8,9-HpCDF	1000	1220		pg/L		122	83 - 130

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-539427/2-A
Matrix: Water
Analysis Batch: 542532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539427

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
OCDD			2000	2240		pg/L		112	80 - 132		
OCDF			2000	2380		pg/L		119	72 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*84*		*40 - 135*
13C-2,3,7,8-TCDF	*85*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*95*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*92*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*83*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*91*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*108*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*98*		*40 - 135*
13C-OCDD	*91*		*40 - 135*

Lab Sample ID: LCSD 320-539427/3-A
Matrix: Water
Analysis Batch: 542532

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 539427

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,7,8-TCDD			200	233		pg/L		117	64 - 142	4	20
2,3,7,8-TCDF			200	233		pg/L		116	71 - 142	5	20
1,2,3,7,8-PeCDD			1000	1130		pg/L		113	71 - 140	0	20
1,2,3,7,8-PeCDF			1000	1170		pg/L		117	76 - 135	4	20
2,3,4,7,8-PeCDF			1000	1150		pg/L		115	74 - 137	4	20
1,2,3,4,7,8-HxCDD			1000	1170		pg/L		117	56 - 146	3	20
1,2,3,6,7,8-HxCDD			1000	1140		pg/L		114	73 - 144	3	20
1,2,3,7,8,9-HxCDD			1000	1080		pg/L		108	71 - 151	8	20
1,2,3,4,7,8-HxCDF			1000	1090		pg/L		109	75 - 131	0	20
1,2,3,6,7,8-HxCDF			1000	1080		pg/L		108	76 - 133	2	20
1,2,3,7,8,9-HxCDF			1000	1140		pg/L		114	77 - 142	3	20
2,3,4,6,7,8-HxCDF			1000	1120		pg/L		112	80 - 137	4	20
1,2,3,4,6,7,8-HpCDD			1000	1080		pg/L		108	78 - 139	0	20
1,2,3,4,6,7,8-HpCDF			1000	1090		pg/L		109	79 - 133	0	20
1,2,3,4,7,8,9-HpCDF			1000	1240		pg/L		124	83 - 130	2	20
OCDD			2000	2120		pg/L		106	80 - 132	5	20
OCDF			2000	2250		pg/L		112	72 - 140	6	20

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*90*		*40 - 135*
13C-2,3,7,8-TCDF	*92*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*100*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*94*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*88*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*89*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*102*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*98*		*40 - 135*
13C-OCDD	*96*		*40 - 135*

QC Association Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Specialty Organics

Prep Batch: 539149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-19	AOC3/AOC8-S6H-2	Total/NA	Solid	8290	
320-81044-24 - RA	AOC3/AOC8-S9I-0.5	Total/NA	Solid	8290	
320-81044-24	AOC3/AOC8-S9I-0.5	Total/NA	Solid	8290	
320-81044-25 - RA	AOC3/AOC8-S9I-0.5 DUP	Total/NA	Solid	8290	
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	Total/NA	Solid	8290	
320-81044-26	AOC3/AOC8-S9I-2	Total/NA	Solid	8290	
MB 320-539149/1-A	Method Blank	Total/NA	Solid	8290	
LCS 320-539149/2-A	Lab Control Sample	Total/NA	Solid	8290	
LCSD 320-539149/3-A	Lab Control Sample Dup	Total/NA	Solid	8290	

Prep Batch: 539427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-31	EB10292021	Total/NA	Water	8290	
MB 320-539427/1-A	Method Blank	Total/NA	Water	8290	
LCS 320-539427/2-A	Lab Control Sample	Total/NA	Water	8290	
LCSD 320-539427/3-A	Lab Control Sample Dup	Total/NA	Water	8290	

Analysis Batch: 542008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-31	EB10292021	Total/NA	Water	8290A	539427
MB 320-539427/1-A	Method Blank	Total/NA	Water	8290A	539427

Analysis Batch: 542532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-539427/2-A	Lab Control Sample	Total/NA	Water	8290A	539427
LCSD 320-539427/3-A	Lab Control Sample Dup	Total/NA	Water	8290A	539427

Analysis Batch: 544394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-19	AOC3/AOC8-S6H-2	Total/NA	Solid	8290A	539149
MB 320-539149/1-A	Method Blank	Total/NA	Solid	8290A	539149
LCS 320-539149/2-A	Lab Control Sample	Total/NA	Solid	8290A	539149
LCSD 320-539149/3-A	Lab Control Sample Dup	Total/NA	Solid	8290A	539149

Analysis Batch: 544396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-24	AOC3/AOC8-S9I-0.5	Total/NA	Solid	8290A	539149
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	Total/NA	Solid	8290A	539149
320-81044-26	AOC3/AOC8-S9I-2	Total/NA	Solid	8290A	539149

Analysis Batch: 544985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-24 - RA	AOC3/AOC8-S9I-0.5	Total/NA	Solid	8290A	539149
320-81044-25 - RA	AOC3/AOC8-S9I-0.5 DUP	Total/NA	Solid	8290A	539149

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Client Sample ID: AOC3/AOC8-S6H-2

Lab Sample ID: 320-81044-19
Date Collected: 10/29/21 10:56
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.44 g	20.0 uL	539149	11/02/21 10:24	FC	TAL SAC
Total/NA	Analysis	8290A		1			544394	11/19/21 05:36	GRB	TAL SAC

Client Sample ID: AOC3/AOC8-S9I-0.5

Lab Sample ID: 320-81044-24
Date Collected: 10/29/21 11:14
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290	RA		10.43 g	20.0 uL	539149	11/02/21 10:24	FC	TAL SAC
Total/NA	Analysis	8290A	RA	1			544985	11/21/21 23:11	KSS	TAL SAC
Total/NA	Prep	8290			10.43 g	20.0 uL	539149	11/02/21 10:24	FC	TAL SAC
Total/NA	Analysis	8290A		1			544396	11/19/21 13:14	GRB	TAL SAC

Client Sample ID: AOC3/AOC8-S9I-0.5 DUP

Lab Sample ID: 320-81044-25
Date Collected: 10/29/21 11:14
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290	RA		10.33 g	20.0 uL	539149	11/02/21 10:24	FC	TAL SAC
Total/NA	Analysis	8290A	RA	1			544985	11/21/21 23:49	KSS	TAL SAC
Total/NA	Prep	8290			10.33 g	20.0 uL	539149	11/02/21 10:24	FC	TAL SAC
Total/NA	Analysis	8290A		1			544396	11/19/21 14:02	GRB	TAL SAC

Client Sample ID: AOC3/AOC8-S9I-2

Lab Sample ID: 320-81044-26
Date Collected: 10/29/21 11:15
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.00 g	20.0 uL	539149	11/02/21 10:24	FC	TAL SAC
Total/NA	Analysis	8290A		1			544396	11/19/21 14:50	GRB	TAL SAC

Client Sample ID: EB10292021

Lab Sample ID: 320-81044-31
Date Collected: 10/29/21 12:00
Matrix: Water
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			1026.8 mL	20.0 uL	539427	11/03/21 06:26	FC	TAL SAC
Total/NA	Analysis	8290A		1			542008	11/12/21 11:53	GRB	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Laboratory: Eurofins TestAmerica, Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TEQ		Solid	Total Dioxin/Furan TEQ
TEQ		Water	Total Dioxin/Furan TEQ

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Method	Method Description	Protocol	Laboratory
8290A	Dioxins and Furans (HRGC/HRMS)	SW846	TAL SAC
TEQ	Total TEQ Calculation	Lab SOP	TAL SAC
8290	Separatory Funnel (Liquid-Liquid) Extraction of Dioxins and Furans	SW846	TAL SAC
8290	Soxhlet Extraction of Dioxins and Furans	SW846	TAL SAC

Protocol References:

Lab SOP = Laboratory Standard Operating Procedure

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-81044-19	AOC3/AOC8-S6H-2	Solid	10/29/21 10:56	10/29/21 14:21
320-81044-24	AOC3/AOC8-S9I-0.5	Solid	10/29/21 11:14	10/29/21 14:21
320-81044-25	AOC3/AOC8-S9I-0.5 DUP	Solid	10/29/21 11:14	10/29/21 14:21
320-81044-26	AOC3/AOC8-S9I-2	Solid	10/29/21 11:15	10/29/21 14:21
320-81044-31	EB10292021	Water	10/29/21 12:00	10/29/21 14:21

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

320-81044

201258

eurofins

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemeno	Date: 10/29/21	COC No: 1
Ninyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	1 of 3 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNR
Alameda California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below			Lab Sampling
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	SVOCs (EPA Test Method 8270C SIM)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3-S1I-0.5	10/29/21	0838	G	Soil	1							X	X		X	
AOC3-S1I-2		0840										X				
AOC3-S2I-0.5		0841										X	X		X	
AOC3-S2I-2		0842										X				
AOC3-S6I-0.5		0902								X		X	X			
AOC3-S6I-0.5 DUP		0902								X		X	X			
AOC3-S6I-2		0905										X				
AOC3-S8F-0.5		0932										X	X		X	
AOC3-S8F-2		0933										X				
AOC3-S9G-0.5		0936										X	X		X	
AOC3-S9G-2		0937										X				

320-81044 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH, 6= Other

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for ____ Months

Special Instructions/QC Requirements & Comments.
Hold samples for additional analyses

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.		Cooler Temp. (°C): Obs'd.	Corr'd:	Therm ID No.
Relinquished by: Daysi Nemeno	Company: NMW	Date/Time: 10/29/21 1307	Received by:	Company: ETAS	Date/Time: 10/29/21 13:07
Relinquished by:	Company: ETAS	Date/Time: 10/29/21 14:21	Received by:	Company: ETAS	Date/Time: 10-29-21/1421
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

1.0 c° 1.8° 0.8°

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12/15/2021 (Rev. 1)

Eurofins TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

320-81044

201258

eurofins

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Noriega	Date: 10/29/21	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	2 of 3 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226	Analysis Turnaround Time		Sampler: DNP
Alameda, California 94501	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
(510) 343-3000	TAT if different from Below _____			Walk-in Client:
(510) 343-3001	☐ 2 weeks			Lab Sampling:
Project Name: Cole School PEA	☐ 1 week			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 2 days			
P O # 403668001	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes.
AOC3-S7F-0.5	10/29/21	1017	G	Soil	1							X	X		X	
AOC3-S7F-2	10/29/21	1019										X				
AOC3-S8G-0.5		1021										X	X		X	
AOC3-S8G-2		1022										X				
AOC3-S7G-0.5		1031										X	X		X	
AOC3-S7G-2		1032										X				
AOC3/AOC8-S6H-0.5		1055										X	X	X	X	
AOC3/AOC8-S6H-2		1056										X		X		
AOC3-S7H-0.5		1057								X	DNP	X	X			
AOC3-S7H-2		1058										X				
AOC3-S8H-0.5		1059										X	X		X	

Preservation Used. 1= Ice, 2= HCl, 3= H2SO4; 4=HNO3; 5=NaOH, 6= Other _____

Possible Hazard Identification.
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.
Hold samples for additional analyses

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.		Cooler Temp (°C): Obs'd. _____ Corr'd: _____ Therm ID No.: _____		
Relinquished by: Daysi Noriega	Company: NMM	Date/Time: 10/29/21 1307	Received by: G. Hicks	Company: ETA SS	Date/Time: 10/29/21 1307
Relinquished by: A. Jones	Company: ETA SS	Date/Time: 10/29/21 1421	Received by: Justinn Mulley	Company: ETA SS	Date/Time: 10-29-21 1421
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Chain of Custody Record

320-81044

901258

eurofins

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Herrera	Date: 10/29/21	COC No: 1
Ninyo & Moore	Email: ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: Test America	1 of 3 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNP
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☑ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling
Project Name: Cole School PEA	☑ 2 weeks			Job / SDG No.
Site: 11101 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes:
AOC3-S8H-2	10/29/21	1100	G	Soil	1							X				
AOC3/AOC8-S9I-0.5		1114								X		X	X	X		
AOC3/AOC8-S9I-0.5DUP		1114								X		X	X	X		
AOC3/AOC8-S9I-2		1115										X		X		
AOC3-S8H-0.5		1116										X	X		X	
AOC3-S8H-2		1117										X				
AOC3-S7I-0.5		1118										X	X		X	
AOC3-S7I-2		1119										X				
EB10292021		1200		H_2O	3					X		X	X	X		

Preservation Used 1= Ice, 2= HCl; 3= H2SO4, 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification.
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.

Hold samples for additional analyses

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No		Cooler Temp. (°C): Obs'd _____ Corr'd _____ Therm ID No.: _____		
Relinquished by: Daysi Herrera	Company: NMI	Date/Time: 10/29/21 1307	Received by: [signature]	Company: EM SJ	Date/Time: 10/29/21 1307
Relinquished by: [signature]	Company: EM SJ	Date/Time: 10/29/21 14 21	Received by: Justinn Gonzales	Company: EM SJ	Date/Time: 10-29-21 1421
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-004, Rev 1 17 dated 6/27/2019

12/15/2021 (Rev. 1)

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247576.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81044-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, As	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B CAM 17 List, minus Mercury	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	6010B/3010A CAM 17 List, minus Mercury	7470A/7470A_Prep Mercury Only	8081A/3510C_LVI Pesticides, Standard List	8082/3510C_LVI PCBs, Standard List				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
AOC3-S1I-0.5 (320-81044-1)	10/29/21	08:38 Pacific		Solid			X	X	X												1	
AOC3-S1I-2 (320-81044-2)	10/29/21	08:40 Pacific		Solid				X													1	
AOC3-S2I-0.5 (320-81044-3)	10/29/21	08:41 Pacific		Solid			X	X	X												1	
AOC3-S2I-2 (320-81044-4)	10/29/21	08:42 Pacific		Solid				X													1	
AOC3-S6I-0.5 (320-81044-5)	10/29/21	09:02 Pacific		Solid				X	X	X											1	
AOC3-S6I-0.5-DUP (320-81044-6)	10/29/21	09:02 Pacific		Solid				X	X	X											1	
AOC3-S6I-2 (320-81044-7)	10/29/21	09:05 Pacific		Solid				X													1	
AOC3-S8F-0.5 (320-81044-8)	10/29/21	09:32 Pacific		Solid			X	X	X												1	
AOC3-S8F-2 (320-81044-9)	10/29/21	09:33 Pacific		Solid				X													1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	11-1-21 1615	ST	[signature]	11-1-21 1615	DCS
2	[signature]	11-1-21 1930	DCS	[signature]	11/2/21 1930	EESAC
3						

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.6

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gonzales, Justinn	Carrier Tracking No(s)	COC No: 320-247576.2
Client Contact: Shipping/Receiving	Phone	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 2 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81044-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, As	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B CAM 17 List, minus Mercury	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	6010B/3010A CAM 17 List, minus Mercury	7470A/7470A_Prep Mercury Only	8081A/3510C_LVI Pesticides, Standard List	8082/3510C_LVI PCBs, Standard List	Total Number of containers	Special Instructions/Note:
			Preservation Code:															
AOC3-S9G-0.5 (320-81044-10)	10/29/21	09:36 Pacific		Solid			X	X	X								1	
AOC3-S9G-2 (320-81044-11)	10/29/21	09:37 Pacific		Solid				X									1	
AOC3-S7F-0.5 (320-81044-12)	10/29/21	10:17 Pacific		Solid			X	X	X								1	
AOC3-S7F-2 (320-81044-13)	10/29/21	10:19 Pacific		Solid				X									1	
AOC3-S8G-0.5 (320-81044-14)	10/29/21	10:21 Pacific		Solid			X	X	X								1	
AOC3-S8G-2 (320-81044-15)	10/29/21	10:22 Pacific		Solid				X									1	
AOC3-S7G-0.5 (320-81044-16)	10/29/21	10:31 Pacific		Solid			X	X	X								1	
AOC3-S7G-2 (320-81044-17)	10/29/21	10:32 Pacific		Solid				X									1	
AOC3/AOC8-S6H-0.5 (320-81044-18)	10/29/21	10:55 Pacific		Solid			X	X	X		X						1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	11-1-21 1615	ES	[signature]	11-1-21 1615	DES
2	[signature]	11-1-21 1930	DES	[signature]	11/1/21 1930	EESAC
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247576.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 3 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81044-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, As	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B CAM 17 List, minus Mercury	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	6010B/3010A CAM 17 List, minus Mercury	7470A/7470A_Prep Mercury Only	8081A/3510C_LVI Pesticides, Standard List	8082/3510C_LVI PCBs, Standard List				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
AOC3/AOC8-S6H-2 (320-81044-19)	10/29/21	10:56 Pacific		Solid				X			X										1	
AOC3-S7H-0.5 (320-81044-20)	10/29/21	10:57 Pacific		Solid				X	X	X											1	
AOC3-S7H-2 (320-81044-21)	10/29/21	10:58 Pacific		Solid				X													1	
AOC3-S8H-0.5 (320-81044-22)	10/29/21	10:59 Pacific		Solid			X	X	X												1	
AOC3-S8H-2 (320-81044-23)	10/29/21	11:00 Pacific		Solid				X													1	
AOC3/AOC8-S9I-0.5 (320-81044-24)	10/29/21	11:14 Pacific		Solid				X	X	X	X										1	
AOC3/AOC8-S9I-0.5-DUP (320-81044-25)	10/29/21	11:14 Pacific		Solid				X	X	X	X										1	
AOC3/AOC8-S9I-2 (320-81044-26)	10/29/21	11:15 Pacific		Solid				X			X										1	
AOC3-S8H-0.5 (320-81044-27)	10/29/21	11:16 Pacific		Solid			X	X	X												1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10-1-21 1615	ST		10-1-21 1615	DCS
2		10-1-21 1930	DCS		10/1/21-1930	EETSAC
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247576.4
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 4 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81044-1
Address: 880 Riverside Parkway.	Due Date Requested: 11/5/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, As	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	6010B/3050B CAM 17 List, minus Mercury	8290/8290_P_Sox 17 Isomers List	8290A/8290_P_Sep 17 Isomers List	6010B/3050A CAM 17 List, minus Mercury	7470A/7470A_Prep Mercury Only	8081A/3510C_LVI Pesticides, Standard List	8082/3510C_LVI PCBs, Standard List				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
AOC3-S8H-2 (320-81044-28)	10/29/21	11:17 Pacific		Solid				X												1	
AOC3-S7I-0.5 (320-81044-29)	10/29/21	11:18 Pacific		Solid			X	X	X											1	
AOC3-S7I-2 (320-81044-30)	10/29/21	11:19 Pacific		Solid				X												1	
EB10292021 (320-81044-31)	10/29/21	12:00 Pacific		Water								X	X	X	X	X				~~1~~ 2	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11-1-21 1615	ST		11-1-21 1615	DLS
2		11-1-21 1830	DLS		11/1/21 1430	EESAT
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

TestAmerica CUSTODY SEAL

Date 11/1/21 Signature

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Part # 69-434 MTW EXP 07/22

320-81044 Waybill

ORIGIN ID:LVKA (928) 484-1919
SAMPLE RECEIVING
EUROFINS TEST AMERICA
780 MONTAGUE EXPRESSWAY
SUITE 602
SAN JOSE, CA 95131
UNITED STATES US

SHIP DATE: 01NOV21
ACTWGT: 30.05 LB
CAD: 0795504/CAFE3507
DIMS: 28x16x15 IN

BILL SENDER

TO SAMPLE RECEIVING
EUROFINS CALSCIENCE, LLC
7440 LINCOLN WAY

GARDEN GROVE CA 92841
(714) 895-5494 REF:
INV:
PO: DEPT:

570C1/A822/6F4D

FedEx Express

JP1102012101ee

TUE - 02 NOV 11:30A
PRIORITY OVERNIGHT

TRK# 0201 5047 2941 7677

92 APVA

92841
CA-US SNA

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81044-2

Login Number: 81044
List Number: 1
Creator: Mullen, Joan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81044-2

Login Number: 81044
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-81044-3
Client Project/Site: Cole School PEA
Revision: 1

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/15/2021 11:47:07 AM

Justinn Gonzales, Project Manager I
(925)484-1919
Justinn.Gonzales@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Job ID: 320-81044-3

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-81044-3

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 11/22/2021. The report (revision 1) is being revised due to: Report samples to MDL per client request.

Receipt
The samples were received on 10/29/2021 2:21 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.8º C, 1.0º C and 1.8º C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Client Sample ID: AOC3-S1I-2 — Lab Sample ID: 320-81044-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	16		0.97	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S6I-2 — Lab Sample ID: 320-81044-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	28		0.97	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S7F-2 — Lab Sample ID: 320-81044-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	41		1.0	0.26	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S7G-2 — Lab Sample ID: 320-81044-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	3.3		0.95	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3/AOC8-S6H-2 — Lab Sample ID: 320-81044-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	14		0.98	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S7H-2 — Lab Sample ID: 320-81044-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.3		0.96	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S8H-2 — Lab Sample ID: 320-81044-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	14		0.95	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3/AOC8-S9I-2 — Lab Sample ID: 320-81044-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.9		0.97	0.25	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC3-S7I-2 — Lab Sample ID: 320-81044-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.9		0.95	0.25	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Client Sample ID: AOC3-S1I-2
Date Collected: 10/29/21 08:40
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-2
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	16		0.97	0.25	mg/Kg		11/18/21 13:37	11/19/21 11:27	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Client Sample ID: AOC3-S6I-2

Date Collected: 10/29/21 09:05
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-7

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	28		0.97	0.25	mg/Kg		11/18/21 13:37	11/19/21 11:31	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Client Sample ID: AOC3-S7F-2

Date Collected: 10/29/21 10:19
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-13

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	41		1.0	0.26	mg/Kg		11/18/21 13:37	11/19/21 11:34	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Client Sample ID: AOC3-S7G-2
Date Collected: 10/29/21 10:32
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-17
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.3		0.95	0.25	mg/Kg		11/18/21 13:37	11/19/21 11:46	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Client Sample ID: AOC3/AOC8-S6H-2

Lab Sample ID: 320-81044-19

Date Collected: 10/29/21 10:56

Matrix: Solid

Date Received: 10/29/21 14:21

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14		0.98	0.25	mg/Kg		11/18/21 13:37	11/19/21 11:50	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Client Sample ID: AOC3-S7H-2

Date Collected: 10/29/21 10:58
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-21

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.3		0.96	0.25	mg/Kg		11/18/21 13:37	11/19/21 11:54	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Client Sample ID: AOC3-S8H-2

Date Collected: 10/29/21 11:00
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-23

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14		0.95	0.25	mg/Kg		11/18/21 13:37	11/19/21 11:57	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Client Sample ID: AOC3/AOC8-S9I-2

Date Collected: 10/29/21 11:15
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-26

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.9		0.97	0.25	mg/Kg		11/18/21 13:37	11/19/21 12:01	1

Client Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Client Sample ID: AOC3-S7I-2
Date Collected: 10/29/21 11:19
Date Received: 10/29/21 14:21

Lab Sample ID: 320-81044-30
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.9		0.95	0.25	mg/Kg		11/18/21 13:37	11/19/21 12:05	1

QC Sample Results

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 320-543922/1-A
Matrix: Solid
Analysis Batch: 544371

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 543922

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.26	mg/Kg		11/18/21 13:37	11/19/21 10:14	1

Lab Sample ID: LCS 320-543922/2-A
Matrix: Solid
Analysis Batch: 544371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543922

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	25.0	22.4		mg/Kg		89	80 - 120

QC Association Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Metals

Prep Batch: 543922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-2	AOC3-S1I-2	Total/NA	Solid	3050B	
320-81044-7	AOC3-S6I-2	Total/NA	Solid	3050B	
320-81044-13	AOC3-S7F-2	Total/NA	Solid	3050B	
320-81044-17	AOC3-S7G-2	Total/NA	Solid	3050B	
320-81044-19	AOC3/AOC8-S6H-2	Total/NA	Solid	3050B	
320-81044-21	AOC3-S7H-2	Total/NA	Solid	3050B	
320-81044-23	AOC3-S8H-2	Total/NA	Solid	3050B	
320-81044-26	AOC3/AOC8-S9I-2	Total/NA	Solid	3050B	
320-81044-30	AOC3-S7I-2	Total/NA	Solid	3050B	
MB 320-543922/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-543922/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 544371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81044-2	AOC3-S1I-2	Total/NA	Solid	6010B	543922
320-81044-7	AOC3-S6I-2	Total/NA	Solid	6010B	543922
320-81044-13	AOC3-S7F-2	Total/NA	Solid	6010B	543922
320-81044-17	AOC3-S7G-2	Total/NA	Solid	6010B	543922
320-81044-19	AOC3/AOC8-S6H-2	Total/NA	Solid	6010B	543922
320-81044-21	AOC3-S7H-2	Total/NA	Solid	6010B	543922
320-81044-23	AOC3-S8H-2	Total/NA	Solid	6010B	543922
320-81044-26	AOC3/AOC8-S9I-2	Total/NA	Solid	6010B	543922
320-81044-30	AOC3-S7I-2	Total/NA	Solid	6010B	543922
MB 320-543922/1-A	Method Blank	Total/NA	Solid	6010B	543922
LCS 320-543922/2-A	Lab Control Sample	Total/NA	Solid	6010B	543922

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Client Sample ID: AOC3-S1I-2
Lab Sample ID: 320-81044-2
Date Collected: 10/29/21 08:40
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 11:27	GSH	TAL SAC

Client Sample ID: AOC3-S6I-2
Lab Sample ID: 320-81044-7
Date Collected: 10/29/21 09:05
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 11:31	GSH	TAL SAC

Client Sample ID: AOC3-S7F-2
Lab Sample ID: 320-81044-13
Date Collected: 10/29/21 10:19
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 11:34	GSH	TAL SAC

Client Sample ID: AOC3-S7G-2
Lab Sample ID: 320-81044-17
Date Collected: 10/29/21 10:32
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 11:46	GSH	TAL SAC

Client Sample ID: AOC3/AOC8-S6H-2
Lab Sample ID: 320-81044-19
Date Collected: 10/29/21 10:56
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 11:50	GSH	TAL SAC

Client Sample ID: AOC3-S7H-2
Lab Sample ID: 320-81044-21
Date Collected: 10/29/21 10:58
Matrix: Solid
Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 11:54	GSH	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Client Sample ID: AOC3-S8H-2

Lab Sample ID: 320-81044-23

Date Collected: 10/29/21 11:00

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 11:57	GSH	TAL SAC

Client Sample ID: AOC3/AOC8-S9I-2

Lab Sample ID: 320-81044-26

Date Collected: 10/29/21 11:15

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 12:01	GSH	TAL SAC

Client Sample ID: AOC3-S7I-2

Lab Sample ID: 320-81044-30

Date Collected: 10/29/21 11:19

Matrix: Solid

Date Received: 10/29/21 14:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	100 mL	543922	11/18/21 13:37	JP	TAL SAC
Total/NA	Analysis	6010B		1			544371	11/19/21 12:05	GSH	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81044-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-81044-2	AOC3-S1I-2	Solid	10/29/21 08:40	10/29/21 14:21
320-81044-7	AOC3-S6I-2	Solid	10/29/21 09:05	10/29/21 14:21
320-81044-13	AOC3-S7F-2	Solid	10/29/21 10:19	10/29/21 14:21
320-81044-17	AOC3-S7G-2	Solid	10/29/21 10:32	10/29/21 14:21
320-81044-19	AOC3/AOC8-S6H-2	Solid	10/29/21 10:56	10/29/21 14:21
320-81044-21	AOC3-S7H-2	Solid	10/29/21 10:58	10/29/21 14:21
320-81044-23	AOC3-S8H-2	Solid	10/29/21 11:00	10/29/21 14:21
320-81044-26	AOC3/AOC8-S9I-2	Solid	10/29/21 11:15	10/29/21 14:21
320-81044-30	AOC3-S7I-2	Solid	10/29/21 11:19	10/29/21 14:21

Gonzales, Justinn

From: Nathan Diem <ndiem@ninyoandmoore.com>
Sent: Wednesday, November 17, 2021 6:32 AM
To: Gonzales, Justinn
Subject: RE: Preliminary Eurofins TestAmerica report files from 320-81044-1 Cole School PEA

Follow Up Flag: Follow up
Flag Status: Flagged

EXTERNAL EMAIL*

Please run the samples below for lead:

AOC3-S1I-2
AOC3-S6I-2
AOC3-S7F-2
AOC3-S7G-2
AOC3/AOC8-S6H-2
AOC3-S7H-2
AOC3-S8H-2
AOC3/AOC8-S9I-2
AOC3-S7I-2

Thanks

Nathan Diem
Project Geologist
Ninyo & Moore
510.343.3000 (**x15226**)

From: Justinn Gonzales [mailto:Justinn.Gonzales@Eurofinset.com]
Sent: Tuesday, November 16, 2021 4:35 PM
To: Nathan Diem <ndiem@ninyoandmoore.com>
Subject: Preliminary Eurofins TestAmerica report files from 320-81044-1 Cole School PEA

Hello,

Attached please find the report files for job 320-81044-1; Cole School PEA

Please feel free to contact me if you have any questions.

Thank you.

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81044-3

Login Number: 81044
List Number: 1
Creator: Mullen, Joan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81044-3

Login Number: 81044
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-81134-1
Client Project/Site: Cole School PEA
Revision: 2

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/21/2021 3:16:26 PM

Justinn Gonzales, Project Manager I
(925)484-1919
Justinn.Gonzales@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*3	ISTD response or retention time outside acceptable limits.
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
P	The %RPD between the primary and confirmation column/detector is >40%. The higher value has been reported
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 320-81134-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-81134-1

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 11/24/2021. The report (revision 2) is being revised due to: Correct sample ID for sample 12.

Report revision history
Revision 1 - 12/15/2021 - Reason - Report samples to MDL per client request.

Receipt
The samples were received on 11/2/2021 12:48 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.0º C.

Receipt Exceptions
Only 2 1 liter ambers received for the following methods: 8081, 8082, 8015 D/M and 8270C SIM. Not enough sample volume for all methods. PM confirmed with client on methods to analyze.

GC/MS VOA
Method 8260B/CA_LUFTMS: The ending CCV for batch 540739 (CCV 320-540739/32) was outside acceptance limits with a low bias. Two consecutive CCVs (CCV 320-540739/34, CCV 320-540739/35) were analyzed the next morning, outside the 12 hour tune window to demonstrate that the instrument was still in calibration. AOC4-S1-5 (320-81134-8), AOC4-S1-10 (320-81134-9), AOC4-S1-15 (320-81134-10), (CCV 320-540739/32), (CCV 320-540739/34) and (CCV 320-540739/35).

Method 8260B: Internal standard (ISTD) response for Dioxane-d8 for the following samples in analytical batch 320-541535 was outside acceptance criteria: (LCSD 320-541535/5). This ISTD does not correspond to any of the requested target compounds reported from this analytical batch; therefore, the data have been reported.

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 320-541535.

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-539553 and analytical batch 320-541763.

Method 8260B: Internal standard (ISTD) response for the following sample was outside control limits: AOC4-S1-15 (320-81134-10). The sample(s) was re-extracted and/or re-analyzed and ISTD response was outside control limits.

Method 8260B: Internal standard (ISTD) response for the following sample was outside control limits: AOC4-S1-15 (320-81134-10). The sample(s) was re-analyzed and ISTD response was outside control limits. The original analysis has been reported.

Method 8260B/CA_LUFTMS: The ending CCV for batch 541762 (CCV 320-541762/30) was outside acceptance limits with a low bias. Two consecutive CCVs (CCV 320-541762/34, CCV 320-541762/35) were analyzed the next morning, outside the 12 hour tune window to demonstrate that the instrument was still in calibration. AOC4-S1-5 (320-81134-8), AOC4-S1-10 (320-81134-9), AOC4-S1-15 (320-81134-10), AOC4-S1-5 DUP (320-81134-11), AOC9-SG3-5 (320-81134-12) and (CCV 320-541762/30).

Method 8260B: The laboratory control sample (LCS) for analytical batch 320-542727 recovered outside control limits for the following analytes: N-Propylbenzene, tert-Butylbenzene and Vinyl chloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The laboratory control sample duplicate (LCSD) for analytical batch 320-542727 recovered outside control limits for the following analytes: N-Propylbenzene, tert-Butylbenzene and sec-Butylbenzene. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Job ID: 320-81134-1 (Continued)

Laboratory: Eurofins TestAmerica, Sacramento (Continued)

Method 8260B/CA_LUFTMS: The ending CCV for batch 542094 (CCV 320-542094/32) was outside acceptance limits with a low bias. Two consecutive CCVs (CCV 320-542094/34, CCV 320-542094/35) were analyzed the next morning, outside the 12 hour tune window to demonstrate that the instrument was still in calibration. AOC4-S1-5 DUP (320-81134-11), AOC9-SG3-5 (320-81134-12), AOC9-SG3-10 (320-81134-13), AOC9-SG4-5 (320-81134-14), AOC9-SG4-10 (320-81134-15), AOC9-S2-5 (320-81134-18), AOC9-S2-10 (320-81134-19), (CCV 320-542094/32), (CCV 320-542094/34) and (CCV 320-542094/35).

Method 8260B: Reanalysis of the following sample(s) was performed outside of the analytical holding time. The sample had low internal standard recoveries in original analysis, it was then reanalyzed within holding time but no reportable data was generated due to vial leakage. The sample was then re-prepped and reanalyzed out of the analytical holding time: AOC4-S1-10 (320-81134-9).

Method 8260B/CA_LUFTMS: Reanalysis of the following sample was performed outside of the analytical holding time. The sample did not generate a reportable result in original and second analysis within hold due to vial leakage. They were then re-prepped and reanalyzed out of the analytical holding time and the out of hold result has been reported: AOC4-S1-5 (320-81134-8).

Method 8260B: Reanalysis of the following sample was performed outside of the analytical holding time. The samples did not generate a reportable result in original and second analysis within hold due to vial leakage. They were then re-prepped and reanalyzed out of the analytical holding time and the out of hold results has been reported: AOC4-S1-5 (320-81134-8).

Method 8260B: The method blank for analytical batches 320-542727, 320-542091, 320-540740, and 320-541763 contained Naphthalene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method 8015B: Surrogate recovery for the following sample was outside control limits: AOC6-S9B-4 (320-81134-20). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015B: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: AOC4-S1-5 (320-81134-8), AOC4-S1-5 DUP (320-81134-11), AOC9-S2-10 (320-81134-19) and AOC6-S9B-4 (320-81134-20).

Method 8015B: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: AOC4-S1-10 (320-81134-9), AOC9-SG3-5 (320-81134-12), AOC9-SG3-10 (320-81134-13), AOC9-SG4-10 (320-81134-15) and AOC9-S2-5 (320-81134-18).

Method 8082: Surrogate recovery for the following sample was outside control limits: AOC6-S9B-4 (320-81134-20). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with method 8082 aqueous in preparation batch 320-540241.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with method 8015B_DRO/8015B_DRO_DOD5 aqueous inpreparation batch 320-540321.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC1-S9A-0.5 — Lab Sample ID: 320-81134-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	60		1.0	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	5.1		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1-S9A-0.5 DUP — Lab Sample ID: 320-81134-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	72		0.66	0.17	mg/Kg	1		6010B	Total/NA
Arsenic	4.7		1.3	0.86	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1-S9A-2 — Lab Sample ID: 320-81134-3

No Detections.

Client Sample ID: AOC1-S1-0.5 — Lab Sample ID: 320-81134-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	0.87	J	3.4	0.50	ug/Kg	2		8081A	Total/NA
PCB-1260	4.9	J	33	2.7	ug/Kg	1		8082	Total/NA
Lead	430		0.99	0.26	mg/Kg	1		6010B	Total/NA
Arsenic	6.7		2.0	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1-S1-0.5 DUP — Lab Sample ID: 320-81134-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	1.7	J P	3.4	0.50	ug/Kg	2		8081A	Total/NA
PCB-1260	8.5	J P	66	5.4	ug/Kg	2		8082	Total/NA
Lead	480		0.97	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	4.0		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1-S1-2 — Lab Sample ID: 320-81134-6

No Detections.

Client Sample ID: AOC1-S1-2 DUP — Lab Sample ID: 320-81134-7

No Detections.

Client Sample ID: AOC4-S1-5 — Lab Sample ID: 320-81134-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1.3		1.0	0.50	mg/Kg	1		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	4.6	J	5.0	3.8	mg/Kg	1		8015B	Total/NA
Arsenic	3.7		2.0	1.3	mg/Kg	1		6010B	Total/NA
Barium	60		0.98	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.60		0.20	0.029	mg/Kg	1		6010B	Total/NA
Cadmium	0.085	J	0.20	0.029	mg/Kg	1		6010B	Total/NA
Cobalt	7.5		0.49	0.25	mg/Kg	1		6010B	Total/NA
Chromium	50		0.49	0.14	mg/Kg	1		6010B	Total/NA
Copper	9.0	B	1.5	0.22	mg/Kg	1		6010B	Total/NA
Nickel	36		0.98	0.24	mg/Kg	1		6010B	Total/NA
Lead	12		0.98	0.25	mg/Kg	1		6010B	Total/NA
Antimony	11		2.0	0.92	mg/Kg	1		6010B	Total/NA
Vanadium	31		0.49	0.19	mg/Kg	1		6010B	Total/NA
Zinc	28		2.0	0.19	mg/Kg	1		6010B	Total/NA
Mercury	0.050	J B	0.086	0.014	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC4-S1-10 — Lab Sample ID: 320-81134-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	0.60	J	1.0	0.50	mg/Kg	1		8015B	Total/NA
Arsenic	2.2		1.9	1.2	mg/Kg	1		6010B	Total/NA
Barium	49		0.95	0.11	mg/Kg	1		6010B	Total/NA
Beryllium	0.49		0.19	0.029	mg/Kg	1		6010B	Total/NA
Cadmium	0.058	J	0.19	0.029	mg/Kg	1		6010B	Total/NA
Cobalt	4.9		0.48	0.24	mg/Kg	1		6010B	Total/NA
Chromium	36		0.48	0.13	mg/Kg	1		6010B	Total/NA
Copper	6.5	B	1.4	0.21	mg/Kg	1		6010B	Total/NA
Nickel	32		0.95	0.23	mg/Kg	1		6010B	Total/NA
Lead	3.1		0.95	0.25	mg/Kg	1		6010B	Total/NA
Antimony	11		1.9	0.90	mg/Kg	1		6010B	Total/NA
Vanadium	21		0.48	0.18	mg/Kg	1		6010B	Total/NA
Zinc	20		1.9	0.18	mg/Kg	1		6010B	Total/NA
Mercury	0.024	J B	0.082	0.013	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC4-S1-15 — Lab Sample ID: 320-81134-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	2.8	J *3 B	4.9	0.62	ug/Kg	1		8260B	Total/NA
Arsenic	3.5		1.9	1.3	mg/Kg	1		6010B	Total/NA
Barium	56		0.96	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.64		0.19	0.029	mg/Kg	1		6010B	Total/NA
Cadmium	0.089	J	0.19	0.029	mg/Kg	1		6010B	Total/NA
Cobalt	6.9		0.48	0.24	mg/Kg	1		6010B	Total/NA
Chromium	51		0.48	0.13	mg/Kg	1		6010B	Total/NA
Copper	10	B	1.4	0.21	mg/Kg	1		6010B	Total/NA
Nickel	35		0.96	0.23	mg/Kg	1		6010B	Total/NA
Lead	3.6		0.96	0.25	mg/Kg	1		6010B	Total/NA
Antimony	12		1.9	0.90	mg/Kg	1		6010B	Total/NA
Vanadium	33		0.48	0.18	mg/Kg	1		6010B	Total/NA
Zinc	26		1.9	0.18	mg/Kg	1		6010B	Total/NA
Mercury	0.018	J B	0.083	0.014	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC4-S1-5 DUP — Lab Sample ID: 320-81134-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1.5		0.98	0.49	mg/Kg	1		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	5.8		4.9	3.7	mg/Kg	1		8015B	Total/NA
Arsenic	2.8		2.0	1.3	mg/Kg	1		6010B	Total/NA
Barium	56		0.98	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.57		0.20	0.029	mg/Kg	1		6010B	Total/NA
Cadmium	0.085	J	0.20	0.029	mg/Kg	1		6010B	Total/NA
Cobalt	5.5		0.49	0.25	mg/Kg	1		6010B	Total/NA
Chromium	42		0.49	0.14	mg/Kg	1		6010B	Total/NA
Copper	8.0	B	1.5	0.22	mg/Kg	1		6010B	Total/NA
Nickel	32		0.98	0.24	mg/Kg	1		6010B	Total/NA
Lead	32		0.98	0.25	mg/Kg	1		6010B	Total/NA
Antimony	11		2.0	0.92	mg/Kg	1		6010B	Total/NA
Vanadium	26		0.49	0.19	mg/Kg	1		6010B	Total/NA
Zinc	26		2.0	0.19	mg/Kg	1		6010B	Total/NA
Mercury	0.052	J B	0.085	0.014	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC9-SG3-5 — Lab Sample ID: 320-81134-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	0.84	J	1.0	0.50	mg/Kg	1		8015B	Total/NA
Arsenic	2.3		1.9	1.3	mg/Kg	1		6010B	Total/NA
Barium	37		0.97	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.44		0.19	0.029	mg/Kg	1		6010B	Total/NA
Cadmium	0.059	J	0.19	0.029	mg/Kg	1		6010B	Total/NA
Cobalt	3.0		0.49	0.24	mg/Kg	1		6010B	Total/NA
Chromium	32		0.49	0.14	mg/Kg	1		6010B	Total/NA
Copper	5.3	B	1.5	0.21	mg/Kg	1		6010B	Total/NA
Nickel	17		0.97	0.23	mg/Kg	1		6010B	Total/NA
Lead	20		0.97	0.25	mg/Kg	1		6010B	Total/NA
Antimony	9.8		1.9	0.91	mg/Kg	1		6010B	Total/NA
Vanadium	21		0.49	0.18	mg/Kg	1		6010B	Total/NA
Zinc	13		1.9	0.18	mg/Kg	1		6010B	Total/NA
Mercury	0.060	J B	0.081	0.013	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC9-SG3-10 — Lab Sample ID: 320-81134-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	0.49	J	0.98	0.49	mg/Kg	1		8015B	Total/NA
Arsenic	3.1		2.0	1.3	mg/Kg	1		6010B	Total/NA
Barium	52		1.0	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.59		0.20	0.030	mg/Kg	1		6010B	Total/NA
Cadmium	0.067	J	0.20	0.030	mg/Kg	1		6010B	Total/NA
Cobalt	5.5		0.50	0.25	mg/Kg	1		6010B	Total/NA
Chromium	45		0.50	0.14	mg/Kg	1		6010B	Total/NA
Copper	7.9	B	1.5	0.22	mg/Kg	1		6010B	Total/NA
Nickel	38		1.0	0.24	mg/Kg	1		6010B	Total/NA
Lead	2.8		1.0	0.26	mg/Kg	1		6010B	Total/NA
Antimony	12		2.0	0.94	mg/Kg	1		6010B	Total/NA
Vanadium	28		0.50	0.19	mg/Kg	1		6010B	Total/NA
Zinc	21		2.0	0.19	mg/Kg	1		6010B	Total/NA
Mercury	0.015	J B	0.079	0.013	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC9-SG4-5 — Lab Sample ID: 320-81134-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.4	J	20	1.4	ug/Kg	1		8260B	Total/NA
Arsenic	2.8		1.9	1.3	mg/Kg	1		6010B	Total/NA
Barium	40		0.97	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.52		0.19	0.029	mg/Kg	1		6010B	Total/NA
Cadmium	0.069	J	0.19	0.029	mg/Kg	1		6010B	Total/NA
Cobalt	5.6		0.49	0.24	mg/Kg	1		6010B	Total/NA
Chromium	30		0.49	0.14	mg/Kg	1		6010B	Total/NA
Copper	5.5	B	1.5	0.21	mg/Kg	1		6010B	Total/NA
Nickel	26		0.97	0.23	mg/Kg	1		6010B	Total/NA
Lead	3.3		0.97	0.25	mg/Kg	1		6010B	Total/NA
Antimony	9.6		1.9	0.91	mg/Kg	1		6010B	Total/NA
Vanadium	26		0.49	0.18	mg/Kg	1		6010B	Total/NA
Zinc	17		1.9	0.18	mg/Kg	1		6010B	Total/NA
Mercury	0.035	J B	0.086	0.014	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC9-SG4-10 — Lab Sample ID: 320-81134-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.9	J	19	1.3	ug/Kg	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	0.62	J	0.98	0.49	mg/Kg	1		8015B	Total/NA
Arsenic	2.7		2.0	1.3	mg/Kg	1		6010B	Total/NA
Barium	46		0.98	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.54		0.20	0.029	mg/Kg	1		6010B	Total/NA
Cadmium	0.063	J	0.20	0.029	mg/Kg	1		6010B	Total/NA
Cobalt	4.7		0.49	0.25	mg/Kg	1		6010B	Total/NA
Chromium	39		0.49	0.14	mg/Kg	1		6010B	Total/NA
Copper	7.5	B	1.5	0.22	mg/Kg	1		6010B	Total/NA
Nickel	35		0.98	0.24	mg/Kg	1		6010B	Total/NA
Lead	2.6		0.98	0.25	mg/Kg	1		6010B	Total/NA
Antimony	12		2.0	0.92	mg/Kg	1		6010B	Total/NA
Vanadium	25		0.49	0.19	mg/Kg	1		6010B	Total/NA
Zinc	20		2.0	0.19	mg/Kg	1		6010B	Total/NA
Mercury	0.032	J B	0.085	0.014	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC1-S2-0.5 — Lab Sample ID: 320-81134-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDE	3.5	J	8.3	1.0	ug/Kg	5		8081A	Total/NA
4,4'-DDT	10		8.3	1.2	ug/Kg	5		8081A	Total/NA
PCB-1260	26	J P	64	5.3	ug/Kg	2		8082	Total/NA
Lead	450		0.97	0.25	mg/Kg	1		6010B	Total/NA
Arsenic	9.0		1.9	1.3	mg/Kg	1		6010B	Total/NA

Client Sample ID: AOC1-S2-2 — Lab Sample ID: 320-81134-17

No Detections.

Client Sample ID: AOC9-S2-5 — Lab Sample ID: 320-81134-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.0	J	20	1.4	ug/Kg	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	0.53	J	0.99	0.50	mg/Kg	1		8015B	Total/NA
Arsenic	1.6	J	1.9	1.3	mg/Kg	1		6010B	Total/NA
Barium	31		0.97	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.35		0.19	0.029	mg/Kg	1		6010B	Total/NA
Cadmium	0.041	J	0.19	0.029	mg/Kg	1		6010B	Total/NA
Cobalt	2.9		0.49	0.24	mg/Kg	1		6010B	Total/NA
Chromium	20		0.49	0.14	mg/Kg	1		6010B	Total/NA
Copper	4.4	B	1.5	0.21	mg/Kg	1		6010B	Total/NA
Nickel	14		0.97	0.23	mg/Kg	1		6010B	Total/NA
Lead	2.6		0.97	0.25	mg/Kg	1		6010B	Total/NA
Antimony	7.5		1.9	0.91	mg/Kg	1		6010B	Total/NA
Vanadium	15		0.49	0.18	mg/Kg	1		6010B	Total/NA
Zinc	11		1.9	0.18	mg/Kg	1		6010B	Total/NA
Mercury	0.032	J B	0.082	0.013	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC9-S2-10 — Lab Sample ID: 320-81134-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.4	J	19	1.3	ug/Kg	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	1.8		0.99	0.50	mg/Kg	1		8015B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AOC9-S2-10 (Continued) — Lab Sample ID: 320-81134-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Motor Oil Range Organics [C24-C36]	6.2		5.0	3.7	mg/Kg	1		8015B	Total/NA
Arsenic	2.5		2.0	1.3	mg/Kg	1		6010B	Total/NA
Barium	49		0.99	0.12	mg/Kg	1		6010B	Total/NA
Beryllium	0.65		0.20	0.030	mg/Kg	1		6010B	Total/NA
Cadmium	0.059	J	0.20	0.030	mg/Kg	1		6010B	Total/NA
Cobalt	6.1		0.50	0.25	mg/Kg	1		6010B	Total/NA
Chromium	40		0.50	0.14	mg/Kg	1		6010B	Total/NA
Copper	7.1	B	1.5	0.22	mg/Kg	1		6010B	Total/NA
Nickel	37		0.99	0.24	mg/Kg	1		6010B	Total/NA
Lead	2.8		0.99	0.26	mg/Kg	1		6010B	Total/NA
Antimony	15	B	2.0	0.93	mg/Kg	1		6010B	Total/NA
Vanadium	27		0.50	0.19	mg/Kg	1		6010B	Total/NA
Zinc	23		2.0	0.19	mg/Kg	1		6010B	Total/NA
Mercury	0.022	J B	0.086	0.014	mg/Kg	1		7471A	Total/NA

Client Sample ID: AOC6-S9B-4 — Lab Sample ID: 320-81134-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1.9		0.99	0.49	mg/Kg	1		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	7.3		4.9	3.7	mg/Kg	1		8015B	Total/NA

Client Sample ID: EB11012021 — Lab Sample ID: 320-81134-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Molybdenum	0.041	J	0.050	0.024	mg/L	1		6010B	Total/NA
Vanadium	0.0070	J	0.010	0.0017	mg/L	1		6010B	Total/NA
Lead	0.0080	J	0.050	0.0080	mg/L	1		6010B	Total/NA

Client Sample ID: TB11012021 — Lab Sample ID: 320-81134-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.39	J	2.0	0.33	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC1-S9A-0.5

Date Collected: 11/01/21 09:25
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-1

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	F1	17	2.3	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
4,4'-DDE	ND	F1	17	2.1	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
4,4'-DDT	ND	F1	17	2.5	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
Aldrin	ND	F1	17	1.4	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
alpha-BHC	ND	F1	17	1.6	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
cis-Chlordane	ND	F1	17	1.8	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
beta-BHC	ND	F2 F1	17	2.2	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
Chlordane (technical)	ND		200	93	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
delta-BHC	ND		17	3.5	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
Dieldrin	ND	F1	17	2.0	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
Endosulfan I	ND	F1	17	1.8	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
Endosulfan II	ND	F1	17	1.8	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
Endosulfan sulfate	ND	F1	17	3.5	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
Endrin	ND	F1	17	2.0	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
Endrin aldehyde	ND	F1	17	5.6	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
Endrin ketone	ND	F1	17	2.7	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
trans-Chlordane	ND	F2	17	5.9	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
gamma-BHC (Lindane)	ND	F1	17	1.4	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
Heptachlor	ND	F1	17	1.5	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
Heptachlor epoxide	ND	F1	17	1.8	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
Methoxychlor	ND	F1	34	5.5	ug/Kg		11/13/21 08:25	11/23/21 15:45	10
Toxaphene	ND		660	220	ug/Kg		11/13/21 08:25	11/23/21 15:45	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*251*	*S1+*	*46 - 109*	*11/13/21 08:25*	*11/23/21 15:45*	*10*
DCB Decachlorobiphenyl	*28*	*p S1-*	*46 - 109*	*11/13/21 08:25*	*11/23/21 15:45*	*10*
Tetrachloro-m-xylene	*71*		*47 - 107*	*11/13/21 08:25*	*11/23/21 15:45*	*10*
Tetrachloro-m-xylene	*51*		*47 - 107*	*11/13/21 08:25*	*11/23/21 15:45*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/13/21 08:43	11/20/21 07:15	1
PCB-1221	ND		33	3.6	ug/Kg		11/13/21 08:43	11/20/21 07:15	1
PCB-1232	ND		33	4.7	ug/Kg		11/13/21 08:43	11/20/21 07:15	1
PCB-1242	ND		33	5.8	ug/Kg		11/13/21 08:43	11/20/21 07:15	1
PCB-1248	ND		33	2.4	ug/Kg		11/13/21 08:43	11/20/21 07:15	1
PCB-1254	ND		33	3.8	ug/Kg		11/13/21 08:43	11/20/21 07:15	1
PCB-1260	ND		33	2.7	ug/Kg		11/13/21 08:43	11/20/21 07:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*52 - 138*	*11/13/21 08:43*	*11/20/21 07:15*	*1*
Tetrachloro-m-xylene	*85*		*56 - 114*	*11/13/21 08:43*	*11/20/21 07:15*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**60**		1.0	0.26	mg/Kg		11/09/21 13:20	11/10/21 10:32	1
Arsenic	**5.1**		2.0	1.3	mg/Kg		11/09/21 13:20	11/10/21 10:32	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC1-S9A-0.5 DUP

Date Collected: 11/01/21 09:25
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-2

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	4.5	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
4,4'-DDE	ND		33	4.1	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
4,4'-DDT	ND		33	4.9	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
Aldrin	ND		33	2.7	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
alpha-BHC	ND		33	3.1	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
cis-Chlordane	ND		33	3.5	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
beta-BHC	ND		33	4.3	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
Chlordane (technical)	ND		390	180	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
delta-BHC	ND		33	6.8	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
Dieldrin	ND		33	3.9	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
Endosulfan I	ND		33	3.5	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
Endosulfan II	ND		33	3.5	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
Endosulfan sulfate	ND		33	6.8	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
Endrin	ND		33	3.9	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
Endrin aldehyde	ND		33	11	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
Endrin ketone	ND		33	5.3	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
trans-Chlordane	ND		33	12	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
gamma-BHC (Lindane)	ND		33	2.7	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
Heptachlor	ND		33	2.9	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
Heptachlor epoxide	ND		33	3.5	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
Methoxychlor	ND		66	11	ug/Kg		11/13/21 08:25	11/23/21 16:42	20
Toxaphene	ND		1300	440	ug/Kg		11/13/21 08:25	11/23/21 16:42	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/13/21 08:25*	*11/23/21 16:42*	*20*
DCB Decachlorobiphenyl	*0*	*S1-*	*46 - 109*	*11/13/21 08:25*	*11/23/21 16:42*	*20*
Tetrachloro-m-xylene	*94*		*47 - 107*	*11/13/21 08:25*	*11/23/21 16:42*	*20*
Tetrachloro-m-xylene	*49*		*47 - 107*	*11/13/21 08:25*	*11/23/21 16:42*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	F2	32	2.5	ug/Kg		11/13/21 08:43	11/20/21 07:35	1
PCB-1221	ND		32	3.5	ug/Kg		11/13/21 08:43	11/20/21 07:35	1
PCB-1232	ND		32	4.7	ug/Kg		11/13/21 08:43	11/20/21 07:35	1
PCB-1242	ND		32	5.7	ug/Kg		11/13/21 08:43	11/20/21 07:35	1
PCB-1248	ND		32	2.4	ug/Kg		11/13/21 08:43	11/20/21 07:35	1
PCB-1254	ND		32	3.7	ug/Kg		11/13/21 08:43	11/20/21 07:35	1
PCB-1260	ND		32	2.6	ug/Kg		11/13/21 08:43	11/20/21 07:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*52 - 138*	*11/13/21 08:43*	*11/20/21 07:35*	*1*
Tetrachloro-m-xylene	*76*		*56 - 114*	*11/13/21 08:43*	*11/20/21 07:35*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**72**		0.66	0.17	mg/Kg		11/09/21 13:20	11/10/21 10:51	1
Arsenic	**4.7**		1.3	0.86	mg/Kg		11/09/21 13:20	11/10/21 10:51	1

Client Sample ID: AOC1-S9A-2

Date Collected: 11/01/21 09:27
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-3

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
Aldrin	ND		1.6	0.13	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
Chlordane (technical)	ND		19	8.9	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
Endrin	ND		1.6	0.19	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
Endrin aldehyde	ND		1.6	0.54	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
trans-Chlordane	ND		1.6	0.57	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
Methoxychlor	ND		3.2	0.53	ug/Kg		11/13/21 08:25	11/23/21 17:01	1
Toxaphene	ND		63	21	ug/Kg		11/13/21 08:25	11/23/21 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*63*		*46 - 109*	*11/13/21 08:25*	*11/23/21 17:01*	*1*
DCB Decachlorobiphenyl	*57*		*46 - 109*	*11/13/21 08:25*	*11/23/21 17:01*	*1*
Tetrachloro-m-xylene	*66*		*47 - 107*	*11/13/21 08:25*	*11/23/21 17:01*	*1*
Tetrachloro-m-xylene	*58*		*47 - 107*	*11/13/21 08:25*	*11/23/21 17:01*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC1-S1-0.5

Date Collected: 11/01/21 12:10
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-4

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.4	0.46	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
4,4'-DDE	ND		3.4	0.42	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
4,4'-DDT	**0.87**	**J**	3.4	0.50	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
Aldrin	ND		3.4	0.28	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
alpha-BHC	ND		3.4	0.32	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
cis-Chlordane	ND		3.4	0.36	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
beta-BHC	ND		3.4	0.44	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
Chlordane (technical)	ND		40	19	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
delta-BHC	ND		3.4	0.70	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
Dieldrin	ND		3.4	0.40	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
Endosulfan I	ND		3.4	0.36	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
Endosulfan II	ND		3.4	0.36	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
Endosulfan sulfate	ND		3.4	0.70	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
Endrin	ND		3.4	0.40	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
Endrin aldehyde	ND		3.4	1.1	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
Endrin ketone	ND		3.4	0.54	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
trans-Chlordane	ND		3.4	1.2	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
gamma-BHC (Lindane)	ND		3.4	0.28	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
Heptachlor	ND		3.4	0.30	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
Heptachlor epoxide	ND		3.4	0.36	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
Methoxychlor	ND		6.8	1.1	ug/Kg		11/13/21 08:25	11/23/21 17:20	2
Toxaphene	ND		130	45	ug/Kg		11/13/21 08:25	11/23/21 17:20	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*46*		*46 - 109*	*11/13/21 08:25*	*11/23/21 17:20*	*2*
DCB Decachlorobiphenyl	*48*		*46 - 109*	*11/13/21 08:25*	*11/23/21 17:20*	*2*
Tetrachloro-m-xylene	*51*		*47 - 107*	*11/13/21 08:25*	*11/23/21 17:20*	*2*
Tetrachloro-m-xylene	*47*		*47 - 107*	*11/13/21 08:25*	*11/23/21 17:20*	*2*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.5	ug/Kg		11/13/21 08:43	11/20/21 08:37	1
PCB-1221	ND		33	3.6	ug/Kg		11/13/21 08:43	11/20/21 08:37	1
PCB-1232	ND		33	4.8	ug/Kg		11/13/21 08:43	11/20/21 08:37	1
PCB-1242	ND		33	5.9	ug/Kg		11/13/21 08:43	11/20/21 08:37	1
PCB-1248	ND		33	2.4	ug/Kg		11/13/21 08:43	11/20/21 08:37	1
PCB-1254	ND		33	3.8	ug/Kg		11/13/21 08:43	11/20/21 08:37	1
PCB-1260	**4.9**	**J**	33	2.7	ug/Kg		11/13/21 08:43	11/20/21 08:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*46*	*S1-*	*52 - 138*	*11/13/21 08:43*	*11/20/21 08:37*	*1*
Tetrachloro-m-xylene	*49*	*S1-*	*56 - 114*	*11/13/21 08:43*	*11/20/21 08:37*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**430**		0.99	0.26	mg/Kg		11/09/21 13:20	11/10/21 14:37	1
Arsenic	**6.7**		2.0	1.3	mg/Kg		11/09/21 13:20	11/10/21 14:37	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC1-S1-0.5 DUP

Date Collected: 11/01/21 12:10
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-5

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.4	0.46	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
4,4'-DDE	ND		3.4	0.42	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
4,4'-DDT	**1.7**	**J P**	3.4	0.50	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
Aldrin	ND		3.4	0.28	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
alpha-BHC	ND		3.4	0.32	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
cis-Chlordane	ND		3.4	0.36	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
beta-BHC	ND		3.4	0.44	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
Chlordane (technical)	ND		40	19	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
delta-BHC	ND		3.4	0.70	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
Dieldrin	ND		3.4	0.40	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
Endosulfan I	ND		3.4	0.36	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
Endosulfan II	ND		3.4	0.36	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
Endosulfan sulfate	ND		3.4	0.70	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
Endrin	ND		3.4	0.40	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
Endrin aldehyde	ND		3.4	1.1	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
Endrin ketone	ND		3.4	0.54	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
trans-Chlordane	ND		3.4	1.2	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
gamma-BHC (Lindane)	ND		3.4	0.28	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
Heptachlor	ND		3.4	0.30	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
Heptachlor epoxide	ND		3.4	0.36	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
Methoxychlor	ND		6.8	1.1	ug/Kg		11/13/21 08:25	11/23/21 17:58	2
Toxaphene	ND		130	45	ug/Kg		11/13/21 08:25	11/23/21 17:58	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*49*		*46 - 109*	*11/13/21 08:25*	*11/23/21 17:58*	*2*
DCB Decachlorobiphenyl	*53*		*46 - 109*	*11/13/21 08:25*	*11/23/21 17:58*	*2*
Tetrachloro-m-xylene	*50*		*47 - 107*	*11/13/21 08:25*	*11/23/21 17:58*	*2*
Tetrachloro-m-xylene	*44*	*S1-*	*47 - 107*	*11/13/21 08:25*	*11/23/21 17:58*	*2*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		66	5.1	ug/Kg		11/13/21 08:43	11/20/21 08:58	2
PCB-1221	ND		66	7.2	ug/Kg		11/13/21 08:43	11/20/21 08:58	2
PCB-1232	ND		66	9.6	ug/Kg		11/13/21 08:43	11/20/21 08:58	2
PCB-1242	ND		66	12	ug/Kg		11/13/21 08:43	11/20/21 08:58	2
PCB-1248	ND		66	4.9	ug/Kg		11/13/21 08:43	11/20/21 08:58	2
PCB-1254	ND		66	7.6	ug/Kg		11/13/21 08:43	11/20/21 08:58	2
PCB-1260	**8.5**	**J P**	66	5.4	ug/Kg		11/13/21 08:43	11/20/21 08:58	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*52*		*52 - 138*	*11/13/21 08:43*	*11/20/21 08:58*	*2*
Tetrachloro-m-xylene	*61*		*56 - 114*	*11/13/21 08:43*	*11/20/21 08:58*	*2*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**480**		0.97	0.25	mg/Kg		11/09/21 13:20	11/10/21 14:40	1
Arsenic	**4.0**		1.9	1.3	mg/Kg		11/09/21 13:20	11/10/21 14:40	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC1-S1-2
Date Collected: 11/01/21 12:12
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-6
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
Aldrin	ND		1.7	0.14	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
Endrin	ND		1.7	0.20	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/13/21 08:25	11/23/21 18:17	1
Toxaphene	ND		67	22	ug/Kg		11/13/21 08:25	11/23/21 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*68*		*46 - 109*	*11/13/21 08:25*	*11/23/21 18:17*	*1*
DCB Decachlorobiphenyl	*70*		*46 - 109*	*11/13/21 08:25*	*11/23/21 18:17*	*1*
Tetrachloro-m-xylene	*67*		*47 - 107*	*11/13/21 08:25*	*11/23/21 18:17*	*1*
Tetrachloro-m-xylene	*60*		*47 - 107*	*11/13/21 08:25*	*11/23/21 18:17*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC1-S1-2 DUP

Date Collected: 11/01/21 12:12
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-7

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
Aldrin	ND		1.7	0.14	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
Chlordane (technical)	ND		20	9.3	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
delta-BHC	ND		1.7	0.34	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
Endosulfan sulfate	ND		1.7	0.34	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
Endrin	ND		1.7	0.20	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
Endrin aldehyde	ND		1.7	0.56	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
trans-Chlordane	ND		1.7	0.59	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
Methoxychlor	ND		3.3	0.55	ug/Kg		11/09/21 14:45	11/22/21 17:23	1
Toxaphene	ND		66	22	ug/Kg		11/09/21 14:45	11/22/21 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*39*	*S1-*	*46 - 109*	*11/09/21 14:45*	*11/22/21 17:23*	*1*
DCB Decachlorobiphenyl	*38*	*S1-*	*46 - 109*	*11/09/21 14:45*	*11/22/21 17:23*	*1*
Tetrachloro-m-xylene	*67*		*47 - 107*	*11/09/21 14:45*	*11/22/21 17:23*	*1*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/09/21 14:45*	*11/22/21 17:23*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC4-S1-5

Date Collected: 11/01/21 11:59
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-8

Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C4-C12	ND	H	0.50	0.050	mg/Kg		11/12/21 14:03	11/17/21 11:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 131*	*11/12/21 14:03*	*11/17/21 11:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	5.0	0.41	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,1,1-Trichloroethane	ND	H	5.0	0.36	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,1,2,2-Tetrachloroethane	ND	H	5.0	0.68	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	H	10	0.83	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,1,2-Trichloroethane	ND	H	5.0	0.44	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,1-Dichloroethane	ND	H	5.0	0.29	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,1-Dichloroethene	ND	H	5.0	0.26	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,1-Dichloropropene	ND	H	5.0	0.37	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,2,3-Trichlorobenzene	ND	H	5.0	0.75	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,2,3-Trichloropropane	ND	H	5.0	0.76	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,2,4-Trichlorobenzene	ND	H	5.0	0.75	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,2,4-Trimethylbenzene	ND	H	5.0	0.51	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,2-Dibromo-3-Chloropropane	ND	H	10	0.88	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Ethylene Dibromide	ND	H	10	0.27	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,2-Dichlorobenzene	ND	H	5.0	0.64	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,2-Dichloroethane	ND	H	5.0	0.73	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,2-Dichloropropane	ND	H	5.0	0.60	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,3,5-Trimethylbenzene	ND	H	5.0	0.35	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,3-Dichlorobenzene	ND	H	5.0	0.30	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,3-Dichloropropane	ND	H	5.0	0.57	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
1,4-Dichlorobenzene	ND	H	5.0	0.78	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
2,2-Dichloropropane	ND	H	5.0	0.38	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
2-Butanone (MEK)	ND	H	10	1.4	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
2-Chlorotoluene	ND	H	5.0	0.62	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
2-Hexanone	ND	H	10	0.74	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
4-Chlorotoluene	ND	H	5.0	0.86	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
4-Methyl-2-pentanone (MIBK)	ND	H	10	0.92	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Acetone	ND	H	20	1.4	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Benzene	ND	H	5.0	0.26	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Bromobenzene	ND	H	5.0	0.52	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Chlorobromomethane	ND	H	5.0	0.94	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Dichlorobromomethane	ND	H	5.0	0.53	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Bromoform	ND	H	5.0	0.40	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Bromomethane	ND	H	5.0	0.86	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
cis-1,2-Dichloroethene	ND	H	5.0	0.89	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
cis-1,3-Dichloropropene	ND	H	5.0	0.64	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Carbon disulfide	ND	H	10	0.49	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Carbon tetrachloride	ND	H	5.0	0.53	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Chlorobenzene	ND	H	5.0	0.29	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Chloroethane	ND	H	5.0	0.45	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Chloroform	ND	H	5.0	0.26	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Chloromethane	ND	H	5.0	0.50	ug/Kg		11/12/21 14:03	11/17/21 11:36	1

Client Sample ID: AOC4-S1-5

Date Collected: 11/01/21 11:59
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-8

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	ND	H	5.0	0.21	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Dibromomethane	ND	H	5.0	0.58	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Dichlorodifluoromethane	ND	H	5.0	0.89	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Ethylbenzene	ND	H	5.0	0.34	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Hexachlorobutadiene	ND	H	5.0	0.33	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Isopropylbenzene	ND	H	5.0	0.52	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Methylene Chloride	ND	H	10	0.84	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Methyl tert-butyl ether	ND	H	10	0.60	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Naphthalene	ND	H	5.0	0.63	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
n-Butylbenzene	ND	H	5.0	0.66	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
N-Propylbenzene	ND	H	5.0	0.29	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
4-Isopropyltoluene	ND	H	5.0	0.63	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
sec-Butylbenzene	ND	H	5.0	0.75	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Styrene	ND	H	5.0	0.31	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
trans-1,2-Dichloroethene	ND	H	5.0	0.38	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
trans-1,3-Dichloropropene	ND	H	5.0	0.75	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
tert-Butylbenzene	ND	H	5.0	0.54	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Tetrachloroethene	ND	H	5.0	0.61	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Toluene	ND	H	5.0	0.61	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Xylenes, Total	ND	H	5.0	0.81	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Trichloroethene	ND	H	5.0	0.60	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Trichlorofluoromethane	ND	H	5.0	0.34	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Vinyl acetate	ND	H	10	0.69	ug/Kg		11/12/21 14:03	11/17/21 11:36	1
Vinyl chloride	ND	H	5.0	0.36	ug/Kg		11/12/21 14:03	11/17/21 11:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*32 - 156*	*11/12/21 14:03*	*11/17/21 11:36*	*1*
4-Bromofluorobenzene (Surr)	*105*		*63 - 143*	*11/12/21 14:03*	*11/17/21 11:36*	*1*
Dibromofluoromethane (Surr)	*97*		*55 - 129*	*11/12/21 14:03*	*11/17/21 11:36*	*1*
Toluene-d8 (Surr)	*99*		*63 - 138*	*11/12/21 14:03*	*11/17/21 11:36*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1.3**		1.0	0.50	mg/Kg		11/06/21 09:57	11/13/21 11:29	1
Motor Oil Range Organics [C24-C36]	**4.6**	**J**	5.0	3.8	mg/Kg		11/06/21 09:57	11/13/21 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*59*		*51 - 111*	*11/06/21 09:57*	*11/13/21 11:29*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.49	0.088	mg/Kg		11/09/21 13:20	11/10/21 14:44	1
Arsenic	**3.7**		2.0	1.3	mg/Kg		11/09/21 13:20	11/10/21 14:44	1
Barium	**60**		0.98	0.12	mg/Kg		11/09/21 13:20	11/10/21 14:44	1
Beryllium	**0.60**		0.20	0.029	mg/Kg		11/09/21 13:20	11/10/21 14:44	1
Cadmium	**0.085**	**J**	0.20	0.029	mg/Kg		11/09/21 13:20	11/10/21 14:44	1
Cobalt	**7.5**		0.49	0.25	mg/Kg		11/09/21 13:20	11/10/21 14:44	1
Chromium	**50**		0.49	0.14	mg/Kg		11/09/21 13:20	11/10/21 14:44	1
Copper	**9.0**	**B**	1.5	0.22	mg/Kg		11/09/21 13:20	11/10/21 14:44	1
Molybdenum	ND		2.0	0.74	mg/Kg		11/09/21 13:20	11/10/21 14:44	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC4-S1-5
Date Collected: 11/01/21 11:59
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-8
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	36		0.98	0.24	mg/Kg		11/09/21 13:20	11/10/21 14:44	1
Lead	12		0.98	0.25	mg/Kg		11/09/21 13:20	11/10/21 14:44	1
Selenium	ND		2.0	1.4	mg/Kg		11/09/21 13:20	11/10/21 14:44	1
Antimony	11		2.0	0.92	mg/Kg		11/09/21 13:20	11/10/21 14:44	1
Thallium	ND		2.0	0.82	mg/Kg		11/09/21 13:20	11/10/21 14:44	1
Vanadium	31		0.49	0.19	mg/Kg		11/09/21 13:20	11/10/21 14:44	1
Zinc	28		2.0	0.19	mg/Kg		11/09/21 13:20	11/10/21 14:44	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050	J B	0.086	0.014	mg/Kg		11/14/21 10:50	11/15/21 17:44	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC4-S1-10

Date Collected: 11/01/21 12:00
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-9

Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C4-C12	ND		0.49	0.049	mg/Kg		11/03/21 10:58	11/07/21 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 131*	*11/03/21 10:58*	*11/07/21 19:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	4.8	0.40	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,1,1-Trichloroethane	ND	H	4.8	0.35	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,1,2,2-Tetrachloroethane	ND	H	4.8	0.66	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	H	9.7	0.80	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,1,2-Trichloroethane	ND	H	4.8	0.43	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,1-Dichloroethane	ND	H	4.8	0.28	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,1-Dichloroethene	ND	H	4.8	0.25	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,1-Dichloropropene	ND	H	4.8	0.36	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,2,3-Trichlorobenzene	ND	H	4.8	0.73	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,2,3-Trichloropropane	ND	H	4.8	0.74	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,2,4-Trichlorobenzene	ND	H	4.8	0.73	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,2,4-Trimethylbenzene	ND	H	4.8	0.49	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,2-Dibromo-3-Chloropropane	ND	H	9.7	0.85	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Ethylene Dibromide	ND	H	9.7	0.26	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,2-Dichlorobenzene	ND	H	4.8	0.62	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,2-Dichloroethane	ND	H	4.8	0.71	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,2-Dichloropropane	ND	H	4.8	0.58	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,3,5-Trimethylbenzene	ND	H	4.8	0.34	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,3-Dichlorobenzene	ND	H	4.8	0.29	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,3-Dichloropropane	ND	H	4.8	0.55	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
1,4-Dichlorobenzene	ND	H	4.8	0.76	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
2,2-Dichloropropane	ND	H	4.8	0.37	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
2-Butanone (MEK)	ND	H	9.7	1.4	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
2-Chlorotoluene	ND	H	4.8	0.60	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
2-Hexanone	ND	H	9.7	0.72	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
4-Chlorotoluene	ND	H	4.8	0.83	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
4-Methyl-2-pentanone (MIBK)	ND	H	9.7	0.89	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Acetone	ND	H	19	1.4	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Benzene	ND	H	4.8	0.25	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Bromobenzene	ND	H	4.8	0.50	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Chlorobromomethane	ND	H	4.8	0.91	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Dichlorobromomethane	ND	H	4.8	0.51	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Bromoform	ND	H	4.8	0.39	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Bromomethane	ND	H	4.8	0.83	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
cis-1,2-Dichloroethene	ND	H	4.8	0.86	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
cis-1,3-Dichloropropene	ND	H	4.8	0.62	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Carbon disulfide	ND	H	9.7	0.47	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Carbon tetrachloride	ND	H	4.8	0.51	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Chlorobenzene	ND	H	4.8	0.28	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Chloroethane	ND	H	4.8	0.44	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Chloroform	ND	H	4.8	0.25	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Chloromethane	ND	H	4.8	0.48	ug/Kg		11/12/21 14:05	11/17/21 11:58	1

Client Sample ID: AOC4-S1-10

Date Collected: 11/01/21 12:00
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-9

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	ND	H	4.8	0.20	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Dibromomethane	ND	H	4.8	0.56	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Dichlorodifluoromethane	ND	H	4.8	0.86	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Ethylbenzene	ND	H	4.8	0.33	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Hexachlorobutadiene	ND	H	4.8	0.32	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Isopropylbenzene	ND	H	4.8	0.50	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Methylene Chloride	ND	H	9.7	0.81	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Methyl tert-butyl ether	ND	H	9.7	0.58	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Naphthalene	ND	H	4.8	0.61	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
n-Butylbenzene	ND	H	4.8	0.64	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
N-Propylbenzene	ND	H	4.8	0.28	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
4-Isopropyltoluene	ND	H	4.8	0.61	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
sec-Butylbenzene	ND	H	4.8	0.73	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Styrene	ND	H	4.8	0.30	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
trans-1,2-Dichloroethene	ND	H	4.8	0.37	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
trans-1,3-Dichloropropene	ND	H	4.8	0.73	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
tert-Butylbenzene	ND	H	4.8	0.52	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Tetrachloroethene	ND	H	4.8	0.59	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Toluene	ND	H	4.8	0.59	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Xylenes, Total	ND	H	4.8	0.78	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Trichloroethene	ND	H	4.8	0.58	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Trichlorofluoromethane	ND	H	4.8	0.33	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Vinyl acetate	ND	H	9.7	0.67	ug/Kg		11/12/21 14:05	11/17/21 11:58	1
Vinyl chloride	ND	H	4.8	0.35	ug/Kg		11/12/21 14:05	11/17/21 11:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*32 - 156*	*11/12/21 14:05*	*11/17/21 11:58*	*1*
4-Bromofluorobenzene (Surr)	*104*		*63 - 143*	*11/12/21 14:05*	*11/17/21 11:58*	*1*
Dibromofluoromethane (Surr)	*96*		*55 - 129*	*11/12/21 14:05*	*11/17/21 11:58*	*1*
Toluene-d8 (Surr)	*97*		*63 - 138*	*11/12/21 14:05*	*11/17/21 11:58*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.60**	**J**	1.0	0.50	mg/Kg		11/06/21 09:57	11/13/21 11:58	1
Motor Oil Range Organics [C24-C36]	ND		5.0	3.8	mg/Kg		11/06/21 09:57	11/13/21 11:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*63*		*51 - 111*	*11/06/21 09:57*	*11/13/21 11:58*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.48	0.086	mg/Kg		11/09/21 13:20	11/10/21 14:48	1
Arsenic	**2.2**		1.9	1.2	mg/Kg		11/09/21 13:20	11/10/21 14:48	1
Barium	**49**		0.95	0.11	mg/Kg		11/09/21 13:20	11/10/21 14:48	1
Beryllium	**0.49**		0.19	0.029	mg/Kg		11/09/21 13:20	11/10/21 14:48	1
Cadmium	**0.058**	**J**	0.19	0.029	mg/Kg		11/09/21 13:20	11/10/21 14:48	1
Cobalt	**4.9**		0.48	0.24	mg/Kg		11/09/21 13:20	11/10/21 14:48	1
Chromium	**36**		0.48	0.13	mg/Kg		11/09/21 13:20	11/10/21 14:48	1
Copper	**6.5**	**B**	1.4	0.21	mg/Kg		11/09/21 13:20	11/10/21 14:48	1
Molybdenum	ND		1.9	0.71	mg/Kg		11/09/21 13:20	11/10/21 14:48	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC4-S1-10
Date Collected: 11/01/21 12:00
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-9
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	32		0.95	0.23	mg/Kg		11/09/21 13:20	11/10/21 14:48	1
Lead	3.1		0.95	0.25	mg/Kg		11/09/21 13:20	11/10/21 14:48	1
Selenium	ND		1.9	1.3	mg/Kg		11/09/21 13:20	11/10/21 14:48	1
Antimony	11		1.9	0.90	mg/Kg		11/09/21 13:20	11/10/21 14:48	1
Thallium	ND		1.9	0.80	mg/Kg		11/09/21 13:20	11/10/21 14:48	1
Vanadium	21		0.48	0.18	mg/Kg		11/09/21 13:20	11/10/21 14:48	1
Zinc	20		1.9	0.18	mg/Kg		11/09/21 13:20	11/10/21 14:48	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024	J B	0.082	0.013	mg/Kg		11/14/21 10:50	11/15/21 17:45	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC4-S1-15

Date Collected: 11/01/21 12:01
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-10

Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C4-C12	ND		0.49	0.049	mg/Kg		11/03/21 10:58	11/07/21 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 131*	*11/03/21 10:58*	*11/07/21 19:57*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	4.9	0.40	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,1,1-Trichloroethane	ND	*3	4.9	0.35	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,1,2,2-Tetrachloroethane	ND	*3	4.9	0.67	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*3	9.8	0.81	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,1,2-Trichloroethane	ND	*3	4.9	0.43	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,1-Dichloroethane	ND	*3	4.9	0.28	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,1-Dichloroethene	ND	*3	4.9	0.25	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,1-Dichloropropene	ND	*3	4.9	0.36	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,2,3-Trichlorobenzene	ND	*3	4.9	0.73	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,2,3-Trichloropropane	ND	*3	4.9	0.74	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,2,4-Trichlorobenzene	ND	*3	4.9	0.73	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,2,4-Trimethylbenzene	ND	*3	4.9	0.50	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,2-Dibromo-3-Chloropropane	ND	*3	9.8	0.86	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Ethylene Dibromide	ND	*3	9.8	0.26	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,2-Dichlorobenzene	ND	*3	4.9	0.63	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,2-Dichloroethane	ND	*3	4.9	0.71	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,2-Dichloropropane	ND	*3	4.9	0.59	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,3,5-Trimethylbenzene	ND	*3	4.9	0.34	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,3-Dichlorobenzene	ND	*3	4.9	0.29	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,3-Dichloropropane	ND	*3	4.9	0.56	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
1,4-Dichlorobenzene	ND	*3	4.9	0.76	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
2,2-Dichloropropane	ND	*3	4.9	0.37	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
2-Butanone (MEK)	ND	*3	9.8	1.4	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
2-Chlorotoluene	ND	*3	4.9	0.61	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
2-Hexanone	ND	*3	9.8	0.72	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
4-Chlorotoluene	ND	*3	4.9	0.84	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
4-Methyl-2-pentanone (MIBK)	ND	*3	9.8	0.90	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Acetone	ND	*3	20	1.4	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Benzene	ND	*3	4.9	0.25	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Bromobenzene	ND	*3	4.9	0.51	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Chlorobromomethane	ND	*3	4.9	0.92	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Dichlorobromomethane	ND	*3	4.9	0.52	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Bromoform	ND	*3	4.9	0.39	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Bromomethane	ND	*3	4.9	0.84	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
cis-1,2-Dichloroethene	ND	*3	4.9	0.87	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
cis-1,3-Dichloropropene	ND	*3	4.9	0.63	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Carbon disulfide	ND	*3	9.8	0.48	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Carbon tetrachloride	ND	*3	4.9	0.52	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Chlorobenzene	ND	*3	4.9	0.28	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Chloroethane	ND	*3	4.9	0.44	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Chloroform	ND	*3	4.9	0.25	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Chloromethane	ND	*3	4.9	0.49	ug/Kg		11/03/21 10:58	11/07/21 19:57	1

Client Sample ID: AOC4-S1-15

Date Collected: 11/01/21 12:01
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-10

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	ND	*3	4.9	0.21	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Dibromomethane	ND	*3	4.9	0.57	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Dichlorodifluoromethane	ND	*3	4.9	0.87	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Ethylbenzene	ND	*3	4.9	0.33	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Hexachlorobutadiene	ND	*3	4.9	0.32	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Isopropylbenzene	ND	*3	4.9	0.51	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Methylene Chloride	ND	*3	9.8	0.82	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Methyl tert-butyl ether	ND	*3	9.8	0.59	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Naphthalene	**2.8**	**J *3 B**	4.9	0.62	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
n-Butylbenzene	ND	*3	4.9	0.65	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
N-Propylbenzene	ND	*3	4.9	0.28	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
4-Isopropyltoluene	ND	*3	4.9	0.62	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
sec-Butylbenzene	ND	*3	4.9	0.73	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Styrene	ND	*3	4.9	0.30	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
trans-1,2-Dichloroethene	ND	*3	4.9	0.37	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
trans-1,3-Dichloropropene	ND	*3	4.9	0.73	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
tert-Butylbenzene	ND	*3	4.9	0.53	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Tetrachloroethene	ND	*3	4.9	0.60	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Toluene	ND	*3	4.9	0.60	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Xylenes, Total	ND	*3	4.9	0.79	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Trichloroethene	ND	*3	4.9	0.59	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Trichlorofluoromethane	ND	*3	4.9	0.33	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Vinyl acetate	ND	*3	9.8	0.68	ug/Kg		11/03/21 10:58	11/07/21 19:57	1
Vinyl chloride	ND	*3	4.9	0.35	ug/Kg		11/03/21 10:58	11/07/21 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*	*3*	*32 - 156*	*11/03/21 10:58*	*11/07/21 19:57*	*1*
4-Bromofluorobenzene (Surr)	*107*	*3*	*63 - 143*	*11/03/21 10:58*	*11/07/21 19:57*	*1*
Dibromofluoromethane (Surr)	*100*	*3*	*55 - 129*	*11/03/21 10:58*	*11/07/21 19:57*	*1*
Toluene-d8 (Surr)	*116*	*3*	*63 - 138*	*11/03/21 10:58*	*11/07/21 19:57*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.99	0.49	mg/Kg		11/06/21 09:57	11/13/21 12:27	1
Motor Oil Range Organics [C24-C36]	ND		4.9	3.7	mg/Kg		11/06/21 09:57	11/13/21 12:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*59*		*51 - 111*	*11/06/21 09:57*	*11/13/21 12:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.48	0.087	mg/Kg		11/09/21 13:20	11/10/21 14:52	1
Arsenic	**3.5**		1.9	1.3	mg/Kg		11/09/21 13:20	11/10/21 14:52	1
Barium	**56**		0.96	0.12	mg/Kg		11/09/21 13:20	11/10/21 14:52	1
Beryllium	**0.64**		0.19	0.029	mg/Kg		11/09/21 13:20	11/10/21 14:52	1
Cadmium	**0.089**	**J**	0.19	0.029	mg/Kg		11/09/21 13:20	11/10/21 14:52	1
Cobalt	**6.9**		0.48	0.24	mg/Kg		11/09/21 13:20	11/10/21 14:52	1
Chromium	**51**		0.48	0.13	mg/Kg		11/09/21 13:20	11/10/21 14:52	1
Copper	**10**	**B**	1.4	0.21	mg/Kg		11/09/21 13:20	11/10/21 14:52	1
Molybdenum	ND		1.9	0.72	mg/Kg		11/09/21 13:20	11/10/21 14:52	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC4-S1-15
Date Collected: 11/01/21 12:01
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-10
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	35		0.96	0.23	mg/Kg		11/09/21 13:20	11/10/21 14:52	1
Lead	3.6		0.96	0.25	mg/Kg		11/09/21 13:20	11/10/21 14:52	1
Selenium	ND		1.9	1.3	mg/Kg		11/09/21 13:20	11/10/21 14:52	1
Antimony	12		1.9	0.90	mg/Kg		11/09/21 13:20	11/10/21 14:52	1
Thallium	ND		1.9	0.81	mg/Kg		11/09/21 13:20	11/10/21 14:52	1
Vanadium	33		0.48	0.18	mg/Kg		11/09/21 13:20	11/10/21 14:52	1
Zinc	26		1.9	0.18	mg/Kg		11/09/21 13:20	11/10/21 14:52	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J B	0.083	0.014	mg/Kg		11/14/21 10:50	11/15/21 17:47	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC4-S1-5 DUP

Date Collected: 11/01/21 11:59
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-11

Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C4-C12	ND		0.49	0.049	mg/Kg		11/03/21 10:58	11/12/21 12:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 131*	*11/03/21 10:58*	*11/12/21 12:05*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.9	0.40	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,1,1-Trichloroethane	ND		4.9	0.35	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.67	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.8	0.81	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,1,2-Trichloroethane	ND		4.9	0.43	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,1-Dichloroethane	ND		4.9	0.28	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,1-Dichloroethene	ND		4.9	0.25	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,1-Dichloropropene	ND		4.9	0.36	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,2,3-Trichlorobenzene	ND		4.9	0.74	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,2,3-Trichloropropane	ND		4.9	0.75	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,2,4-Trichlorobenzene	ND		4.9	0.74	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,2,4-Trimethylbenzene	ND		4.9	0.50	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,2-Dibromo-3-Chloropropane	ND		9.8	0.86	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Ethylene Dibromide	ND		9.8	0.26	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,2-Dichlorobenzene	ND		4.9	0.63	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,2-Dichloroethane	ND		4.9	0.72	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,2-Dichloropropane	ND		4.9	0.59	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,3,5-Trimethylbenzene	ND		4.9	0.34	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,3-Dichlorobenzene	ND		4.9	0.29	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,3-Dichloropropane	ND		4.9	0.56	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
1,4-Dichlorobenzene	ND		4.9	0.76	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
2,2-Dichloropropane	ND		4.9	0.37	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
2-Butanone (MEK)	ND		9.8	1.4	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
2-Chlorotoluene	ND		4.9	0.61	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
2-Hexanone	ND		9.8	0.73	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
4-Chlorotoluene	ND		4.9	0.84	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
4-Methyl-2-pentanone (MIBK)	ND		9.8	0.90	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Acetone	ND		20	1.4	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Benzene	ND		4.9	0.25	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Bromobenzene	ND		4.9	0.51	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Chlorobromomethane	ND		4.9	0.92	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Dichlorobromomethane	ND		4.9	0.52	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Bromoform	ND		4.9	0.39	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Bromomethane	ND		4.9	0.84	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
cis-1,2-Dichloroethene	ND		4.9	0.87	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
cis-1,3-Dichloropropene	ND		4.9	0.63	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Carbon disulfide	ND		9.8	0.48	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Carbon tetrachloride	ND		4.9	0.52	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Chlorobenzene	ND		4.9	0.28	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Chloroethane	ND		4.9	0.44	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Chloroform	ND		4.9	0.25	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Chloromethane	ND		4.9	0.49	ug/Kg		11/03/21 10:58	11/11/21 16:37	1

Client Sample ID: AOC4-S1-5 DUP

Date Collected: 11/01/21 11:59
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-11

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	ND		4.9	0.21	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Dibromomethane	ND		4.9	0.57	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Dichlorodifluoromethane	ND		4.9	0.87	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Ethylbenzene	ND		4.9	0.33	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Hexachlorobutadiene	ND		4.9	0.32	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Isopropylbenzene	ND		4.9	0.51	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Methylene Chloride	ND		9.8	0.82	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Methyl tert-butyl ether	ND		9.8	0.59	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Naphthalene	ND		4.9	0.62	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
n-Butylbenzene	ND		4.9	0.65	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
N-Propylbenzene	ND		4.9	0.28	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
4-Isopropyltoluene	ND		4.9	0.62	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
sec-Butylbenzene	ND		4.9	0.74	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Styrene	ND		4.9	0.30	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
trans-1,2-Dichloroethene	ND		4.9	0.37	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
trans-1,3-Dichloropropene	ND		4.9	0.74	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
tert-Butylbenzene	ND		4.9	0.53	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Tetrachloroethene	ND		4.9	0.60	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Toluene	ND		4.9	0.60	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Xylenes, Total	ND		4.9	0.79	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Trichloroethene	ND		4.9	0.59	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Trichlorofluoromethane	ND		4.9	0.33	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Vinyl acetate	ND		9.8	0.68	ug/Kg		11/03/21 10:58	11/11/21 16:37	1
Vinyl chloride	ND		4.9	0.35	ug/Kg		11/03/21 10:58	11/11/21 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*32 - 156*	*11/03/21 10:58*	*11/11/21 16:37*	*1*
4-Bromofluorobenzene (Surr)	*105*		*63 - 143*	*11/03/21 10:58*	*11/11/21 16:37*	*1*
Dibromofluoromethane (Surr)	*96*		*55 - 129*	*11/03/21 10:58*	*11/11/21 16:37*	*1*
Toluene-d8 (Surr)	*96*		*63 - 138*	*11/03/21 10:58*	*11/11/21 16:37*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1.5**		0.98	0.49	mg/Kg		11/06/21 09:57	11/13/21 12:56	1
Motor Oil Range Organics [C24-C36]	**5.8**		4.9	3.7	mg/Kg		11/06/21 09:57	11/13/21 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*62*		*51 - 111*	*11/06/21 09:57*	*11/13/21 12:56*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.49	0.088	mg/Kg		11/09/21 13:20	11/10/21 14:55	1
Arsenic	**2.8**		2.0	1.3	mg/Kg		11/09/21 13:20	11/10/21 14:55	1
Barium	**56**		0.98	0.12	mg/Kg		11/09/21 13:20	11/10/21 14:55	1
Beryllium	**0.57**		0.20	0.029	mg/Kg		11/09/21 13:20	11/10/21 14:55	1
Cadmium	**0.085**	**J**	0.20	0.029	mg/Kg		11/09/21 13:20	11/10/21 14:55	1
Cobalt	**5.5**		0.49	0.25	mg/Kg		11/09/21 13:20	11/10/21 14:55	1
Chromium	**42**		0.49	0.14	mg/Kg		11/09/21 13:20	11/10/21 14:55	1
Copper	**8.0**	**B**	1.5	0.22	mg/Kg		11/09/21 13:20	11/10/21 14:55	1
Molybdenum	ND		2.0	0.74	mg/Kg		11/09/21 13:20	11/10/21 14:55	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC4-S1-5 DUP

Date Collected: 11/01/21 11:59
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-11

Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	32		0.98	0.24	mg/Kg		11/09/21 13:20	11/10/21 14:55	1
Lead	32		0.98	0.25	mg/Kg		11/09/21 13:20	11/10/21 14:55	1
Selenium	ND		2.0	1.4	mg/Kg		11/09/21 13:20	11/10/21 14:55	1
Antimony	11		2.0	0.92	mg/Kg		11/09/21 13:20	11/10/21 14:55	1
Thallium	ND		2.0	0.82	mg/Kg		11/09/21 13:20	11/10/21 14:55	1
Vanadium	26		0.49	0.19	mg/Kg		11/09/21 13:20	11/10/21 14:55	1
Zinc	26		2.0	0.19	mg/Kg		11/09/21 13:20	11/10/21 14:55	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.052	J B	0.085	0.014	mg/Kg		11/14/21 10:50	11/15/21 17:53	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC9-SG3-5

Date Collected: 11/01/21 10:37
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-12

Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C4-C12	ND		0.49	0.049	mg/Kg		11/03/21 10:58	11/12/21 12:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 131*	*11/03/21 10:58*	*11/12/21 12:27*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.9	0.40	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,1,1-Trichloroethane	ND		4.9	0.35	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.66	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.7	0.81	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,1,2-Trichloroethane	ND		4.9	0.43	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,1-Dichloroethane	ND		4.9	0.28	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,1-Dichloroethene	ND		4.9	0.25	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,1-Dichloropropene	ND		4.9	0.36	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,2,3-Trichlorobenzene	ND		4.9	0.73	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,2,3-Trichloropropane	ND		4.9	0.74	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,2,4-Trichlorobenzene	ND		4.9	0.73	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,2,4-Trimethylbenzene	ND		4.9	0.50	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,2-Dibromo-3-Chloropropane	ND		9.7	0.85	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Ethylene Dibromide	ND		9.7	0.26	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,2-Dichlorobenzene	ND		4.9	0.62	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,2-Dichloroethane	ND		4.9	0.71	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,2-Dichloropropane	ND		4.9	0.58	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,3,5-Trimethylbenzene	ND		4.9	0.34	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,3-Dichlorobenzene	ND		4.9	0.29	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,3-Dichloropropane	ND		4.9	0.55	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
1,4-Dichlorobenzene	ND		4.9	0.76	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
2,2-Dichloropropane	ND		4.9	0.37	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
2-Butanone (MEK)	ND		9.7	1.4	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
2-Chlorotoluene	ND		4.9	0.60	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
2-Hexanone	ND		9.7	0.72	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
4-Chlorotoluene	ND		4.9	0.83	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
4-Methyl-2-pentanone (MIBK)	ND		9.7	0.89	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Acetone	ND		19	1.4	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Benzene	ND		4.9	0.25	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Bromobenzene	ND		4.9	0.50	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Chlorobromomethane	ND		4.9	0.91	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Dichlorobromomethane	ND		4.9	0.51	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Bromoform	ND		4.9	0.39	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Bromomethane	ND		4.9	0.83	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
cis-1,2-Dichloroethene	ND		4.9	0.86	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
cis-1,3-Dichloropropene	ND		4.9	0.62	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Carbon disulfide	ND		9.7	0.48	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Carbon tetrachloride	ND		4.9	0.51	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Chlorobenzene	ND		4.9	0.28	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Chloroethane	ND		4.9	0.44	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Chloroform	ND		4.9	0.25	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Chloromethane	ND		4.9	0.49	ug/Kg		11/03/21 10:58	11/12/21 12:27	1

Client Sample ID: AOC9-SG3-5

Date Collected: 11/01/21 10:37
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-12

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	ND		4.9	0.20	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Dibromomethane	ND		4.9	0.56	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Dichlorodifluoromethane	ND		4.9	0.86	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Ethylbenzene	ND		4.9	0.33	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Hexachlorobutadiene	ND		4.9	0.32	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Isopropylbenzene	ND		4.9	0.50	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Methylene Chloride	ND		9.7	0.82	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Methyl tert-butyl ether	ND		9.7	0.58	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Naphthalene	ND		4.9	0.61	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
n-Butylbenzene	ND		4.9	0.64	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
N-Propylbenzene	ND		4.9	0.28	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
4-Isopropyltoluene	ND		4.9	0.61	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
sec-Butylbenzene	ND		4.9	0.73	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Styrene	ND		4.9	0.30	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
trans-1,2-Dichloroethene	ND		4.9	0.37	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
trans-1,3-Dichloropropene	ND		4.9	0.73	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
tert-Butylbenzene	ND		4.9	0.52	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Tetrachloroethene	ND		4.9	0.59	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Toluene	ND		4.9	0.59	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Xylenes, Total	ND		4.9	0.79	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Trichloroethene	ND		4.9	0.58	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Trichlorofluoromethane	ND		4.9	0.33	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Vinyl acetate	ND		9.7	0.67	ug/Kg		11/03/21 10:58	11/12/21 12:27	1
Vinyl chloride	ND		4.9	0.35	ug/Kg		11/03/21 10:58	11/12/21 12:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*32 - 156*	*11/03/21 10:58*	*11/12/21 12:27*	*1*
4-Bromofluorobenzene (Surr)	*105*		*63 - 143*	*11/03/21 10:58*	*11/12/21 12:27*	*1*
Dibromofluoromethane (Surr)	*103*		*55 - 129*	*11/03/21 10:58*	*11/12/21 12:27*	*1*
Toluene-d8 (Surr)	*116*		*63 - 138*	*11/03/21 10:58*	*11/12/21 12:27*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.84**	**J**	1.0	0.50	mg/Kg		11/06/21 09:57	11/13/21 13:25	1
Motor Oil Range Organics [C24-C36]	ND		5.0	3.8	mg/Kg		11/06/21 09:57	11/13/21 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*63*		*51 - 111*	*11/06/21 09:57*	*11/13/21 13:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.49	0.087	mg/Kg		11/09/21 13:20	11/10/21 14:59	1
Arsenic	**2.3**		1.9	1.3	mg/Kg		11/09/21 13:20	11/10/21 14:59	1
Barium	**37**		0.97	0.12	mg/Kg		11/09/21 13:20	11/10/21 14:59	1
Beryllium	**0.44**		0.19	0.029	mg/Kg		11/09/21 13:20	11/10/21 14:59	1
Cadmium	**0.059**	**J**	0.19	0.029	mg/Kg		11/09/21 13:20	11/10/21 14:59	1
Cobalt	**3.0**		0.49	0.24	mg/Kg		11/09/21 13:20	11/10/21 14:59	1
Chromium	**32**		0.49	0.14	mg/Kg		11/09/21 13:20	11/10/21 14:59	1
Copper	**5.3**	**B**	1.5	0.21	mg/Kg		11/09/21 13:20	11/10/21 14:59	1
Molybdenum	ND		1.9	0.73	mg/Kg		11/09/21 13:20	11/10/21 14:59	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC9-SG3-5
Date Collected: 11/01/21 10:37
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-12
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**17**		0.97	0.23	mg/Kg		11/09/21 13:20	11/10/21 14:59	1
Lead	**20**		0.97	0.25	mg/Kg		11/09/21 13:20	11/10/21 14:59	1
Selenium	ND		1.9	1.4	mg/Kg		11/09/21 13:20	11/10/21 14:59	1
Antimony	**9.8**		1.9	0.91	mg/Kg		11/09/21 13:20	11/10/21 14:59	1
Thallium	ND		1.9	0.82	mg/Kg		11/09/21 13:20	11/10/21 14:59	1
Vanadium	**21**		0.49	0.18	mg/Kg		11/09/21 13:20	11/10/21 14:59	1
Zinc	**13**		1.9	0.18	mg/Kg		11/09/21 13:20	11/10/21 14:59	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.060**	**J B**	0.081	0.013	mg/Kg		11/14/21 10:50	11/15/21 17:55	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC9-SG3-10

Date Collected: 11/01/21 10:47
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-13

Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C4-C12	ND		0.49	0.049	mg/Kg		11/03/21 10:58	11/15/21 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 131*	*11/03/21 10:58*	*11/15/21 17:00*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.9	0.40	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,1,1-Trichloroethane	ND		4.9	0.35	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.66	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.8	0.81	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,1,2-Trichloroethane	ND		4.9	0.43	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,1-Dichloroethane	ND		4.9	0.28	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,1-Dichloroethene	ND		4.9	0.25	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,1-Dichloropropene	ND		4.9	0.36	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,2,3-Trichlorobenzene	ND		4.9	0.73	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,2,3-Trichloropropane	ND		4.9	0.74	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,2,4-Trichlorobenzene	ND		4.9	0.73	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,2,4-Trimethylbenzene	ND		4.9	0.50	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,2-Dibromo-3-Chloropropane	ND		9.8	0.86	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Ethylene Dibromide	ND		9.8	0.26	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,2-Dichlorobenzene	ND		4.9	0.63	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,2-Dichloroethane	ND		4.9	0.71	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,2-Dichloropropane	ND		4.9	0.59	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,3,5-Trimethylbenzene	ND		4.9	0.34	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,3-Dichlorobenzene	ND		4.9	0.29	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,3-Dichloropropane	ND		4.9	0.56	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
1,4-Dichlorobenzene	ND		4.9	0.76	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
2,2-Dichloropropane	ND		4.9	0.37	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
2-Butanone (MEK)	ND		9.8	1.4	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
2-Chlorotoluene	ND		4.9	0.61	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
2-Hexanone	ND		9.8	0.72	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
4-Chlorotoluene	ND		4.9	0.84	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
4-Methyl-2-pentanone (MIBK)	ND		9.8	0.90	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Acetone	ND		20	1.4	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Benzene	ND		4.9	0.25	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Bromobenzene	ND		4.9	0.51	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Chlorobromomethane	ND		4.9	0.92	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Dichlorobromomethane	ND		4.9	0.52	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Bromoform	ND		4.9	0.39	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Bromomethane	ND		4.9	0.84	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
cis-1,2-Dichloroethene	ND		4.9	0.87	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
cis-1,3-Dichloropropene	ND		4.9	0.63	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Carbon disulfide	ND		9.8	0.48	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Carbon tetrachloride	ND		4.9	0.52	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Chlorobenzene	ND		4.9	0.28	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Chloroethane	ND		4.9	0.44	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Chloroform	ND		4.9	0.25	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Chloromethane	ND		4.9	0.49	ug/Kg		11/03/21 10:58	11/15/21 17:00	1

Client Sample ID: AOC9-SG3-10

Date Collected: 11/01/21 10:47
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-13

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	ND		4.9	0.21	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Dibromomethane	ND		4.9	0.57	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Dichlorodifluoromethane	ND		4.9	0.87	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Ethylbenzene	ND		4.9	0.33	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Hexachlorobutadiene	ND		4.9	0.32	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Isopropylbenzene	ND		4.9	0.51	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Methylene Chloride	ND		9.8	0.82	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Methyl tert-butyl ether	ND		9.8	0.59	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Naphthalene	ND		4.9	0.62	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
n-Butylbenzene	ND		4.9	0.64	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
N-Propylbenzene	ND	*+	4.9	0.28	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
4-Isopropyltoluene	ND		4.9	0.62	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
sec-Butylbenzene	ND	*+	4.9	0.73	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Styrene	ND		4.9	0.30	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
trans-1,2-Dichloroethene	ND		4.9	0.37	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
trans-1,3-Dichloropropene	ND		4.9	0.73	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
tert-Butylbenzene	ND	*+	4.9	0.53	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Tetrachloroethene	ND		4.9	0.60	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Toluene	ND		4.9	0.60	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Xylenes, Total	ND		4.9	0.79	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Trichloroethene	ND		4.9	0.59	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Trichlorofluoromethane	ND		4.9	0.33	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Vinyl acetate	ND		9.8	0.67	ug/Kg		11/03/21 10:58	11/15/21 17:00	1
Vinyl chloride	ND	*+	4.9	0.35	ug/Kg		11/03/21 10:58	11/15/21 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*32 - 156*	*11/03/21 10:58*	*11/15/21 17:00*	*1*
4-Bromofluorobenzene (Surr)	*105*		*63 - 143*	*11/03/21 10:58*	*11/15/21 17:00*	*1*
Dibromofluoromethane (Surr)	*108*		*55 - 129*	*11/03/21 10:58*	*11/15/21 17:00*	*1*
Toluene-d8 (Surr)	*129*		*63 - 138*	*11/03/21 10:58*	*11/15/21 17:00*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.49**	**J**	0.98	0.49	mg/Kg		11/06/21 09:57	11/13/21 13:54	1
Motor Oil Range Organics [C24-C36]	ND		4.9	3.7	mg/Kg		11/06/21 09:57	11/13/21 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*62*		*51 - 111*	*11/06/21 09:57*	*11/13/21 13:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.50	0.090	mg/Kg		11/09/21 13:20	11/10/21 15:03	1
Arsenic	**3.1**		2.0	1.3	mg/Kg		11/09/21 13:20	11/10/21 15:03	1
Barium	**52**		1.0	0.12	mg/Kg		11/09/21 13:20	11/10/21 15:03	1
Beryllium	**0.59**		0.20	0.030	mg/Kg		11/09/21 13:20	11/10/21 15:03	1
Cadmium	**0.067**	**J**	0.20	0.030	mg/Kg		11/09/21 13:20	11/10/21 15:03	1
Cobalt	**5.5**		0.50	0.25	mg/Kg		11/09/21 13:20	11/10/21 15:03	1
Chromium	**45**		0.50	0.14	mg/Kg		11/09/21 13:20	11/10/21 15:03	1
Copper	**7.9**	**B**	1.5	0.22	mg/Kg		11/09/21 13:20	11/10/21 15:03	1
Molybdenum	ND		2.0	0.75	mg/Kg		11/09/21 13:20	11/10/21 15:03	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC9-SG3-10
Date Collected: 11/01/21 10:47
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-13
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	38		1.0	0.24	mg/Kg		11/09/21 13:20	11/10/21 15:03	1
Lead	2.8		1.0	0.26	mg/Kg		11/09/21 13:20	11/10/21 15:03	1
Selenium	ND		2.0	1.4	mg/Kg		11/09/21 13:20	11/10/21 15:03	1
Antimony	12		2.0	0.94	mg/Kg		11/09/21 13:20	11/10/21 15:03	1
Thallium	ND		2.0	0.84	mg/Kg		11/09/21 13:20	11/10/21 15:03	1
Vanadium	28		0.50	0.19	mg/Kg		11/09/21 13:20	11/10/21 15:03	1
Zinc	21		2.0	0.19	mg/Kg		11/09/21 13:20	11/10/21 15:03	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J B	0.079	0.013	mg/Kg		11/14/21 10:50	11/15/21 17:57	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC9-SG4-5

Date Collected: 11/01/21 10:00
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-14

Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C4-C12	ND		0.50	0.050	mg/Kg		11/03/21 10:58	11/12/21 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 131*	*11/03/21 10:58*	*11/12/21 13:11*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.41	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.67	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.9	0.82	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,1,2-Trichloroethane	ND		5.0	0.44	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,1-Dichloroethane	ND		5.0	0.29	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,1-Dichloroethene	ND		5.0	0.26	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,1-Dichloropropene	ND		5.0	0.37	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,2,3-Trichloropropane	ND		5.0	0.75	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,2,4-Trichlorobenzene	ND		5.0	0.74	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,2,4-Trimethylbenzene	ND		5.0	0.51	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,2-Dibromo-3-Chloropropane	ND		9.9	0.87	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Ethylene Dibromide	ND		9.9	0.27	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,2-Dichlorobenzene	ND		5.0	0.63	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,2-Dichloroethane	ND		5.0	0.72	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,2-Dichloropropane	ND		5.0	0.60	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,3,5-Trimethylbenzene	ND		5.0	0.35	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,3-Dichlorobenzene	ND		5.0	0.30	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,3-Dichloropropane	ND		5.0	0.57	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
1,4-Dichlorobenzene	ND		5.0	0.77	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
2,2-Dichloropropane	ND		5.0	0.38	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
2-Butanone (MEK)	ND		9.9	1.4	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
2-Chlorotoluene	ND		5.0	0.62	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
2-Hexanone	ND		9.9	0.73	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
4-Chlorotoluene	ND		5.0	0.85	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
4-Methyl-2-pentanone (MIBK)	ND		9.9	0.91	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Acetone	**2.4**	**J**	20	1.4	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Benzene	ND		5.0	0.26	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Bromobenzene	ND		5.0	0.52	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Chlorobromomethane	ND		5.0	0.93	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Dichlorobromomethane	ND		5.0	0.53	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Bromoform	ND		5.0	0.40	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Bromomethane	ND		5.0	0.85	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
cis-1,2-Dichloroethene	ND		5.0	0.88	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
cis-1,3-Dichloropropene	ND		5.0	0.63	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Carbon disulfide	ND		9.9	0.49	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Carbon tetrachloride	ND		5.0	0.53	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Chlorobenzene	ND		5.0	0.29	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Chloroethane	ND		5.0	0.45	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Chloroform	ND		5.0	0.26	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Chloromethane	ND		5.0	0.50	ug/Kg		11/03/21 10:58	11/12/21 13:11	1

Client Sample ID: AOC9-SG4-5

Date Collected: 11/01/21 10:00
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-14

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	ND		5.0	0.21	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Dibromomethane	ND		5.0	0.58	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Dichlorodifluoromethane	ND		5.0	0.88	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Ethylbenzene	ND		5.0	0.34	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Hexachlorobutadiene	ND		5.0	0.33	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Isopropylbenzene	ND		5.0	0.52	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Methylene Chloride	ND		9.9	0.83	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Methyl tert-butyl ether	ND		9.9	0.60	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Naphthalene	ND		5.0	0.63	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
n-Butylbenzene	ND		5.0	0.65	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
N-Propylbenzene	ND		5.0	0.29	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
4-Isopropyltoluene	ND		5.0	0.63	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
sec-Butylbenzene	ND		5.0	0.74	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Styrene	ND		5.0	0.31	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
trans-1,2-Dichloroethene	ND		5.0	0.38	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
trans-1,3-Dichloropropene	ND		5.0	0.74	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
tert-Butylbenzene	ND		5.0	0.54	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Tetrachloroethene	ND		5.0	0.61	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Toluene	ND		5.0	0.61	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Xylenes, Total	ND		5.0	0.80	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Trichloroethene	ND		5.0	0.60	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Trichlorofluoromethane	ND		5.0	0.34	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Vinyl acetate	ND		9.9	0.68	ug/Kg		11/03/21 10:58	11/12/21 13:11	1
Vinyl chloride	ND		5.0	0.36	ug/Kg		11/03/21 10:58	11/12/21 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*32 - 156*	*11/03/21 10:58*	*11/12/21 13:11*	*1*
4-Bromofluorobenzene (Surr)	*104*		*63 - 143*	*11/03/21 10:58*	*11/12/21 13:11*	*1*
Dibromofluoromethane (Surr)	*102*		*55 - 129*	*11/03/21 10:58*	*11/12/21 13:11*	*1*
Toluene-d8 (Surr)	*115*		*63 - 138*	*11/03/21 10:58*	*11/12/21 13:11*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.98	0.49	mg/Kg		11/06/21 09:57	11/13/21 14:22	1
Motor Oil Range Organics [C24-C36]	ND		4.9	3.7	mg/Kg		11/06/21 09:57	11/13/21 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*62*		*51 - 111*	*11/06/21 09:57*	*11/13/21 14:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.49	0.087	mg/Kg		11/09/21 13:20	11/10/21 15:07	1
Arsenic	**2.8**		1.9	1.3	mg/Kg		11/09/21 13:20	11/10/21 15:07	1
Barium	**40**		0.97	0.12	mg/Kg		11/09/21 13:20	11/10/21 15:07	1
Beryllium	**0.52**		0.19	0.029	mg/Kg		11/09/21 13:20	11/10/21 15:07	1
Cadmium	**0.069**	**J**	0.19	0.029	mg/Kg		11/09/21 13:20	11/10/21 15:07	1
Cobalt	**5.6**		0.49	0.24	mg/Kg		11/09/21 13:20	11/10/21 15:07	1
Chromium	**30**		0.49	0.14	mg/Kg		11/09/21 13:20	11/10/21 15:07	1
Copper	**5.5**	**B**	1.5	0.21	mg/Kg		11/09/21 13:20	11/10/21 15:07	1
Molybdenum	ND		1.9	0.73	mg/Kg		11/09/21 13:20	11/10/21 15:07	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC9-SG4-5
Date Collected: 11/01/21 10:00
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-14
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	26		0.97	0.23	mg/Kg		11/09/21 13:20	11/10/21 15:07	1
Lead	3.3		0.97	0.25	mg/Kg		11/09/21 13:20	11/10/21 15:07	1
Selenium	ND		1.9	1.4	mg/Kg		11/09/21 13:20	11/10/21 15:07	1
Antimony	9.6		1.9	0.91	mg/Kg		11/09/21 13:20	11/10/21 15:07	1
Thallium	ND		1.9	0.82	mg/Kg		11/09/21 13:20	11/10/21 15:07	1
Vanadium	26		0.49	0.18	mg/Kg		11/09/21 13:20	11/10/21 15:07	1
Zinc	17		1.9	0.18	mg/Kg		11/09/21 13:20	11/10/21 15:07	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035	J B	0.086	0.014	mg/Kg		11/14/21 10:50	11/15/21 17:59	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC9-SG4-10

Date Collected: 11/01/21 10:05
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-15

Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C4-C12	ND		0.47	0.047	mg/Kg		11/03/21 10:58	11/12/21 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 131*	*11/03/21 10:58*	*11/12/21 13:33*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.7	0.38	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,1,1-Trichloroethane	ND		4.7	0.34	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,1,2,2-Tetrachloroethane	ND		4.7	0.64	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.4	0.78	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,1,2-Trichloroethane	ND		4.7	0.41	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,1-Dichloroethane	ND		4.7	0.27	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,1-Dichloroethene	ND		4.7	0.24	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,1-Dichloropropene	ND		4.7	0.35	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,2,3-Trichlorobenzene	ND		4.7	0.70	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,2,3-Trichloropropane	ND		4.7	0.71	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,2,4-Trichlorobenzene	ND		4.7	0.70	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,2,4-Trimethylbenzene	ND		4.7	0.48	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,2-Dibromo-3-Chloropropane	ND		9.4	0.83	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Ethylene Dibromide	ND		9.4	0.25	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,2-Dichlorobenzene	ND		4.7	0.60	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,2-Dichloroethane	ND		4.7	0.68	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,2-Dichloropropane	ND		4.7	0.56	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,3,5-Trimethylbenzene	ND		4.7	0.33	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,3-Dichlorobenzene	ND		4.7	0.28	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,3-Dichloropropane	ND		4.7	0.53	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
1,4-Dichlorobenzene	ND		4.7	0.73	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
2,2-Dichloropropane	ND		4.7	0.36	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
2-Butanone (MEK)	ND		9.4	1.3	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
2-Chlorotoluene	ND		4.7	0.58	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
2-Hexanone	ND		9.4	0.69	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
4-Chlorotoluene	ND		4.7	0.81	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
4-Methyl-2-pentanone (MIBK)	ND		9.4	0.86	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Acetone	**5.9**	**J**	19	1.3	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Benzene	ND		4.7	0.24	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Bromobenzene	ND		4.7	0.49	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Chlorobromomethane	ND		4.7	0.88	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Dichlorobromomethane	ND		4.7	0.50	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Bromoform	ND		4.7	0.38	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Bromomethane	ND		4.7	0.81	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
cis-1,2-Dichloroethene	ND		4.7	0.83	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
cis-1,3-Dichloropropene	ND		4.7	0.60	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Carbon disulfide	ND		9.4	0.46	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Carbon tetrachloride	ND		4.7	0.50	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Chlorobenzene	ND		4.7	0.27	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Chloroethane	ND		4.7	0.42	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Chloroform	ND		4.7	0.24	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Chloromethane	ND		4.7	0.47	ug/Kg		11/03/21 10:58	11/12/21 13:33	1

Client Sample ID: AOC9-SG4-10

Date Collected: 11/01/21 10:05
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-15

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	ND		4.7	0.20	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Dibromomethane	ND		4.7	0.54	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Dichlorodifluoromethane	ND		4.7	0.83	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Ethylbenzene	ND		4.7	0.32	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Hexachlorobutadiene	ND		4.7	0.31	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Isopropylbenzene	ND		4.7	0.49	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Methylene Chloride	ND		9.4	0.79	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Methyl tert-butyl ether	ND		9.4	0.56	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Naphthalene	ND		4.7	0.59	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
n-Butylbenzene	ND		4.7	0.62	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
N-Propylbenzene	ND		4.7	0.27	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
4-Isopropyltoluene	ND		4.7	0.59	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
sec-Butylbenzene	ND		4.7	0.70	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Styrene	ND		4.7	0.29	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
trans-1,2-Dichloroethene	ND		4.7	0.36	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
trans-1,3-Dichloropropene	ND		4.7	0.70	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
tert-Butylbenzene	ND		4.7	0.51	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Tetrachloroethene	ND		4.7	0.57	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Toluene	ND		4.7	0.57	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Xylenes, Total	ND		4.7	0.76	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Trichloroethene	ND		4.7	0.56	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Trichlorofluoromethane	ND		4.7	0.32	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Vinyl acetate	ND		9.4	0.65	ug/Kg		11/03/21 10:58	11/12/21 13:33	1
Vinyl chloride	ND		4.7	0.34	ug/Kg		11/03/21 10:58	11/12/21 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*32 - 156*	*11/03/21 10:58*	*11/12/21 13:33*	*1*
4-Bromofluorobenzene (Surr)	*109*		*63 - 143*	*11/03/21 10:58*	*11/12/21 13:33*	*1*
Dibromofluoromethane (Surr)	*106*		*55 - 129*	*11/03/21 10:58*	*11/12/21 13:33*	*1*
Toluene-d8 (Surr)	*116*		*63 - 138*	*11/03/21 10:58*	*11/12/21 13:33*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.62**	**J**	0.98	0.49	mg/Kg		11/06/21 09:57	11/13/21 14:51	1
Motor Oil Range Organics [C24-C36]	ND		4.9	3.7	mg/Kg		11/06/21 09:57	11/13/21 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*63*		*51 - 111*	*11/06/21 09:57*	*11/13/21 14:51*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.49	0.088	mg/Kg		11/09/21 13:20	11/10/21 15:18	1
Arsenic	**2.7**		2.0	1.3	mg/Kg		11/09/21 13:20	11/10/21 15:18	1
Barium	**46**		0.98	0.12	mg/Kg		11/09/21 13:20	11/10/21 15:18	1
Beryllium	**0.54**		0.20	0.029	mg/Kg		11/09/21 13:20	11/10/21 15:18	1
Cadmium	**0.063**	**J**	0.20	0.029	mg/Kg		11/09/21 13:20	11/10/21 15:18	1
Cobalt	**4.7**		0.49	0.25	mg/Kg		11/09/21 13:20	11/10/21 15:18	1
Chromium	**39**		0.49	0.14	mg/Kg		11/09/21 13:20	11/10/21 15:18	1
Copper	**7.5**	**B**	1.5	0.22	mg/Kg		11/09/21 13:20	11/10/21 15:18	1
Molybdenum	ND		2.0	0.74	mg/Kg		11/09/21 13:20	11/10/21 15:18	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC9-SG4-10
Date Collected: 11/01/21 10:05
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-15
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	35		0.98	0.24	mg/Kg		11/09/21 13:20	11/10/21 15:18	1
Lead	2.6		0.98	0.25	mg/Kg		11/09/21 13:20	11/10/21 15:18	1
Selenium	ND		2.0	1.4	mg/Kg		11/09/21 13:20	11/10/21 15:18	1
Antimony	12		2.0	0.92	mg/Kg		11/09/21 13:20	11/10/21 15:18	1
Thallium	ND		2.0	0.82	mg/Kg		11/09/21 13:20	11/10/21 15:18	1
Vanadium	25		0.49	0.19	mg/Kg		11/09/21 13:20	11/10/21 15:18	1
Zinc	20		2.0	0.19	mg/Kg		11/09/21 13:20	11/10/21 15:18	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032	J B	0.085	0.014	mg/Kg		11/14/21 10:50	11/15/21 18:00	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC1-S2-0.5

Date Collected: 11/01/21 12:53
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-16

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		8.3	1.1	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
4,4'-DDE	**3.5**	**J**	8.3	1.0	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
4,4'-DDT	**10**		8.3	1.2	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
Aldrin	ND		8.3	0.68	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
alpha-BHC	ND		8.3	0.78	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
cis-Chlordane	ND		8.3	0.88	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
beta-BHC	ND		8.3	1.1	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
Chlordane (technical)	ND		98	46	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
delta-BHC	ND		8.3	1.7	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
Dieldrin	ND		8.3	0.98	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
Endosulfan I	ND		8.3	0.88	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
Endosulfan II	ND		8.3	0.88	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
Endosulfan sulfate	ND		8.3	1.7	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
Endrin	ND		8.3	0.98	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
Endrin aldehyde	ND		8.3	2.8	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
Endrin ketone	ND		8.3	1.3	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
trans-Chlordane	ND		8.3	2.9	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
gamma-BHC (Lindane)	ND		8.3	0.68	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
Heptachlor	ND		8.3	0.73	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
Heptachlor epoxide	ND		8.3	0.88	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
Methoxychlor	ND		17	2.7	ug/Kg		11/13/21 08:25	11/23/21 18:35	5
Toxaphene	ND		330	110	ug/Kg		11/13/21 08:25	11/23/21 18:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*103*		*46 - 109*	*11/13/21 08:25*	*11/23/21 18:35*	*5*
DCB Decachlorobiphenyl	*52*		*46 - 109*	*11/13/21 08:25*	*11/23/21 18:35*	*5*
Tetrachloro-m-xylene	*65*		*47 - 107*	*11/13/21 08:25*	*11/23/21 18:35*	*5*
Tetrachloro-m-xylene	*52*		*47 - 107*	*11/13/21 08:25*	*11/23/21 18:35*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		64	5.0	ug/Kg		11/13/21 08:43	11/20/21 09:18	2
PCB-1221	ND		64	7.1	ug/Kg		11/13/21 08:43	11/20/21 09:18	2
PCB-1232	ND		64	9.3	ug/Kg		11/13/21 08:43	11/20/21 09:18	2
PCB-1242	ND		64	12	ug/Kg		11/13/21 08:43	11/20/21 09:18	2
PCB-1248	ND		64	4.8	ug/Kg		11/13/21 08:43	11/20/21 09:18	2
PCB-1254	ND		64	7.4	ug/Kg		11/13/21 08:43	11/20/21 09:18	2
PCB-1260	**26**	**J P**	64	5.3	ug/Kg		11/13/21 08:43	11/20/21 09:18	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*52 - 138*	*11/13/21 08:43*	*11/20/21 09:18*	*2*
Tetrachloro-m-xylene	*71*		*56 - 114*	*11/13/21 08:43*	*11/20/21 09:18*	*2*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**450**		0.97	0.25	mg/Kg		11/09/21 13:20	11/10/21 15:22	1
Arsenic	**9.0**		1.9	1.3	mg/Kg		11/09/21 13:20	11/10/21 15:22	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC1-S2-2
Date Collected: 11/01/21 12:57
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-17
Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.22	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
4,4'-DDE	ND		1.6	0.20	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
4,4'-DDT	ND		1.6	0.24	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
Aldrin	ND		1.6	0.13	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
alpha-BHC	ND		1.6	0.15	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
cis-Chlordane	ND		1.6	0.17	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
beta-BHC	ND		1.6	0.21	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
Chlordane (technical)	ND		19	8.9	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
delta-BHC	ND		1.6	0.33	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
Dieldrin	ND		1.6	0.19	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
Endosulfan I	ND		1.6	0.17	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
Endosulfan II	ND		1.6	0.17	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
Endosulfan sulfate	ND		1.6	0.33	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
Endrin	ND		1.6	0.19	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
Endrin aldehyde	ND		1.6	0.54	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
Endrin ketone	ND		1.6	0.26	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
trans-Chlordane	ND		1.6	0.57	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
gamma-BHC (Lindane)	ND		1.6	0.13	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
Heptachlor	ND		1.6	0.14	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
Heptachlor epoxide	ND		1.6	0.17	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
Methoxychlor	ND		3.2	0.53	ug/Kg		11/13/21 08:25	11/23/21 18:54	1
Toxaphene	ND		64	21	ug/Kg		11/13/21 08:25	11/23/21 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*75*		*46 - 109*	*11/13/21 08:25*	*11/23/21 18:54*	*1*
DCB Decachlorobiphenyl	*75*		*46 - 109*	*11/13/21 08:25*	*11/23/21 18:54*	*1*
Tetrachloro-m-xylene	*69*		*47 - 107*	*11/13/21 08:25*	*11/23/21 18:54*	*1*
Tetrachloro-m-xylene	*61*		*47 - 107*	*11/13/21 08:25*	*11/23/21 18:54*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC9-S2-5

Date Collected: 11/01/21 13:00
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-18

Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C4-C12	ND		0.49	0.049	mg/Kg		11/03/21 10:58	11/12/21 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 131*	*11/03/21 10:58*	*11/12/21 13:55*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.9	0.40	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,1,1-Trichloroethane	ND		4.9	0.35	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.67	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.8	0.81	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,1,2-Trichloroethane	ND		4.9	0.43	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,1-Dichloroethane	ND		4.9	0.28	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,1-Dichloroethene	ND		4.9	0.25	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,1-Dichloropropene	ND		4.9	0.36	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,2,3-Trichlorobenzene	ND		4.9	0.73	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,2,3-Trichloropropane	ND		4.9	0.74	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,2,4-Trichlorobenzene	ND		4.9	0.73	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,2,4-Trimethylbenzene	ND		4.9	0.50	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,2-Dibromo-3-Chloropropane	ND		9.8	0.86	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Ethylene Dibromide	ND		9.8	0.26	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,2-Dichlorobenzene	ND		4.9	0.63	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,2-Dichloroethane	ND		4.9	0.71	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,2-Dichloropropane	ND		4.9	0.59	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,3,5-Trimethylbenzene	ND		4.9	0.34	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,3-Dichlorobenzene	ND		4.9	0.29	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,3-Dichloropropane	ND		4.9	0.56	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
1,4-Dichlorobenzene	ND		4.9	0.76	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
2,2-Dichloropropane	ND		4.9	0.37	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
2-Butanone (MEK)	ND		9.8	1.4	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
2-Chlorotoluene	ND		4.9	0.61	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
2-Hexanone	ND		9.8	0.72	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
4-Chlorotoluene	ND		4.9	0.84	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
4-Methyl-2-pentanone (MIBK)	ND		9.8	0.90	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Acetone	**4.0**	**J**	20	1.4	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Benzene	ND		4.9	0.25	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Bromobenzene	ND		4.9	0.51	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Chlorobromomethane	ND		4.9	0.92	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Dichlorobromomethane	ND		4.9	0.52	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Bromoform	ND		4.9	0.39	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Bromomethane	ND		4.9	0.84	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
cis-1,2-Dichloroethene	ND		4.9	0.87	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
cis-1,3-Dichloropropene	ND		4.9	0.63	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Carbon disulfide	ND		9.8	0.48	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Carbon tetrachloride	ND		4.9	0.52	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Chlorobenzene	ND		4.9	0.28	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Chloroethane	ND		4.9	0.44	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Chloroform	ND		4.9	0.25	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Chloromethane	ND		4.9	0.49	ug/Kg		11/03/21 10:58	11/12/21 13:55	1

Client Sample ID: AOC9-S2-5
Date Collected: 11/01/21 13:00
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-18
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	ND		4.9	0.21	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Dibromomethane	ND		4.9	0.57	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Dichlorodifluoromethane	ND		4.9	0.87	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Ethylbenzene	ND		4.9	0.33	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Hexachlorobutadiene	ND		4.9	0.32	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Isopropylbenzene	ND		4.9	0.51	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Methylene Chloride	ND		9.8	0.82	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Methyl tert-butyl ether	ND		9.8	0.59	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Naphthalene	ND		4.9	0.62	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
n-Butylbenzene	ND		4.9	0.65	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
N-Propylbenzene	ND		4.9	0.28	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
4-Isopropyltoluene	ND		4.9	0.62	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
sec-Butylbenzene	ND		4.9	0.73	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Styrene	ND		4.9	0.30	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
trans-1,2-Dichloroethene	ND		4.9	0.37	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
trans-1,3-Dichloropropene	ND		4.9	0.73	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
tert-Butylbenzene	ND		4.9	0.53	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Tetrachloroethene	ND		4.9	0.60	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Toluene	ND		4.9	0.60	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Xylenes, Total	ND		4.9	0.79	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Trichloroethene	ND		4.9	0.59	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Trichlorofluoromethane	ND		4.9	0.33	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Vinyl acetate	ND		9.8	0.68	ug/Kg		11/03/21 10:58	11/12/21 13:55	1
Vinyl chloride	ND		4.9	0.35	ug/Kg		11/03/21 10:58	11/12/21 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*32 - 156*	*11/03/21 10:58*	*11/12/21 13:55*	*1*
4-Bromofluorobenzene (Surr)	*107*		*63 - 143*	*11/03/21 10:58*	*11/12/21 13:55*	*1*
Dibromofluoromethane (Surr)	*104*		*55 - 129*	*11/03/21 10:58*	*11/12/21 13:55*	*1*
Toluene-d8 (Surr)	*115*		*63 - 138*	*11/03/21 10:58*	*11/12/21 13:55*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.53**	**J**	0.99	0.50	mg/Kg		11/06/21 09:57	11/13/21 15:20	1
Motor Oil Range Organics [C24-C36]	ND		5.0	3.7	mg/Kg		11/06/21 09:57	11/13/21 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*59*		*51 - 111*	*11/06/21 09:57*	*11/13/21 15:20*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.49	0.087	mg/Kg		11/09/21 13:20	11/10/21 15:26	1
Arsenic	**1.6**	**J**	1.9	1.3	mg/Kg		11/09/21 13:20	11/10/21 15:26	1
Barium	**31**		0.97	0.12	mg/Kg		11/09/21 13:20	11/10/21 15:26	1
Beryllium	**0.35**		0.19	0.029	mg/Kg		11/09/21 13:20	11/10/21 15:26	1
Cadmium	**0.041**	**J**	0.19	0.029	mg/Kg		11/09/21 13:20	11/10/21 15:26	1
Cobalt	**2.9**		0.49	0.24	mg/Kg		11/09/21 13:20	11/10/21 15:26	1
Chromium	**20**		0.49	0.14	mg/Kg		11/09/21 13:20	11/10/21 15:26	1
Copper	**4.4**	**B**	1.5	0.21	mg/Kg		11/09/21 13:20	11/10/21 15:26	1
Molybdenum	ND		1.9	0.73	mg/Kg		11/09/21 13:20	11/10/21 15:26	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC9-S2-5
Date Collected: 11/01/21 13:00
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-18
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	14		0.97	0.23	mg/Kg		11/09/21 13:20	11/10/21 15:26	1
Lead	2.6		0.97	0.25	mg/Kg		11/09/21 13:20	11/10/21 15:26	1
Selenium	ND		1.9	1.4	mg/Kg		11/09/21 13:20	11/10/21 15:26	1
Antimony	7.5		1.9	0.91	mg/Kg		11/09/21 13:20	11/10/21 15:26	1
Thallium	ND		1.9	0.82	mg/Kg		11/09/21 13:20	11/10/21 15:26	1
Vanadium	15		0.49	0.18	mg/Kg		11/09/21 13:20	11/10/21 15:26	1
Zinc	11		1.9	0.18	mg/Kg		11/09/21 13:20	11/10/21 15:26	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032	J B	0.082	0.013	mg/Kg		11/14/21 10:50	11/15/21 18:02	1

Client Sample ID: AOC9-S2-10
Date Collected: 11/01/21 13:02
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-19
Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C4-C12	ND		0.47	0.047	mg/Kg		11/03/21 11:01	11/12/21 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 131*	*11/03/21 11:01*	*11/12/21 14:18*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.7	0.39	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,1,1-Trichloroethane	ND		4.7	0.34	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,1,2,2-Tetrachloroethane	ND		4.7	0.64	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.5	0.78	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,1,2-Trichloroethane	ND		4.7	0.42	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,1-Dichloroethane	ND		4.7	0.27	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,1-Dichloroethene	ND		4.7	0.25	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,1-Dichloropropene	ND		4.7	0.35	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,2,3-Trichlorobenzene	ND		4.7	0.71	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,2,3-Trichloropropane	ND		4.7	0.72	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,2,4-Trichlorobenzene	ND		4.7	0.71	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,2,4-Trimethylbenzene	ND		4.7	0.48	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,2-Dibromo-3-Chloropropane	ND		9.5	0.83	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Ethylene Dibromide	ND		9.5	0.26	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,2-Dichlorobenzene	ND		4.7	0.60	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,2-Dichloroethane	ND		4.7	0.69	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,2-Dichloropropane	ND		4.7	0.57	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,3,5-Trimethylbenzene	ND		4.7	0.33	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,3-Dichlorobenzene	ND		4.7	0.28	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,3-Dichloropropane	ND		4.7	0.54	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
1,4-Dichlorobenzene	ND		4.7	0.74	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
2,2-Dichloropropane	ND		4.7	0.36	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
2-Butanone (MEK)	ND		9.5	1.3	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
2-Chlorotoluene	ND		4.7	0.59	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
2-Hexanone	ND		9.5	0.70	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
4-Chlorotoluene	ND		4.7	0.81	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
4-Methyl-2-pentanone (MIBK)	ND		9.5	0.87	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Acetone	**1.4**	**J**	19	1.3	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Benzene	ND		4.7	0.25	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Bromobenzene	ND		4.7	0.49	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Chlorobromomethane	ND		4.7	0.89	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Dichlorobromomethane	ND		4.7	0.50	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Bromoform	ND		4.7	0.38	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Bromomethane	ND		4.7	0.81	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
cis-1,2-Dichloroethene	ND		4.7	0.84	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
cis-1,3-Dichloropropene	ND		4.7	0.60	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Carbon disulfide	ND		9.5	0.46	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Carbon tetrachloride	ND		4.7	0.50	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Chlorobenzene	ND		4.7	0.27	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Chloroethane	ND		4.7	0.43	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Chloroform	ND		4.7	0.25	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Chloromethane	ND		4.7	0.47	ug/Kg		11/03/21 11:01	11/12/21 14:18	1

Client Sample ID: AOC9-S2-10

Date Collected: 11/01/21 13:02
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-19

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	ND		4.7	0.20	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Dibromomethane	ND		4.7	0.55	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Dichlorodifluoromethane	ND		4.7	0.84	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Ethylbenzene	ND		4.7	0.32	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Hexachlorobutadiene	ND		4.7	0.31	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Isopropylbenzene	ND		4.7	0.49	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Methylene Chloride	ND		9.5	0.79	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Methyl tert-butyl ether	ND		9.5	0.57	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Naphthalene	ND		4.7	0.60	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
n-Butylbenzene	ND		4.7	0.62	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
N-Propylbenzene	ND		4.7	0.27	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
4-Isopropyltoluene	ND		4.7	0.60	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
sec-Butylbenzene	ND		4.7	0.71	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Styrene	ND		4.7	0.29	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
trans-1,2-Dichloroethene	ND		4.7	0.36	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
trans-1,3-Dichloropropene	ND		4.7	0.71	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
tert-Butylbenzene	ND		4.7	0.51	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Tetrachloroethene	ND		4.7	0.58	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Toluene	ND		4.7	0.58	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Xylenes, Total	ND		4.7	0.77	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Trichloroethene	ND		4.7	0.57	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Trichlorofluoromethane	ND		4.7	0.32	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Vinyl acetate	ND		9.5	0.65	ug/Kg		11/03/21 11:01	11/12/21 14:18	1
Vinyl chloride	ND		4.7	0.34	ug/Kg		11/03/21 11:01	11/12/21 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*32 - 156*	*11/03/21 11:01*	*11/12/21 14:18*	*1*
4-Bromofluorobenzene (Surr)	*104*		*63 - 143*	*11/03/21 11:01*	*11/12/21 14:18*	*1*
Dibromofluoromethane (Surr)	*103*		*55 - 129*	*11/03/21 11:01*	*11/12/21 14:18*	*1*
Toluene-d8 (Surr)	*114*		*63 - 138*	*11/03/21 11:01*	*11/12/21 14:18*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1.8**		0.99	0.50	mg/Kg		11/06/21 09:57	11/13/21 15:48	1
Motor Oil Range Organics [C24-C36]	**6.2**		5.0	3.7	mg/Kg		11/06/21 09:57	11/13/21 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*72*		*51 - 111*	*11/06/21 09:57*	*11/13/21 15:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.50	0.089	mg/Kg		11/04/21 13:39	11/09/21 15:39	1
Arsenic	**2.5**		2.0	1.3	mg/Kg		11/04/21 13:39	11/05/21 13:43	1
Barium	**49**		0.99	0.12	mg/Kg		11/04/21 13:39	11/05/21 13:43	1
Beryllium	**0.65**		0.20	0.030	mg/Kg		11/04/21 13:39	11/10/21 16:35	1
Cadmium	**0.059**	**J**	0.20	0.030	mg/Kg		11/04/21 13:39	11/05/21 13:43	1
Cobalt	**6.1**		0.50	0.25	mg/Kg		11/04/21 13:39	11/05/21 13:43	1
Chromium	**40**		0.50	0.14	mg/Kg		11/04/21 13:39	11/05/21 13:43	1
Copper	**7.1**	**B**	1.5	0.22	mg/Kg		11/04/21 13:39	11/05/21 13:43	1
Molybdenum	ND		2.0	0.74	mg/Kg		11/04/21 13:39	11/05/21 13:43	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC9-S2-10
Date Collected: 11/01/21 13:02
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-19
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	37		0.99	0.24	mg/Kg		11/04/21 13:39	11/05/21 13:43	1
Lead	2.8		0.99	0.26	mg/Kg		11/04/21 13:39	11/05/21 13:43	1
Selenium	ND		2.0	1.4	mg/Kg		11/04/21 13:39	11/05/21 13:43	1
Antimony	15	B	2.0	0.93	mg/Kg		11/04/21 13:39	11/05/21 13:43	1
Thallium	ND		2.0	0.83	mg/Kg		11/04/21 13:39	11/09/21 15:39	1
Vanadium	27		0.50	0.19	mg/Kg		11/04/21 13:39	11/05/21 13:43	1
Zinc	23		2.0	0.19	mg/Kg		11/04/21 13:39	11/05/21 13:43	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022	J B	0.086	0.014	mg/Kg		11/14/21 10:50	11/15/21 18:04	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC6-S9B-4

Date Collected: 11/01/21 11:28
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-20

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.9		0.99	0.49	mg/Kg		11/06/21 09:57	11/13/21 16:17	1
Motor Oil Range Organics [C24-C36]	7.3		4.9	3.7	mg/Kg		11/06/21 09:57	11/13/21 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*45*	*S1-*	*51 - 111*	*11/06/21 09:57*	*11/13/21 16:17*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		31	2.4	ug/Kg		11/10/21 10:54	11/16/21 18:50	1
PCB-1221	ND		31	3.4	ug/Kg		11/10/21 10:54	11/16/21 18:50	1
PCB-1232	ND		31	4.5	ug/Kg		11/10/21 10:54	11/16/21 18:50	1
PCB-1242	ND		31	5.6	ug/Kg		11/10/21 10:54	11/16/21 18:50	1
PCB-1248	ND		31	2.3	ug/Kg		11/10/21 10:54	11/16/21 18:50	1
PCB-1254	ND		31	3.6	ug/Kg		11/10/21 10:54	11/16/21 18:50	1
PCB-1260	ND		31	2.5	ug/Kg		11/10/21 10:54	11/16/21 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*37*	*S1-*	*52 - 138*	*11/10/21 10:54*	*11/16/21 18:50*	*1*
Tetrachloro-m-xylene	*36*	*S1-*	*56 - 114*	*11/10/21 10:54*	*11/16/21 18:50*	*1*

Client Sample ID: EB11012021

Date Collected: 11/01/21 13:50
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-21

Matrix: Water

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		48	15	ug/L		11/05/21 12:43	11/09/21 13:54	1
Motor Oil Range Organics [C28-C40]	ND		480	160	ug/L		11/05/21 12:43	11/09/21 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*69*		*56 - 145*	*11/05/21 12:43*	*11/09/21 13:54*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.48	0.072	ug/L		11/05/21 09:42	11/17/21 21:27	1
PCB-1221	ND		0.48	0.25	ug/L		11/05/21 09:42	11/17/21 21:27	1
PCB-1232	ND		0.48	0.077	ug/L		11/05/21 09:42	11/17/21 21:27	1
PCB-1242	ND		0.48	0.12	ug/L		11/05/21 09:42	11/17/21 21:27	1
PCB-1248	ND		0.48	0.12	ug/L		11/05/21 09:42	11/17/21 21:27	1
PCB-1254	ND		0.48	0.091	ug/L		11/05/21 09:42	11/17/21 21:27	1
PCB-1260	ND		0.48	0.11	ug/L		11/05/21 09:42	11/17/21 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*70*		*29 - 128*	*11/05/21 09:42*	*11/17/21 21:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.010	0.0058	mg/L		11/14/21 11:09	11/15/21 14:40	1
Arsenic	ND		0.10	0.022	mg/L		11/14/21 11:09	11/15/21 14:40	1
Barium	ND		0.010	0.0016	mg/L		11/14/21 11:09	11/15/21 14:40	1
Beryllium	ND		0.010	0.0026	mg/L		11/14/21 11:09	11/15/21 14:40	1
Cadmium	ND		0.010	0.0012	mg/L		11/14/21 11:09	11/15/21 14:40	1
Cobalt	ND		0.050	0.0023	mg/L		11/14/21 11:09	11/15/21 14:40	1
Chromium	ND		0.050	0.0086	mg/L		11/14/21 11:09	11/15/21 14:40	1
Copper	ND		0.050	0.0085	mg/L		11/14/21 11:09	11/15/21 14:40	1
Molybdenum	**0.041**	**J**	0.050	0.024	mg/L		11/14/21 11:09	11/15/21 14:40	1
Nickel	ND		0.050	0.0045	mg/L		11/14/21 11:09	11/15/21 14:40	1
Antimony	ND		0.10	0.021	mg/L		11/14/21 11:09	11/15/21 14:40	1
Selenium	ND		0.10	0.034	mg/L		11/14/21 11:09	11/15/21 14:40	1
Thallium	ND		0.050	0.019	mg/L		11/14/21 11:09	11/15/21 14:40	1
Vanadium	**0.0070**	**J**	0.010	0.0017	mg/L		11/14/21 11:09	11/15/21 14:40	1
Zinc	ND		0.25	0.014	mg/L		11/14/21 11:09	11/15/21 14:40	1
Lead	**0.0080**	**J**	0.050	0.0080	mg/L		11/14/21 11:09	11/15/21 14:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00050	0.00014	mg/L		11/15/21 05:30	11/15/21 16:47	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: TB11012021
Date Collected: 11/01/21 08:00
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.8	ug/L			11/10/21 13:06	1
Benzene	ND		0.50	0.080	ug/L			11/10/21 13:06	1
Bromobenzene	ND		1.0	0.091	ug/L			11/10/21 13:06	1
Bromochloromethane	ND		1.0	0.18	ug/L			11/10/21 13:06	1
Bromodichloromethane	ND		0.50	0.14	ug/L			11/10/21 13:06	1
Bromoform	ND		1.0	0.19	ug/L			11/10/21 13:06	1
Bromomethane	ND		1.0	0.21	ug/L			11/10/21 13:06	1
2-Butanone (MEK)	**0.39**	**J**	2.0	0.33	ug/L			11/10/21 13:06	1
n-Butylbenzene	ND		1.0	0.18	ug/L			11/10/21 13:06	1
sec-Butylbenzene	ND		1.0	0.14	ug/L			11/10/21 13:06	1
tert-Butylbenzene	ND		1.0	0.13	ug/L			11/10/21 13:06	1
Carbon disulfide	ND		2.0	0.36	ug/L			11/10/21 13:06	1
Carbon tetrachloride	ND		0.50	0.12	ug/L			11/10/21 13:06	1
Chlorobenzene	ND		0.50	0.070	ug/L			11/10/21 13:06	1
Chloroethane	ND		1.0	0.24	ug/L			11/10/21 13:06	1
Chloroform	ND		1.0	0.12	ug/L			11/10/21 13:06	1
Chloromethane	ND		1.0	0.26	ug/L			11/10/21 13:06	1
2-Chlorotoluene	ND		0.50	0.11	ug/L			11/10/21 13:06	1
4-Chlorotoluene	ND		0.50	0.10	ug/L			11/10/21 13:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.20	ug/L			11/10/21 13:06	1
1,2-Dibromoethane (EDB)	ND		0.50	0.12	ug/L			11/10/21 13:06	1
Dibromochloromethane	ND		0.50	0.16	ug/L			11/10/21 13:06	1
Dibromomethane	ND		0.50	0.17	ug/L			11/10/21 13:06	1
1,2-Dichlorobenzene	ND		0.50	0.097	ug/L			11/10/21 13:06	1
1,3-Dichlorobenzene	ND		0.50	0.086	ug/L			11/10/21 13:06	1
1,4-Dichlorobenzene	ND		0.50	0.083	ug/L			11/10/21 13:06	1
Dichlorodifluoromethane	ND		1.0	0.32	ug/L			11/10/21 13:06	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			11/10/21 13:06	1
1,2-Dichloroethane	ND		0.50	0.14	ug/L			11/10/21 13:06	1
cis-1,2-Dichloroethene	ND		0.50	0.18	ug/L			11/10/21 13:06	1
trans-1,2-Dichloroethene	ND		0.50	0.11	ug/L			11/10/21 13:06	1
1,1-Dichloroethene	ND		0.50	0.13	ug/L			11/10/21 13:06	1
1,2-Dichloropropane	ND		0.50	0.15	ug/L			11/10/21 13:06	1
1,3-Dichloropropane	ND		1.0	0.10	ug/L			11/10/21 13:06	1
2,2-Dichloropropane	ND		1.0	0.46	ug/L			11/10/21 13:06	1
cis-1,3-Dichloropropene	ND		0.50	0.15	ug/L			11/10/21 13:06	1
trans-1,3-Dichloropropene	ND		0.50	0.16	ug/L			11/10/21 13:06	1
1,1-Dichloropropene	ND		0.50	0.12	ug/L			11/10/21 13:06	1
Ethylbenzene	ND		0.50	0.084	ug/L			11/10/21 13:06	1
Hexachlorobutadiene	ND		1.0	0.23	ug/L			11/10/21 13:06	1
2-Hexanone	ND		2.0	0.17	ug/L			11/10/21 13:06	1
Isopropylbenzene	ND		0.50	0.11	ug/L			11/10/21 13:06	1
p-Isopropyltoluene	ND		1.0	0.15	ug/L			11/10/21 13:06	1
4-Methyl-2-pentanone (MIBK)	ND		2.0	0.11	ug/L			11/10/21 13:06	1
Methyl tert-butyl ether	ND		0.50	0.12	ug/L			11/10/21 13:06	1
Methylene Chloride	ND		1.0	0.16	ug/L			11/10/21 13:06	1
Naphthalene	ND		1.0	0.48	ug/L			11/10/21 13:06	1
N-Propylbenzene	ND		1.0	0.11	ug/L			11/10/21 13:06	1
Styrene	ND		0.50	0.13	ug/L			11/10/21 13:06	1

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: TB11012021
Date Collected: 11/01/21 08:00
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.10	ug/L			11/10/21 13:06	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.11	ug/L			11/10/21 13:06	1
Tetrachloroethene	ND		0.50	0.10	ug/L			11/10/21 13:06	1
Toluene	ND		0.50	0.095	ug/L			11/10/21 13:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			11/10/21 13:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.25	ug/L			11/10/21 13:06	1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L			11/10/21 13:06	1
1,1,2-Trichloroethane	ND		0.50	0.12	ug/L			11/10/21 13:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.17	ug/L			11/10/21 13:06	1
Trichloroethene	ND		0.50	0.10	ug/L			11/10/21 13:06	1
Trichlorofluoromethane	ND		1.0	0.13	ug/L			11/10/21 13:06	1
1,2,3-Trichloropropane	ND		1.0	0.13	ug/L			11/10/21 13:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.32	ug/L			11/10/21 13:06	1
1,3,5-Trimethylbenzene	ND		0.50	0.16	ug/L			11/10/21 13:06	1
Vinyl acetate	ND		2.0	0.19	ug/L			11/10/21 13:06	1
Vinyl chloride	ND		0.50	0.18	ug/L			11/10/21 13:06	1
m-Xylene & p-Xylene	ND		0.50	0.27	ug/L			11/10/21 13:06	1
o-Xylene	ND		0.50	0.14	ug/L			11/10/21 13:06	1
Xylenes, Total	ND		0.50	0.27	ug/L			11/10/21 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*74 - 120*		*11/10/21 13:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*72 - 123*		*11/10/21 13:06*	*1*
Toluene-d8 (Surr)	*103*		*78 - 120*		*11/10/21 13:06*	*1*
Dibromofluoromethane (Surr)	*114*		*80 - 123*		*11/10/21 13:06*	*1*

Surrogate Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(32-156)	(63-143)	(55-129)	(63-138)
320-81134-8	AOC4-S1-5	98	105	97	99
320-81134-9	AOC4-S1-10	93	104	96	97
320-81134-10	AOC4-S1-15	101 *3	107 *3	100 *3	116 *3
320-81134-11	AOC4-S1-5 DUP	94	105	96	96
320-81134-12	AOC9-SG3-5	104	105	103	116
320-81134-13	AOC9-SG3-10	105	105	108	129
320-81134-14	AOC9-SG4-5	98	104	102	115
320-81134-15	AOC9-SG4-10	102	109	106	116
320-81134-18	AOC9-S2-5	101	107	104	115
320-81134-19	AOC9-S2-10	103	104	103	114
LCS 320-540740/7	Lab Control Sample	104	108	106	112
LCS 320-541763/7	Lab Control Sample	94	105	96	99
LCS 320-542091/7	Lab Control Sample	105	112	106	121
LCS 320-542727/7	Lab Control Sample	109	112	109	119
LCS 320-543468/7	Lab Control Sample	94	104	95	97
LCSD 320-540740/8	Lab Control Sample Dup	100	113	104	116
LCSD 320-541763/8	Lab Control Sample Dup	94	107	97	100
LCSD 320-542091/8	Lab Control Sample Dup	104	111	105	121
LCSD 320-542727/8	Lab Control Sample Dup	102	111	103	117
LCSD 320-543468/8	Lab Control Sample Dup	96	105	97	99
MB 320-540740/10	Method Blank	103	109	106	112
MB 320-541763/10	Method Blank	94	104	93	97
MB 320-542091/10	Method Blank	105	109	106	115
MB 320-542727/11	Method Blank	104	110	105	117
MB 320-543468/10	Method Blank	96	103	96	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DCA	TOL	DBFM
Lab Sample ID	Client Sample ID	(74-120)	(72-123)	(78-120)	(80-123)
320-81134-22	TB11012021	106	107	103	114
LCS 320-541535/4	Lab Control Sample	111	104	106	118
LCSD 320-541535/5	Lab Control Sample Dup	110	101	103	112
MB 320-541535/8	Method Blank	106	105	104	112

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Surrogate Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB (70-131)
320-81134-8	AOC4-S1-5	98
320-81134-9	AOC4-S1-10	108
320-81134-10	AOC4-S1-15	107
320-81134-11	AOC4-S1-5 DUP	107
320-81134-12	AOC9-SG3-5	105
320-81134-13	AOC9-SG3-10	105
320-81134-14	AOC9-SG4-5	104
320-81134-15	AOC9-SG4-10	109
320-81134-18	AOC9-S2-5	107
320-81134-19	AOC9-S2-10	104
LCS 320-540739/5	Lab Control Sample	110
LCS 320-542094/4	Lab Control Sample	108
LCS 320-542726/4	Lab Control Sample	108
LCS 320-543469/4	Lab Control Sample	98
LCSD 320-540739/6	Lab Control Sample Dup	112
LCSD 320-542094/5	Lab Control Sample Dup	111
LCSD 320-542726/5	Lab Control Sample Dup	111
LCSD 320-543469/5	Lab Control Sample Dup	98
MB 320-540739/10	Method Blank	109
MB 320-542094/10	Method Blank	109
MB 320-542726/11	Method Blank	110
MB 320-543469/10	Method Blank	97

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTPH1 (51-111)
320-81134-8	AOC4-S1-5	59
320-81134-9	AOC4-S1-10	63
320-81134-10	AOC4-S1-15	59
320-81134-11	AOC4-S1-5 DUP	62
320-81134-12	AOC9-SG3-5	63
320-81134-13	AOC9-SG3-10	62
320-81134-14	AOC9-SG4-5	62
320-81134-15	AOC9-SG4-10	63
320-81134-18	AOC9-S2-5	59
320-81134-19	AOC9-S2-10	72
320-81134-20	AOC6-S9B-4	45 S1-
LCS 320-540584/2-A	Lab Control Sample	70
MB 320-540584/1-A	Method Blank	64

Surrogate Legend

OTPH = o-Terphenyl (Surr)

Surrogate Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTPH1 (56-145)
320-81134-21	EB11012021	69
LCS 320-540321/2-A	Lab Control Sample	78
LCSD 320-540321/3-A	Lab Control Sample Dup	78
MB 320-540321/1-A	Method Blank	72

Surrogate Legend

OTPH = o-Terphenyl (Surr)

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCBP1 (46-109)	DCBP2 (46-109)	TCX1 (47-107)	TCX2 (47-107)
320-81134-1	AOC1-S9A-0.5	251 S1+	28 p S1-	71	51
320-81134-1 MS	AOC1-S9A-0.5		10 p S1-		46 S1-
320-81134-1 MSD	AOC1-S9A-0.5		30 p S1-		36 p S1-
320-81134-2	AOC1-S9A-0.5 DUP	0 S1-	0 S1-	94	49
320-81134-3	AOC1-S9A-2	63	57	66	58
320-81134-4	AOC1-S1-0.5	46	48	51	47
320-81134-5	AOC1-S1-0.5 DUP	49	53	50	44 S1-
320-81134-6	AOC1-S1-2	68	70	67	60
320-81134-7	AOC1-S1-2 DUP	39 S1-	38 S1-	67	69
320-81134-16	AOC1-S2-0.5	103	52	65	52
320-81134-17	AOC1-S2-2	75	75	69	61
LCS 320-541359/2-A	Lab Control Sample	52		77	
LCS 320-542445/2-A	Lab Control Sample		82		74
LCS 320-542445/3-A	Lab Control Sample		81		68
MB 320-541359/1-A	Method Blank	64	90	76	72
MB 320-542445/1-A	Method Blank	81	76	78	71

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (52-138)	TCX1 (56-114)
320-81134-1	AOC1-S9A-0.5	80	85
320-81134-2	AOC1-S9A-0.5 DUP	77	76
320-81134-2 MS	AOC1-S9A-0.5 DUP	103	82
320-81134-2 MSD	AOC1-S9A-0.5 DUP	88	66
320-81134-4	AOC1-S1-0.5	46 S1-	49 S1-
320-81134-5	AOC1-S1-0.5 DUP	52	61
320-81134-16	AOC1-S2-0.5	66	71
LCS 320-542456/2-A	Lab Control Sample	106	91
MB 320-542456/1-A	Method Blank	85	71

Surrogate Legend

Surrogate Summary

Client: Ninyo & Moore
Job ID: 320-81134-1
Project/Site: Cole School PEA

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX2
Lab Sample ID	Client Sample ID	(52-138)	(56-114)
320-81134-20	AOC6-S9B-4	37 S1-	36 S1-
LCS 320-541564/2-A	Lab Control Sample	79	80
MB 320-541564/1-A	Method Blank	66	65

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCBP1
Lab Sample ID	Client Sample ID	(29-128)
320-81134-21	EB11012021	70
LCS 320-540241/2-A	Lab Control Sample	70
LCSD 320-540241/3-A	Lab Control Sample Dup	72
MB 320-540241/1-A	Method Blank	62

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 320-540740/10
Matrix: Solid
Analysis Batch: 540740

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	0.88	ug/Kg			11/07/21 13:00	1
Ethylene Dibromide	ND		10	0.27	ug/Kg			11/07/21 13:00	1
1,2-Dichlorobenzene	ND		5.0	0.64	ug/Kg			11/07/21 13:00	1
1,3-Dichlorobenzene	ND		5.0	0.30	ug/Kg			11/07/21 13:00	1
2-Butanone (MEK)	ND		10	1.4	ug/Kg			11/07/21 13:00	1
1,4-Dichlorobenzene	ND		5.0	0.78	ug/Kg			11/07/21 13:00	1
2-Chlorotoluene	ND		5.0	0.62	ug/Kg			11/07/21 13:00	1
1,1-Dichloroethane	ND		5.0	0.29	ug/Kg			11/07/21 13:00	1
4-Chlorotoluene	ND		5.0	0.86	ug/Kg			11/07/21 13:00	1
1,2-Dichloroethane	ND		5.0	0.73	ug/Kg			11/07/21 13:00	1
Acetone	ND		20	1.4	ug/Kg			11/07/21 13:00	1
Benzene	ND		5.0	0.26	ug/Kg			11/07/21 13:00	1
1,1-Dichloroethene	ND		5.0	0.26	ug/Kg			11/07/21 13:00	1
Bromobenzene	ND		5.0	0.52	ug/Kg			11/07/21 13:00	1
1,2-Dichloropropane	ND		5.0	0.60	ug/Kg			11/07/21 13:00	1
Chlorobromomethane	ND		5.0	0.94	ug/Kg			11/07/21 13:00	1
1,3-Dichloropropane	ND		5.0	0.57	ug/Kg			11/07/21 13:00	1
Dichlorobromomethane	ND		5.0	0.53	ug/Kg			11/07/21 13:00	1
2,2-Dichloropropane	ND		5.0	0.38	ug/Kg			11/07/21 13:00	1
Bromoform	ND		5.0	0.40	ug/Kg			11/07/21 13:00	1
Bromomethane	ND		5.0	0.86	ug/Kg			11/07/21 13:00	1
cis-1,2-Dichloroethene	ND		5.0	0.89	ug/Kg			11/07/21 13:00	1
1,1-Dichloropropene	ND		5.0	0.37	ug/Kg			11/07/21 13:00	1
cis-1,3-Dichloropropene	ND		5.0	0.64	ug/Kg			11/07/21 13:00	1
Carbon disulfide	ND		10	0.49	ug/Kg			11/07/21 13:00	1
Carbon tetrachloride	ND		5.0	0.53	ug/Kg			11/07/21 13:00	1
2-Hexanone	ND		10	0.74	ug/Kg			11/07/21 13:00	1
Chlorobenzene	ND		5.0	0.29	ug/Kg			11/07/21 13:00	1
Chloroethane	ND		5.0	0.45	ug/Kg			11/07/21 13:00	1
Chloroform	ND		5.0	0.26	ug/Kg			11/07/21 13:00	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.92	ug/Kg			11/07/21 13:00	1
Chloromethane	ND		5.0	0.50	ug/Kg			11/07/21 13:00	1
Chlorodibromomethane	ND		5.0	0.21	ug/Kg			11/07/21 13:00	1
Dibromomethane	ND		5.0	0.58	ug/Kg			11/07/21 13:00	1
Dichlorodifluoromethane	ND		5.0	0.89	ug/Kg			11/07/21 13:00	1
Ethylbenzene	ND		5.0	0.34	ug/Kg			11/07/21 13:00	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.41	ug/Kg			11/07/21 13:00	1
Hexachlorobutadiene	ND		5.0	0.33	ug/Kg			11/07/21 13:00	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.68	ug/Kg			11/07/21 13:00	1
Isopropylbenzene	ND		5.0	0.52	ug/Kg			11/07/21 13:00	1
Methylene Chloride	ND		10	0.84	ug/Kg			11/07/21 13:00	1
Methyl tert-butyl ether	ND		10	0.60	ug/Kg			11/07/21 13:00	1
1,2,3-Trichlorobenzene	ND		5.0	0.75	ug/Kg			11/07/21 13:00	1
Naphthalene	3.01	J	5.0	0.63	ug/Kg			11/07/21 13:00	1
1,2,4-Trichlorobenzene	ND		5.0	0.75	ug/Kg			11/07/21 13:00	1
n-Butylbenzene	ND		5.0	0.66	ug/Kg			11/07/21 13:00	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			11/07/21 13:00	1
N-Propylbenzene	ND		5.0	0.29	ug/Kg			11/07/21 13:00	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 320-540740/10
Matrix: Solid
Analysis Batch: 540740

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	0.44	ug/Kg			11/07/21 13:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.83	ug/Kg			11/07/21 13:00	1
4-Isopropyltoluene	ND		5.0	0.63	ug/Kg			11/07/21 13:00	1
sec-Butylbenzene	ND		5.0	0.75	ug/Kg			11/07/21 13:00	1
1,2,3-Trichloropropane	ND		5.0	0.76	ug/Kg			11/07/21 13:00	1
Styrene	ND		5.0	0.31	ug/Kg			11/07/21 13:00	1
1,2,4-Trimethylbenzene	ND		5.0	0.51	ug/Kg			11/07/21 13:00	1
trans-1,2-Dichloroethene	ND		5.0	0.38	ug/Kg			11/07/21 13:00	1
1,3,5-Trimethylbenzene	ND		5.0	0.35	ug/Kg			11/07/21 13:00	1
trans-1,3-Dichloropropene	ND		5.0	0.75	ug/Kg			11/07/21 13:00	1
tert-Butylbenzene	ND		5.0	0.54	ug/Kg			11/07/21 13:00	1
Tetrachloroethene	ND		5.0	0.61	ug/Kg			11/07/21 13:00	1
m-Xylene & p-Xylene	ND		5.0	0.81	ug/Kg			11/07/21 13:00	1
Toluene	ND		5.0	0.61	ug/Kg			11/07/21 13:00	1
o-Xylene	ND		5.0	0.33	ug/Kg			11/07/21 13:00	1
Xylenes, Total	ND		5.0	0.81	ug/Kg			11/07/21 13:00	1
Trichloroethene	ND		5.0	0.60	ug/Kg			11/07/21 13:00	1
Trichlorofluoromethane	ND		5.0	0.34	ug/Kg			11/07/21 13:00	1
Vinyl acetate	ND		10	0.69	ug/Kg			11/07/21 13:00	1
Vinyl chloride	ND		5.0	0.36	ug/Kg			11/07/21 13:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*63 - 143*		*11/07/21 13:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*32 - 156*		*11/07/21 13:00*	*1*
Toluene-d8 (Surr)	*112*		*63 - 138*		*11/07/21 13:00*	*1*
Dibromofluoromethane (Surr)	*106*		*55 - 129*		*11/07/21 13:00*	*1*

Lab Sample ID: LCS 320-540740/7
Matrix: Solid
Analysis Batch: 540740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	50.0	51.8		ug/Kg		104	75 - 137
Ethylene Dibromide	50.0	50.6		ug/Kg		101	80 - 124
1,2-Dichlorobenzene	50.0	49.4		ug/Kg		99	68 - 121
1,3-Dichlorobenzene	50.0	48.5		ug/Kg		97	64 - 126
2-Butanone (MEK)	125	101		ug/Kg		81	71 - 142
1,4-Dichlorobenzene	50.0	47.4		ug/Kg		95	65 - 124
2-Chlorotoluene	50.0	48.8		ug/Kg		98	64 - 127
1,1-Dichloroethane	50.0	46.4		ug/Kg		93	76 - 134
4-Chlorotoluene	50.0	48.7		ug/Kg		97	67 - 128
1,2-Dichloroethane	50.0	49.6		ug/Kg		99	66 - 150
Acetone	125	102		ug/Kg		82	64 - 128
Benzene	50.0	47.0		ug/Kg		94	78 - 128
1,1-Dichloroethene	50.0	42.6		ug/Kg		85	66 - 136
Bromobenzene	50.0	49.1		ug/Kg		98	67 - 132
1,2-Dichloropropane	50.0	48.5		ug/Kg		97	80 - 129
Chlorobromomethane	50.0	47.0		ug/Kg		94	80 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-540740/7
Matrix: Solid
Analysis Batch: 540740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	50.0	50.8		ug/Kg		102	80 - 123
Dichlorobromomethane	50.0	48.2		ug/Kg		96	80 - 137
2,2-Dichloropropane	50.0	48.4		ug/Kg		97	69 - 153
Bromoform	50.0	49.3		ug/Kg		99	80 - 136
Bromomethane	50.0	51.1		ug/Kg		102	48 - 164
cis-1,2-Dichloroethene	50.0	46.5		ug/Kg		93	74 - 131
1,1-Dichloropropene	50.0	47.2		ug/Kg		94	76 - 132
cis-1,3-Dichloropropene	50.0	50.3		ug/Kg		101	80 - 134
Carbon disulfide	50.0	41.5		ug/Kg		83	52 - 145
Carbon tetrachloride	50.0	45.3		ug/Kg		91	62 - 154
2-Hexanone	125	104		ug/Kg		83	78 - 143
Chlorobenzene	50.0	47.9		ug/Kg		96	74 - 125
Chloroethane	50.0	46.4		ug/Kg		93	54 - 148
Chloroform	50.0	47.2		ug/Kg		94	78 - 135
4-Methyl-2-pentanone (MIBK)	125	105		ug/Kg		84	79 - 150
Chloromethane	50.0	50.0		ug/Kg		100	60 - 141
Chlorodibromomethane	50.0	48.2		ug/Kg		96	80 - 133
Dibromomethane	50.0	49.1		ug/Kg		98	80 - 129
Dichlorodifluoromethane	50.0	59.9		ug/Kg		120	60 - 130
Ethylbenzene	50.0	47.9		ug/Kg		96	72 - 125
1,1,1,2-Tetrachloroethane	50.0	50.4		ug/Kg		101	77 - 134
Hexachlorobutadiene	50.0	48.2		ug/Kg		96	52 - 140
1,1,2,2-Tetrachloroethane	50.0	53.7		ug/Kg		107	71 - 134
Isopropylbenzene	50.0	47.9		ug/Kg		96	69 - 137
Methylene Chloride	50.0	46.5		ug/Kg		93	77 - 125
Methyl tert-butyl ether	50.0	65.3		ug/Kg		131	66 - 146
1,2,3-Trichlorobenzene	50.0	56.2		ug/Kg		112	54 - 140
Naphthalene	50.0	59.5		ug/Kg		119	53 - 140
1,2,4-Trichlorobenzene	50.0	53.1		ug/Kg		106	48 - 145
n-Butylbenzene	50.0	48.6		ug/Kg		97	68 - 136
1,1,1-Trichloroethane	50.0	45.9		ug/Kg		92	67 - 150
N-Propylbenzene	50.0	48.5		ug/Kg		97	63 - 128
1,1,2-Trichloroethane	50.0	48.9		ug/Kg		98	80 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	42.3		ug/Kg		85	62 - 138
4-Isopropyltoluene	50.0	48.5		ug/Kg		97	64 - 137
sec-Butylbenzene	50.0	48.2		ug/Kg		96	68 - 131
1,2,3-Trichloropropane	50.0	50.9		ug/Kg		102	71 - 132
Styrene	50.0	48.6		ug/Kg		97	79 - 128
1,2,4-Trimethylbenzene	50.0	49.8		ug/Kg		100	64 - 137
trans-1,2-Dichloroethene	50.0	44.0		ug/Kg		88	67 - 135
1,3,5-Trimethylbenzene	50.0	49.6		ug/Kg		99	66 - 135
trans-1,3-Dichloropropene	50.0	51.1		ug/Kg		102	80 - 148
tert-Butylbenzene	50.0	49.0		ug/Kg		98	67 - 131
Tetrachloroethene	50.0	45.5		ug/Kg		91	65 - 135
m-Xylene & p-Xylene	50.0	47.8		ug/Kg		96	73 - 128
Toluene	50.0	47.6		ug/Kg		95	80 - 124
o-Xylene	50.0	48.3		ug/Kg		97	76 - 127
Xylenes, Total	100	96.1		ug/Kg		96	75 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-540740/7
Matrix: Solid
Analysis Batch: 540740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Trichloroethene			50.0	46.6		ug/Kg		93	80 - 126		
Trichlorofluoromethane			50.0	48.3		ug/Kg		97	43 - 158		
Vinyl acetate			50.0	53.2		ug/Kg		106	39 - 160		
Vinyl chloride			50.0	54.2		ug/Kg		108	67 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*63 - 143*
1,2-Dichloroethane-d4 (Surr)	*104*		*32 - 156*
Toluene-d8 (Surr)	*112*		*63 - 138*
Dibromofluoromethane (Surr)	*106*		*55 - 129*

Lab Sample ID: LCSD 320-540740/8
Matrix: Solid
Analysis Batch: 540740

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			50.0	50.6		ug/Kg		101	75 - 137	2	48
Ethylene Dibromide			50.0	50.5		ug/Kg		101	80 - 124	0	39
1,2-Dichlorobenzene			50.0	48.3		ug/Kg		97	68 - 121	2	28
1,3-Dichlorobenzene			50.0	48.9		ug/Kg		98	64 - 126	1	41
2-Butanone (MEK)			125	104		ug/Kg		83	71 - 142	3	44
1,4-Dichlorobenzene			50.0	48.4		ug/Kg		97	65 - 124	2	38
2-Chlorotoluene			50.0	49.7		ug/Kg		99	64 - 127	2	41
1,1-Dichloroethane			50.0	44.6		ug/Kg		89	76 - 134	4	24
4-Chlorotoluene			50.0	49.6		ug/Kg		99	67 - 128	2	40
1,2-Dichloroethane			50.0	48.0		ug/Kg		96	66 - 150	3	36
Acetone			125	103		ug/Kg		83	64 - 128	1	36
Benzene			50.0	45.4		ug/Kg		91	78 - 128	3	37
1,1-Dichloroethene			50.0	40.9		ug/Kg		82	66 - 136	4	42
Bromobenzene			50.0	49.9		ug/Kg		100	67 - 132	1	40
1,2-Dichloropropane			50.0	47.2		ug/Kg		94	80 - 129	3	38
Chlorobromomethane			50.0	45.2		ug/Kg		90	80 - 127	4	36
1,3-Dichloropropane			50.0	51.8		ug/Kg		104	80 - 123	2	39
Dichlorobromomethane			50.0	48.0		ug/Kg		96	80 - 137	0	37
2,2-Dichloropropane			50.0	45.2		ug/Kg		90	69 - 153	7	47
Bromoform			50.0	49.5		ug/Kg		99	80 - 136	0	45
Bromomethane			50.0	49.7		ug/Kg		99	48 - 164	3	38
cis-1,2-Dichloroethene			50.0	44.8		ug/Kg		90	74 - 131	4	37
1,1-Dichloropropene			50.0	45.5		ug/Kg		91	76 - 132	4	38
cis-1,3-Dichloropropene			50.0	50.3		ug/Kg		101	80 - 134	0	39
Carbon disulfide			50.0	39.5		ug/Kg		79	52 - 145	5	46
Carbon tetrachloride			50.0	44.8		ug/Kg		90	62 - 154	1	43
2-Hexanone			125	117		ug/Kg		94	78 - 143	12	73
Chlorobenzene			50.0	47.9		ug/Kg		96	74 - 125	0	38
Chloroethane			50.0	43.3		ug/Kg		87	54 - 148	7	34
Chloroform			50.0	45.4		ug/Kg		91	78 - 135	4	23
4-Methyl-2-pentanone (MIBK)			125	111		ug/Kg		89	79 - 150	6	48
Chloromethane			50.0	48.3		ug/Kg		97	60 - 141	3	36

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 320-540740/8
Matrix: Solid
Analysis Batch: 540740

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorodibromomethane			50.0	48.7		ug/Kg		97	80 - 133	1	24
Dibromomethane			50.0	47.1		ug/Kg		94	80 - 129	4	37
Dichlorodifluoromethane			50.0	58.0		ug/Kg		116	60 - 130	3	46
Ethylbenzene			50.0	47.8		ug/Kg		96	72 - 125	0	41
1,1,1,2-Tetrachloroethane			50.0	49.1		ug/Kg		98	77 - 134	3	25
Hexachlorobutadiene			50.0	46.9		ug/Kg		94	52 - 140	3	38
1,1,2,2-Tetrachloroethane			50.0	51.3		ug/Kg		103	71 - 134	5	31
Isopropylbenzene			50.0	47.7		ug/Kg		95	69 - 137	1	41
Methylene Chloride			50.0	43.8		ug/Kg		88	77 - 125	6	25
Methyl tert-butyl ether			50.0	59.9		ug/Kg		120	66 - 146	9	45
1,2,3-Trichlorobenzene			50.0	51.5		ug/Kg		103	54 - 140	9	42
Naphthalene			50.0	56.5		ug/Kg		113	53 - 140	5	46
1,2,4-Trichlorobenzene			50.0	50.4		ug/Kg		101	48 - 145	5	39
n-Butylbenzene			50.0	47.8		ug/Kg		96	68 - 136	2	37
1,1,1-Trichloroethane			50.0	43.7		ug/Kg		87	67 - 150	5	43
N-Propylbenzene			50.0	48.7		ug/Kg		97	63 - 128	0	42
1,1,2-Trichloroethane			50.0	49.7		ug/Kg		99	80 - 128	2	41
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	41.6		ug/Kg		83	62 - 138	2	22
4-Isopropyltoluene			50.0	48.2		ug/Kg		96	64 - 137	1	40
sec-Butylbenzene			50.0	48.6		ug/Kg		97	68 - 131	1	40
1,2,3-Trichloropropane			50.0	51.8		ug/Kg		104	71 - 132	2	41
Styrene			50.0	49.2		ug/Kg		98	79 - 128	1	40
1,2,4-Trimethylbenzene			50.0	49.6		ug/Kg		99	64 - 137	0	41
trans-1,2-Dichloroethene			50.0	42.1		ug/Kg		84	67 - 135	4	37
1,3,5-Trimethylbenzene			50.0	49.7		ug/Kg		99	66 - 135	0	42
trans-1,3-Dichloropropene			50.0	51.9		ug/Kg		104	80 - 148	2	42
tert-Butylbenzene			50.0	49.3		ug/Kg		99	67 - 131	1	42
Tetrachloroethene			50.0	45.7		ug/Kg		91	65 - 135	0	39
m-Xylene & p-Xylene			50.0	47.9		ug/Kg		96	73 - 128	0	40
Toluene			50.0	47.5		ug/Kg		95	80 - 124	0	39
o-Xylene			50.0	47.4		ug/Kg		95	76 - 127	2	40
Xylenes, Total			100	95.3		ug/Kg		95	75 - 122	1	15
Trichloroethene			50.0	44.9		ug/Kg		90	80 - 126	4	40
Trichlorofluoromethane			50.0	46.0		ug/Kg		92	43 - 158	5	32
Vinyl acetate			50.0	50.3		ug/Kg		101	39 - 160	6	50
Vinyl chloride			50.0	52.1		ug/Kg		104	67 - 127	4	37

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*63 - 143*
1,2-Dichloroethane-d4 (Surr)	*100*		*32 - 156*
Toluene-d8 (Surr)	*116*		*63 - 138*
Dibromofluoromethane (Surr)	*104*		*55 - 129*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 320-541535/8
Matrix: Water
Analysis Batch: 541535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		1.0	0.20	ug/L			11/10/21 12:21	1
1,2-Dibromoethane (EDB)	ND		0.50	0.12	ug/L			11/10/21 12:21	1
1,2-Dichlorobenzene	ND		0.50	0.097	ug/L			11/10/21 12:21	1
1,3-Dichlorobenzene	ND		0.50	0.086	ug/L			11/10/21 12:21	1
2-Butanone (MEK)	ND		2.0	0.33	ug/L			11/10/21 12:21	1
1,4-Dichlorobenzene	ND		0.50	0.083	ug/L			11/10/21 12:21	1
2-Chlorotoluene	ND		0.50	0.11	ug/L			11/10/21 12:21	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			11/10/21 12:21	1
4-Chlorotoluene	ND		0.50	0.10	ug/L			11/10/21 12:21	1
1,2-Dichloroethane	ND		0.50	0.14	ug/L			11/10/21 12:21	1
Acetone	ND		10	3.8	ug/L			11/10/21 12:21	1
Benzene	ND		0.50	0.080	ug/L			11/10/21 12:21	1
1,1-Dichloroethene	ND		0.50	0.13	ug/L			11/10/21 12:21	1
Bromobenzene	ND		1.0	0.091	ug/L			11/10/21 12:21	1
1,2-Dichloropropane	ND		0.50	0.15	ug/L			11/10/21 12:21	1
Bromochloromethane	ND		1.0	0.18	ug/L			11/10/21 12:21	1
1,3-Dichloropropane	ND		1.0	0.10	ug/L			11/10/21 12:21	1
Bromodichloromethane	ND		0.50	0.14	ug/L			11/10/21 12:21	1
2,2-Dichloropropane	ND		1.0	0.46	ug/L			11/10/21 12:21	1
Bromoform	ND		1.0	0.19	ug/L			11/10/21 12:21	1
Bromomethane	ND		1.0	0.21	ug/L			11/10/21 12:21	1
cis-1,2-Dichloroethene	ND		0.50	0.18	ug/L			11/10/21 12:21	1
1,1-Dichloropropene	ND		0.50	0.12	ug/L			11/10/21 12:21	1
cis-1,3-Dichloropropene	ND		0.50	0.15	ug/L			11/10/21 12:21	1
Carbon disulfide	ND		2.0	0.36	ug/L			11/10/21 12:21	1
Carbon tetrachloride	ND		0.50	0.12	ug/L			11/10/21 12:21	1
2-Hexanone	ND		2.0	0.17	ug/L			11/10/21 12:21	1
Chlorobenzene	ND		0.50	0.070	ug/L			11/10/21 12:21	1
Chloroethane	ND		1.0	0.24	ug/L			11/10/21 12:21	1
Chloroform	ND		1.0	0.12	ug/L			11/10/21 12:21	1
4-Methyl-2-pentanone (MIBK)	ND		2.0	0.11	ug/L			11/10/21 12:21	1
Chloromethane	ND		1.0	0.26	ug/L			11/10/21 12:21	1
Dibromochloromethane	ND		0.50	0.16	ug/L			11/10/21 12:21	1
Dibromomethane	ND		0.50	0.17	ug/L			11/10/21 12:21	1
Dichlorodifluoromethane	ND		1.0	0.32	ug/L			11/10/21 12:21	1
Ethylbenzene	ND		0.50	0.084	ug/L			11/10/21 12:21	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.10	ug/L			11/10/21 12:21	1
Hexachlorobutadiene	ND		1.0	0.23	ug/L			11/10/21 12:21	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.11	ug/L			11/10/21 12:21	1
Isopropylbenzene	ND		0.50	0.11	ug/L			11/10/21 12:21	1
Methylene Chloride	ND		1.0	0.16	ug/L			11/10/21 12:21	1
Methyl tert-butyl ether	ND		0.50	0.12	ug/L			11/10/21 12:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			11/10/21 12:21	1
Naphthalene	ND		1.0	0.48	ug/L			11/10/21 12:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.25	ug/L			11/10/21 12:21	1
n-Butylbenzene	ND		1.0	0.18	ug/L			11/10/21 12:21	1
1,1,1-Trichloroethane	ND		0.50	0.10	ug/L			11/10/21 12:21	1
N-Propylbenzene	ND		1.0	0.11	ug/L			11/10/21 12:21	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 320-541535/8
Matrix: Water
Analysis Batch: 541535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.50	0.12	ug/L			11/10/21 12:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.17	ug/L			11/10/21 12:21	1
p-Isopropyltoluene	ND		1.0	0.15	ug/L			11/10/21 12:21	1
sec-Butylbenzene	ND		1.0	0.14	ug/L			11/10/21 12:21	1
1,2,3-Trichloropropane	ND		1.0	0.13	ug/L			11/10/21 12:21	1
Styrene	ND		0.50	0.13	ug/L			11/10/21 12:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.32	ug/L			11/10/21 12:21	1
trans-1,2-Dichloroethene	ND		0.50	0.11	ug/L			11/10/21 12:21	1
1,3,5-Trimethylbenzene	ND		0.50	0.16	ug/L			11/10/21 12:21	1
trans-1,3-Dichloropropene	ND		0.50	0.16	ug/L			11/10/21 12:21	1
tert-Butylbenzene	ND		1.0	0.13	ug/L			11/10/21 12:21	1
Tetrachloroethene	ND		0.50	0.10	ug/L			11/10/21 12:21	1
m-Xylene & p-Xylene	ND		0.50	0.27	ug/L			11/10/21 12:21	1
Toluene	ND		0.50	0.095	ug/L			11/10/21 12:21	1
o-Xylene	ND		0.50	0.14	ug/L			11/10/21 12:21	1
Xylenes, Total	ND		0.50	0.27	ug/L			11/10/21 12:21	1
Trichloroethene	ND		0.50	0.10	ug/L			11/10/21 12:21	1
Trichlorofluoromethane	ND		1.0	0.13	ug/L			11/10/21 12:21	1
Vinyl acetate	ND		2.0	0.19	ug/L			11/10/21 12:21	1
Vinyl chloride	ND		0.50	0.18	ug/L			11/10/21 12:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*74 - 120*		*11/10/21 12:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*72 - 123*		*11/10/21 12:21*	*1*
Toluene-d8 (Surr)	*104*		*78 - 120*		*11/10/21 12:21*	*1*
Dibromofluoromethane (Surr)	*112*		*80 - 123*		*11/10/21 12:21*	*1*

Lab Sample ID: LCS 320-541535/4
Matrix: Water
Analysis Batch: 541535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	20.0	19.3		ug/L		96	66 - 121
1,2-Dibromoethane (EDB)	20.0	19.8		ug/L		99	78 - 120
1,2-Dichlorobenzene	20.0	19.4		ug/L		97	77 - 120
1,3-Dichlorobenzene	20.0	19.5		ug/L		98	78 - 120
2-Butanone (MEK)	50.0	46.3		ug/L		93	66 - 129
1,4-Dichlorobenzene	20.0	19.5		ug/L		97	74 - 120
2-Chlorotoluene	20.0	20.1		ug/L		100	79 - 120
1,1-Dichloroethane	20.0	20.5		ug/L		103	79 - 120
4-Chlorotoluene	20.0	20.1		ug/L		101	80 - 121
1,2-Dichloroethane	20.0	19.8		ug/L		99	77 - 128
Acetone	50.0	50.1		ug/L		100	55 - 145
Benzene	20.0	20.4		ug/L		102	79 - 120
1,1-Dichloroethene	20.0	21.4		ug/L		107	74 - 120
Bromobenzene	20.0	19.6		ug/L		98	80 - 120
1,2-Dichloropropane	20.0	20.8		ug/L		104	75 - 125
Bromochloromethane	20.0	19.4		ug/L		97	80 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-541535/4
Matrix: Water
Analysis Batch: 541535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	20.0	19.4		ug/L		97	79 - 120
Bromodichloromethane	20.0	19.9		ug/L		100	80 - 124
2,2-Dichloropropane	20.0	16.3		ug/L		82	75 - 127
Bromoform	20.0	19.0		ug/L		95	80 - 120
Bromomethane	20.0	19.1		ug/L		96	65 - 132
cis-1,2-Dichloroethene	20.0	20.4		ug/L		102	78 - 120
1,1-Dichloropropene	20.0	21.4		ug/L		107	77 - 120
cis-1,3-Dichloropropene	20.0	20.8		ug/L		104	80 - 131
Carbon disulfide	20.0	20.6		ug/L		103	65 - 121
Carbon tetrachloride	20.0	20.8		ug/L		104	78 - 124
2-Hexanone	50.0	50.2		ug/L		100	54 - 128
Chlorobenzene	20.0	20.0		ug/L		100	78 - 120
Chloroethane	20.0	20.2		ug/L		101	65 - 123
Chloroform	20.0	20.3		ug/L		102	80 - 120
4-Methyl-2-pentanone (MIBK)	50.0	47.5		ug/L		95	64 - 128
Chloromethane	20.0	18.1		ug/L		90	62 - 129
Dibromochloromethane	20.0	19.5		ug/L		98	80 - 122
Dibromomethane	20.0	19.9		ug/L		99	80 - 121
Dichlorodifluoromethane	20.0	16.1		ug/L		81	39 - 161
Ethylbenzene	20.0	20.5		ug/L		103	80 - 120
1,1,1,2-Tetrachloroethane	20.0	19.8		ug/L		99	79 - 120
Hexachlorobutadiene	20.0	20.5		ug/L		102	69 - 120
1,1,2,2-Tetrachloroethane	20.0	20.3		ug/L		101	74 - 137
Isopropylbenzene	20.0	21.2		ug/L		106	80 - 121
Methylene Chloride	20.0	20.4		ug/L		102	77 - 120
Methyl tert-butyl ether	20.0	20.6		ug/L		103	71 - 125
1,2,3-Trichlorobenzene	20.0	17.5		ug/L		88	47 - 162
Naphthalene	20.0	19.2		ug/L		96	56 - 143
1,2,4-Trichlorobenzene	20.0	18.1		ug/L		91	61 - 130
n-Butylbenzene	20.0	20.6		ug/L		103	72 - 120
1,1,1-Trichloroethane	20.0	20.7		ug/L		103	79 - 121
N-Propylbenzene	20.0	20.8		ug/L		104	76 - 120
1,1,2-Trichloroethane	20.0	21.2		ug/L		106	79 - 127
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	19.9		ug/L		99	64 - 125
p-Isopropyltoluene	20.0	20.6		ug/L		103	76 - 120
sec-Butylbenzene	20.0	20.5		ug/L		102	77 - 120
1,2,3-Trichloropropane	20.0	20.2		ug/L		101	73 - 120
Styrene	20.0	21.9		ug/L		110	80 - 120
1,2,4-Trimethylbenzene	20.0	20.2		ug/L		101	76 - 120
trans-1,2-Dichloroethene	20.0	21.4		ug/L		107	76 - 120
1,3,5-Trimethylbenzene	20.0	20.1		ug/L		101	79 - 120
trans-1,3-Dichloropropene	20.0	20.5		ug/L		103	75 - 133
tert-Butylbenzene	20.0	20.1		ug/L		100	78 - 120
Tetrachloroethene	20.0	20.0		ug/L		100	74 - 120
m-Xylene & p-Xylene	20.0	21.0		ug/L		105	80 - 121
Toluene	20.0	21.1		ug/L		105	79 - 126
o-Xylene	20.0	20.9		ug/L		104	80 - 124
Xylenes, Total	40.0	41.9		ug/L		105	80 - 123

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-541535/4
Matrix: Water
Analysis Batch: 541535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Trichloroethene			20.0	20.5		ug/L		102	74 - 120		
Trichlorofluoromethane			20.0	20.3		ug/L		102	60 - 135		
Vinyl acetate			20.0	24.1		ug/L		121	64 - 136		
Vinyl chloride			20.0	18.8		ug/L		94	68 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*74 - 120*
1,2-Dichloroethane-d4 (Surr)	*104*		*72 - 123*
Toluene-d8 (Surr)	*106*		*78 - 120*
Dibromofluoromethane (Surr)	*118*		*80 - 123*

Lab Sample ID: LCSD 320-541535/5
Matrix: Water
Analysis Batch: 541535

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			20.0	18.4		ug/L		92	66 - 121	5	33
1,2-Dibromoethane (EDB)			20.0	20.0		ug/L		100	78 - 120	1	15
1,2-Dichlorobenzene			20.0	19.0		ug/L		95	77 - 120	2	19
1,3-Dichlorobenzene			20.0	19.1		ug/L		95	78 - 120	2	17
2-Butanone (MEK)			50.0	46.9		ug/L		94	66 - 129	1	34
1,4-Dichlorobenzene			20.0	19.1		ug/L		95	74 - 120	2	15
2-Chlorotoluene			20.0	19.5		ug/L		98	79 - 120	3	19
1,1-Dichloroethane			20.0	19.4		ug/L		97	79 - 120	6	21
4-Chlorotoluene			20.0	20.1		ug/L		101	80 - 121	0	19
1,2-Dichloroethane			20.0	19.2		ug/L		96	77 - 128	3	25
Acetone			50.0	53.7		ug/L		107	55 - 145	7	49
Benzene			20.0	19.7		ug/L		98	79 - 120	4	21
1,1-Dichloroethene			20.0	20.1		ug/L		100	74 - 120	7	22
Bromobenzene			20.0	19.4		ug/L		97	80 - 120	1	17
1,2-Dichloropropane			20.0	20.5		ug/L		103	75 - 125	1	27
Bromochloromethane			20.0	19.1		ug/L		95	80 - 120	2	19
1,3-Dichloropropane			20.0	19.8		ug/L		99	79 - 120	2	15
Bromodichloromethane			20.0	19.4		ug/L		97	80 - 124	3	20
2,2-Dichloropropane			20.0	14.9		ug/L		75	75 - 127	9	25
Bromoform			20.0	18.4		ug/L		92	80 - 120	3	16
Bromomethane			20.0	15.8		ug/L		79	65 - 132	19	40
cis-1,2-Dichloroethene			20.0	19.6		ug/L		98	78 - 120	4	18
1,1-Dichloropropene			20.0	20.5		ug/L		102	77 - 120	4	20
cis-1,3-Dichloropropene			20.0	19.9		ug/L		100	80 - 131	4	24
Carbon disulfide			20.0	18.8		ug/L		94	65 - 121	9	26
Carbon tetrachloride			20.0	19.4		ug/L		97	78 - 124	7	25
2-Hexanone			50.0	50.8		ug/L		102	54 - 128	1	31
Chlorobenzene			20.0	19.9		ug/L		99	78 - 120	1	15
Chloroethane			20.0	15.9		ug/L		79	65 - 123	24	40
Chloroform			20.0	19.4		ug/L		97	80 - 120	4	22
4-Methyl-2-pentanone (MIBK)			50.0	47.2		ug/L		94	64 - 128	1	33
Chloromethane			20.0	17.4		ug/L		87	62 - 129	4	25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 320-541535/5
Matrix: Water
Analysis Batch: 541535

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibromochloromethane			20.0	19.5		ug/L		97	80 - 122	0	17
Dibromomethane			20.0	19.5		ug/L		97	80 - 121	2	17
Dichlorodifluoromethane			20.0	15.2		ug/L		76	39 - 161	6	51
Ethylbenzene			20.0	20.3		ug/L		101	80 - 120	1	15
1,1,1,2-Tetrachloroethane			20.0	19.7		ug/L		99	79 - 120	1	23
Hexachlorobutadiene			20.0	19.4		ug/L		97	69 - 120	6	30
1,1,2,2-Tetrachloroethane			20.0	18.8		ug/L		94	74 - 137	7	27
Isopropylbenzene			20.0	20.5		ug/L		102	80 - 121	4	17
Methylene Chloride			20.0	19.6		ug/L		98	77 - 120	4	20
Methyl tert-butyl ether			20.0	19.8		ug/L		99	71 - 125	4	24
1,2,3-Trichlorobenzene			20.0	17.6		ug/L		88	47 - 162	1	45
Naphthalene			20.0	19.9		ug/L		99	56 - 143	3	48
1,2,4-Trichlorobenzene			20.0	18.0		ug/L		90	61 - 130	0	40
n-Butylbenzene			20.0	19.9		ug/L		100	72 - 120	3	25
1,1,1-Trichloroethane			20.0	19.3		ug/L		97	79 - 121	7	25
N-Propylbenzene			20.0	20.4		ug/L		102	76 - 120	2	26
1,1,2-Trichloroethane			20.0	20.7		ug/L		103	79 - 127	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane			20.0	18.5		ug/L		93	64 - 125	7	40
p-Isopropyltoluene			20.0	19.6		ug/L		98	76 - 120	5	18
sec-Butylbenzene			20.0	19.5		ug/L		97	77 - 120	5	19
1,2,3-Trichloropropane			20.0	19.7		ug/L		99	73 - 120	2	22
Styrene			20.0	21.9		ug/L		110	80 - 120	0	15
1,2,4-Trimethylbenzene			20.0	19.6		ug/L		98	76 - 120	3	17
trans-1,2-Dichloroethene			20.0	20.2		ug/L		101	76 - 120	6	20
1,3,5-Trimethylbenzene			20.0	19.5		ug/L		97	79 - 120	3	20
trans-1,3-Dichloropropene			20.0	20.1		ug/L		101	75 - 133	2	29
tert-Butylbenzene			20.0	19.3		ug/L		96	78 - 120	4	19
Tetrachloroethene			20.0	19.4		ug/L		97	74 - 120	3	18
m-Xylene & p-Xylene			20.0	20.5		ug/L		102	80 - 121	2	15
Toluene			20.0	20.2		ug/L		101	79 - 126	4	20
o-Xylene			20.0	20.7		ug/L		104	80 - 124	1	18
Xylenes, Total			40.0	41.2		ug/L		103	80 - 123	2	16
Trichloroethene			20.0	20.4		ug/L		102	74 - 120	0	20
Trichlorofluoromethane			20.0	18.8		ug/L		94	60 - 135	8	41
Vinyl acetate			20.0	21.5		ug/L		108	64 - 136	11	30
Vinyl chloride			20.0	17.7		ug/L		89	68 - 121	6	33

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*74 - 120*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 123*
Toluene-d8 (Surr)	*103*		*78 - 120*
Dibromofluoromethane (Surr)	*112*		*80 - 123*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 320-541763/10
Matrix: Solid
Analysis Batch: 541763

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	0.88	ug/Kg			11/11/21 10:25	1
Ethylene Dibromide	ND		10	0.27	ug/Kg			11/11/21 10:25	1
1,2-Dichlorobenzene	ND		5.0	0.64	ug/Kg			11/11/21 10:25	1
1,3-Dichlorobenzene	ND		5.0	0.30	ug/Kg			11/11/21 10:25	1
2-Butanone (MEK)	ND		10	1.4	ug/Kg			11/11/21 10:25	1
1,4-Dichlorobenzene	ND		5.0	0.78	ug/Kg			11/11/21 10:25	1
2-Chlorotoluene	ND		5.0	0.62	ug/Kg			11/11/21 10:25	1
1,1-Dichloroethane	ND		5.0	0.29	ug/Kg			11/11/21 10:25	1
4-Chlorotoluene	ND		5.0	0.86	ug/Kg			11/11/21 10:25	1
1,2-Dichloroethane	ND		5.0	0.73	ug/Kg			11/11/21 10:25	1
Acetone	ND		20	1.4	ug/Kg			11/11/21 10:25	1
Benzene	ND		5.0	0.26	ug/Kg			11/11/21 10:25	1
1,1-Dichloroethene	ND		5.0	0.26	ug/Kg			11/11/21 10:25	1
Bromobenzene	ND		5.0	0.52	ug/Kg			11/11/21 10:25	1
1,2-Dichloropropane	ND		5.0	0.60	ug/Kg			11/11/21 10:25	1
Chlorobromomethane	ND		5.0	0.94	ug/Kg			11/11/21 10:25	1
1,3-Dichloropropane	ND		5.0	0.57	ug/Kg			11/11/21 10:25	1
Dichlorobromomethane	ND		5.0	0.53	ug/Kg			11/11/21 10:25	1
2,2-Dichloropropane	ND		5.0	0.38	ug/Kg			11/11/21 10:25	1
Bromoform	ND		5.0	0.40	ug/Kg			11/11/21 10:25	1
Bromomethane	ND		5.0	0.86	ug/Kg			11/11/21 10:25	1
cis-1,2-Dichloroethene	ND		5.0	0.89	ug/Kg			11/11/21 10:25	1
1,1-Dichloropropene	ND		5.0	0.37	ug/Kg			11/11/21 10:25	1
cis-1,3-Dichloropropene	ND		5.0	0.64	ug/Kg			11/11/21 10:25	1
Carbon disulfide	ND		10	0.49	ug/Kg			11/11/21 10:25	1
Carbon tetrachloride	ND		5.0	0.53	ug/Kg			11/11/21 10:25	1
2-Hexanone	ND		10	0.74	ug/Kg			11/11/21 10:25	1
Chlorobenzene	ND		5.0	0.29	ug/Kg			11/11/21 10:25	1
Chloroethane	ND		5.0	0.45	ug/Kg			11/11/21 10:25	1
Chloroform	ND		5.0	0.26	ug/Kg			11/11/21 10:25	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.92	ug/Kg			11/11/21 10:25	1
Chloromethane	ND		5.0	0.50	ug/Kg			11/11/21 10:25	1
Chlorodibromomethane	ND		5.0	0.21	ug/Kg			11/11/21 10:25	1
Dibromomethane	ND		5.0	0.58	ug/Kg			11/11/21 10:25	1
Dichlorodifluoromethane	ND		5.0	0.89	ug/Kg			11/11/21 10:25	1
Ethylbenzene	ND		5.0	0.34	ug/Kg			11/11/21 10:25	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.41	ug/Kg			11/11/21 10:25	1
Hexachlorobutadiene	ND		5.0	0.33	ug/Kg			11/11/21 10:25	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.68	ug/Kg			11/11/21 10:25	1
Isopropylbenzene	ND		5.0	0.52	ug/Kg			11/11/21 10:25	1
Methylene Chloride	ND		10	0.84	ug/Kg			11/11/21 10:25	1
Methyl tert-butyl ether	ND		10	0.60	ug/Kg			11/11/21 10:25	1
1,2,3-Trichlorobenzene	ND		5.0	0.75	ug/Kg			11/11/21 10:25	1
Naphthalene	0.738	J	5.0	0.63	ug/Kg			11/11/21 10:25	1
1,2,4-Trichlorobenzene	ND		5.0	0.75	ug/Kg			11/11/21 10:25	1
n-Butylbenzene	ND		5.0	0.66	ug/Kg			11/11/21 10:25	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			11/11/21 10:25	1
N-Propylbenzene	ND		5.0	0.29	ug/Kg			11/11/21 10:25	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 320-541763/10
Matrix: Solid
Analysis Batch: 541763

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	0.44	ug/Kg			11/11/21 10:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.83	ug/Kg			11/11/21 10:25	1
4-Isopropyltoluene	ND		5.0	0.63	ug/Kg			11/11/21 10:25	1
sec-Butylbenzene	ND		5.0	0.75	ug/Kg			11/11/21 10:25	1
1,2,3-Trichloropropane	ND		5.0	0.76	ug/Kg			11/11/21 10:25	1
Styrene	ND		5.0	0.31	ug/Kg			11/11/21 10:25	1
1,2,4-Trimethylbenzene	ND		5.0	0.51	ug/Kg			11/11/21 10:25	1
trans-1,2-Dichloroethene	ND		5.0	0.38	ug/Kg			11/11/21 10:25	1
1,3,5-Trimethylbenzene	ND		5.0	0.35	ug/Kg			11/11/21 10:25	1
trans-1,3-Dichloropropene	ND		5.0	0.75	ug/Kg			11/11/21 10:25	1
tert-Butylbenzene	ND		5.0	0.54	ug/Kg			11/11/21 10:25	1
Tetrachloroethene	ND		5.0	0.61	ug/Kg			11/11/21 10:25	1
m-Xylene & p-Xylene	ND		5.0	0.81	ug/Kg			11/11/21 10:25	1
Toluene	ND		5.0	0.61	ug/Kg			11/11/21 10:25	1
o-Xylene	ND		5.0	0.33	ug/Kg			11/11/21 10:25	1
Xylenes, Total	ND		5.0	0.81	ug/Kg			11/11/21 10:25	1
Trichloroethene	ND		5.0	0.60	ug/Kg			11/11/21 10:25	1
Trichlorofluoromethane	ND		5.0	0.34	ug/Kg			11/11/21 10:25	1
Vinyl acetate	ND		10	0.69	ug/Kg			11/11/21 10:25	1
Vinyl chloride	ND		5.0	0.36	ug/Kg			11/11/21 10:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*63 - 143*		*11/11/21 10:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*32 - 156*		*11/11/21 10:25*	*1*
Toluene-d8 (Surr)	*97*		*63 - 138*		*11/11/21 10:25*	*1*
Dibromofluoromethane (Surr)	*93*		*55 - 129*		*11/11/21 10:25*	*1*

Lab Sample ID: LCS 320-541763/7
Matrix: Solid
Analysis Batch: 541763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	50.0	50.6		ug/Kg		101	75 - 137
Ethylene Dibromide	50.0	50.5		ug/Kg		101	80 - 124
1,2-Dichlorobenzene	50.0	50.9		ug/Kg		102	68 - 121
1,3-Dichlorobenzene	50.0	50.9		ug/Kg		102	64 - 126
2-Butanone (MEK)	125	131		ug/Kg		105	71 - 142
1,4-Dichlorobenzene	50.0	50.6		ug/Kg		101	65 - 124
2-Chlorotoluene	50.0	51.2		ug/Kg		102	64 - 127
1,1-Dichloroethane	50.0	48.0		ug/Kg		96	76 - 134
4-Chlorotoluene	50.0	51.4		ug/Kg		103	67 - 128
1,2-Dichloroethane	50.0	49.2		ug/Kg		98	66 - 150
Acetone	125	118		ug/Kg		95	64 - 128
Benzene	50.0	48.3		ug/Kg		97	78 - 128
1,1-Dichloroethene	50.0	49.2		ug/Kg		98	66 - 136
Bromobenzene	50.0	50.9		ug/Kg		102	67 - 132
1,2-Dichloropropane	50.0	47.6		ug/Kg		95	80 - 129
Chlorobromomethane	50.0	47.3		ug/Kg		95	80 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-541763/7
Matrix: Solid
Analysis Batch: 541763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	50.0	50.7		ug/Kg		101	80 - 123
Dichlorobromomethane	50.0	49.5		ug/Kg		99	80 - 137
2,2-Dichloropropane	50.0	49.4		ug/Kg		99	69 - 153
Bromoform	50.0	52.3		ug/Kg		105	80 - 136
Bromomethane	50.0	48.1		ug/Kg		96	48 - 164
cis-1,2-Dichloroethene	50.0	47.4		ug/Kg		95	74 - 131
1,1-Dichloropropene	50.0	50.8		ug/Kg		102	76 - 132
cis-1,3-Dichloropropene	50.0	50.8		ug/Kg		102	80 - 134
Carbon disulfide	50.0	48.6		ug/Kg		97	52 - 145
Carbon tetrachloride	50.0	51.8		ug/Kg		104	62 - 154
2-Hexanone	125	126		ug/Kg		101	78 - 143
Chlorobenzene	50.0	50.1		ug/Kg		100	74 - 125
Chloroethane	50.0	47.9		ug/Kg		96	54 - 148
Chloroform	50.0	48.7		ug/Kg		97	78 - 135
4-Methyl-2-pentanone (MIBK)	125	126		ug/Kg		101	79 - 150
Chloromethane	50.0	44.6		ug/Kg		89	60 - 141
Chlorodibromomethane	50.0	51.5		ug/Kg		103	80 - 133
Dibromomethane	50.0	48.0		ug/Kg		96	80 - 129
Dichlorodifluoromethane	50.0	50.8		ug/Kg		102	60 - 130
Ethylbenzene	50.0	50.3		ug/Kg		101	72 - 125
1,1,1,2-Tetrachloroethane	50.0	50.1		ug/Kg		100	77 - 134
Hexachlorobutadiene	50.0	55.8		ug/Kg		112	52 - 140
1,1,2,2-Tetrachloroethane	50.0	51.8		ug/Kg		104	71 - 134
Isopropylbenzene	50.0	51.4		ug/Kg		103	69 - 137
Methylene Chloride	50.0	50.7		ug/Kg		101	77 - 125
Methyl tert-butyl ether	50.0	49.2		ug/Kg		98	66 - 146
1,2,3-Trichlorobenzene	50.0	51.7		ug/Kg		103	54 - 140
Naphthalene	50.0	50.5		ug/Kg		101	53 - 140
1,2,4-Trichlorobenzene	50.0	52.3		ug/Kg		105	48 - 145
n-Butylbenzene	50.0	53.4		ug/Kg		107	68 - 136
1,1,1-Trichloroethane	50.0	51.0		ug/Kg		102	67 - 150
N-Propylbenzene	50.0	52.5		ug/Kg		105	63 - 128
1,1,2-Trichloroethane	50.0	48.3		ug/Kg		97	80 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.4		ug/Kg		103	62 - 138
4-Isopropyltoluene	50.0	53.4		ug/Kg		107	64 - 137
sec-Butylbenzene	50.0	53.9		ug/Kg		108	68 - 131
1,2,3-Trichloropropane	50.0	50.4		ug/Kg		101	71 - 132
Styrene	50.0	50.3		ug/Kg		101	79 - 128
1,2,4-Trimethylbenzene	50.0	51.8		ug/Kg		104	64 - 137
trans-1,2-Dichloroethene	50.0	48.7		ug/Kg		97	67 - 135
1,3,5-Trimethylbenzene	50.0	52.6		ug/Kg		105	66 - 135
trans-1,3-Dichloropropene	50.0	50.1		ug/Kg		100	80 - 148
tert-Butylbenzene	50.0	54.0		ug/Kg		108	67 - 131
Tetrachloroethene	50.0	52.0		ug/Kg		104	65 - 135
m-Xylene & p-Xylene	50.0	49.6		ug/Kg		99	73 - 128
Toluene	50.0	49.4		ug/Kg		99	80 - 124
o-Xylene	50.0	49.8		ug/Kg		100	76 - 127
Xylenes, Total	100	99.4		ug/Kg		99	75 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-541763/7
Matrix: Solid
Analysis Batch: 541763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	50.0	49.5		ug/Kg		99	80 - 126
Trichlorofluoromethane	50.0	50.1		ug/Kg		100	43 - 158
Vinyl acetate	50.0	48.7		ug/Kg		97	39 - 160
Vinyl chloride	50.0	48.6		ug/Kg		97	67 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*63 - 143*
1,2-Dichloroethane-d4 (Surr)	*94*		*32 - 156*
Toluene-d8 (Surr)	*99*		*63 - 138*
Dibromofluoromethane (Surr)	*96*		*55 - 129*

Lab Sample ID: LCSD 320-541763/8
Matrix: Solid
Analysis Batch: 541763

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	50.0	48.7		ug/Kg		97	75 - 137	4	48
Ethylene Dibromide	50.0	51.6		ug/Kg		103	80 - 124	2	39
1,2-Dichlorobenzene	50.0	49.4		ug/Kg		99	68 - 121	3	28
1,3-Dichlorobenzene	50.0	49.1		ug/Kg		98	64 - 126	4	41
2-Butanone (MEK)	125	124		ug/Kg		99	71 - 142	6	44
1,4-Dichlorobenzene	50.0	49.3		ug/Kg		99	65 - 124	3	38
2-Chlorotoluene	50.0	49.9		ug/Kg		100	64 - 127	2	41
1,1-Dichloroethane	50.0	47.2		ug/Kg		94	76 - 134	2	24
4-Chlorotoluene	50.0	49.5		ug/Kg		99	67 - 128	4	40
1,2-Dichloroethane	50.0	49.2		ug/Kg		98	66 - 150	0	36
Acetone	125	122		ug/Kg		98	64 - 128	3	36
Benzene	50.0	47.6		ug/Kg		95	78 - 128	1	37
1,1-Dichloroethene	50.0	46.4		ug/Kg		93	66 - 136	6	42
Bromobenzene	50.0	49.9		ug/Kg		100	67 - 132	2	40
1,2-Dichloropropane	50.0	47.2		ug/Kg		94	80 - 129	1	38
Chlorobromomethane	50.0	48.8		ug/Kg		98	80 - 127	3	36
1,3-Dichloropropane	50.0	50.3		ug/Kg		101	80 - 123	1	39
Dichlorobromomethane	50.0	49.2		ug/Kg		98	80 - 137	1	37
2,2-Dichloropropane	50.0	49.4		ug/Kg		99	69 - 153	0	47
Bromoform	50.0	52.6		ug/Kg		105	80 - 136	0	45
Bromomethane	50.0	47.8		ug/Kg		96	48 - 164	1	38
cis-1,2-Dichloroethene	50.0	47.0		ug/Kg		94	74 - 131	1	37
1,1-Dichloropropene	50.0	48.1		ug/Kg		96	76 - 132	5	38
cis-1,3-Dichloropropene	50.0	50.0		ug/Kg		100	80 - 134	2	39
Carbon disulfide	50.0	46.6		ug/Kg		93	52 - 145	4	46
Carbon tetrachloride	50.0	49.9		ug/Kg		100	62 - 154	4	43
2-Hexanone	125	127		ug/Kg		101	78 - 143	0	73
Chlorobenzene	50.0	49.1		ug/Kg		98	74 - 125	2	38
Chloroethane	50.0	46.9		ug/Kg		94	54 - 148	2	34
Chloroform	50.0	47.9		ug/Kg		96	78 - 135	2	23
4-Methyl-2-pentanone (MIBK)	125	126		ug/Kg		101	79 - 150	0	48
Chloromethane	50.0	41.9		ug/Kg		84	60 - 141	6	36

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 320-541763/8
Matrix: Solid
Analysis Batch: 541763

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorodibromomethane			50.0	52.4		ug/Kg		105	80 - 133	2	24
Dibromomethane			50.0	47.8		ug/Kg		96	80 - 129	0	37
Dichlorodifluoromethane			50.0	49.6		ug/Kg		99	60 - 130	2	46
Ethylbenzene			50.0	49.1		ug/Kg		98	72 - 125	2	41
1,1,1,2-Tetrachloroethane			50.0	50.5		ug/Kg		101	77 - 134	1	25
Hexachlorobutadiene			50.0	50.3		ug/Kg		101	52 - 140	10	38
1,1,2,2-Tetrachloroethane			50.0	51.5		ug/Kg		103	71 - 134	1	31
Isopropylbenzene			50.0	49.8		ug/Kg		100	69 - 137	3	41
Methylene Chloride			50.0	50.5		ug/Kg		101	77 - 125	0	25
Methyl tert-butyl ether			50.0	48.0		ug/Kg		96	66 - 146	2	45
1,2,3-Trichlorobenzene			50.0	49.7		ug/Kg		99	54 - 140	4	42
Naphthalene			50.0	48.7		ug/Kg		97	53 - 140	4	46
1,2,4-Trichlorobenzene			50.0	50.3		ug/Kg		101	48 - 145	4	39
n-Butylbenzene			50.0	49.9		ug/Kg		100	68 - 136	7	37
1,1,1-Trichloroethane			50.0	49.4		ug/Kg		99	67 - 150	3	43
N-Propylbenzene			50.0	49.6		ug/Kg		99	63 - 128	6	42
1,1,2-Trichloroethane			50.0	48.8		ug/Kg		98	80 - 128	1	41
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	47.8		ug/Kg		96	62 - 138	7	22
4-Isopropyltoluene			50.0	50.4		ug/Kg		101	64 - 137	6	40
sec-Butylbenzene			50.0	50.7		ug/Kg		101	68 - 131	6	40
1,2,3-Trichloropropane			50.0	49.3		ug/Kg		99	71 - 132	2	41
Styrene			50.0	50.2		ug/Kg		100	79 - 128	0	40
1,2,4-Trimethylbenzene			50.0	49.9		ug/Kg		100	64 - 137	4	41
trans-1,2-Dichloroethene			50.0	47.6		ug/Kg		95	67 - 135	2	37
1,3,5-Trimethylbenzene			50.0	50.2		ug/Kg		100	66 - 135	5	42
trans-1,3-Dichloropropene			50.0	49.9		ug/Kg		100	80 - 148	0	42
tert-Butylbenzene			50.0	50.9		ug/Kg		102	67 - 131	6	42
Tetrachloroethene			50.0	49.8		ug/Kg		100	65 - 135	4	39
m-Xylene & p-Xylene			50.0	48.7		ug/Kg		97	73 - 128	2	40
Toluene			50.0	48.1		ug/Kg		96	80 - 124	3	39
o-Xylene			50.0	49.1		ug/Kg		98	76 - 127	1	40
Xylenes, Total			100	97.8		ug/Kg		98	75 - 122	2	15
Trichloroethene			50.0	46.8		ug/Kg		94	80 - 126	6	40
Trichlorofluoromethane			50.0	47.5		ug/Kg		95	43 - 158	5	32
Vinyl acetate			50.0	48.7		ug/Kg		97	39 - 160	0	50
Vinyl chloride			50.0	46.8		ug/Kg		94	67 - 127	4	37

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*63 - 143*
1,2-Dichloroethane-d4 (Surr)	*94*		*32 - 156*
Toluene-d8 (Surr)	*100*		*63 - 138*
Dibromofluoromethane (Surr)	*97*		*55 - 129*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 320-542091/10
Matrix: Solid
Analysis Batch: 542091

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	0.88	ug/Kg			11/12/21 09:09	1
Ethylene Dibromide	ND		10	0.27	ug/Kg			11/12/21 09:09	1
1,2-Dichlorobenzene	ND		5.0	0.64	ug/Kg			11/12/21 09:09	1
1,3-Dichlorobenzene	ND		5.0	0.30	ug/Kg			11/12/21 09:09	1
2-Butanone (MEK)	ND		10	1.4	ug/Kg			11/12/21 09:09	1
1,4-Dichlorobenzene	ND		5.0	0.78	ug/Kg			11/12/21 09:09	1
2-Chlorotoluene	ND		5.0	0.62	ug/Kg			11/12/21 09:09	1
1,1-Dichloroethane	ND		5.0	0.29	ug/Kg			11/12/21 09:09	1
4-Chlorotoluene	ND		5.0	0.86	ug/Kg			11/12/21 09:09	1
1,2-Dichloroethane	ND		5.0	0.73	ug/Kg			11/12/21 09:09	1
Acetone	ND		20	1.4	ug/Kg			11/12/21 09:09	1
Benzene	ND		5.0	0.26	ug/Kg			11/12/21 09:09	1
1,1-Dichloroethene	ND		5.0	0.26	ug/Kg			11/12/21 09:09	1
Bromobenzene	ND		5.0	0.52	ug/Kg			11/12/21 09:09	1
1,2-Dichloropropane	ND		5.0	0.60	ug/Kg			11/12/21 09:09	1
Chlorobromomethane	ND		5.0	0.94	ug/Kg			11/12/21 09:09	1
1,3-Dichloropropane	ND		5.0	0.57	ug/Kg			11/12/21 09:09	1
Dichlorobromomethane	ND		5.0	0.53	ug/Kg			11/12/21 09:09	1
2,2-Dichloropropane	ND		5.0	0.38	ug/Kg			11/12/21 09:09	1
Bromoform	ND		5.0	0.40	ug/Kg			11/12/21 09:09	1
Bromomethane	ND		5.0	0.86	ug/Kg			11/12/21 09:09	1
cis-1,2-Dichloroethene	ND		5.0	0.89	ug/Kg			11/12/21 09:09	1
1,1-Dichloropropene	ND		5.0	0.37	ug/Kg			11/12/21 09:09	1
cis-1,3-Dichloropropene	ND		5.0	0.64	ug/Kg			11/12/21 09:09	1
Carbon disulfide	ND		10	0.49	ug/Kg			11/12/21 09:09	1
Carbon tetrachloride	ND		5.0	0.53	ug/Kg			11/12/21 09:09	1
2-Hexanone	ND		10	0.74	ug/Kg			11/12/21 09:09	1
Chlorobenzene	ND		5.0	0.29	ug/Kg			11/12/21 09:09	1
Chloroethane	ND		5.0	0.45	ug/Kg			11/12/21 09:09	1
Chloroform	ND		5.0	0.26	ug/Kg			11/12/21 09:09	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.92	ug/Kg			11/12/21 09:09	1
Chloromethane	ND		5.0	0.50	ug/Kg			11/12/21 09:09	1
Chlorodibromomethane	ND		5.0	0.21	ug/Kg			11/12/21 09:09	1
Dibromomethane	ND		5.0	0.58	ug/Kg			11/12/21 09:09	1
Dichlorodifluoromethane	ND		5.0	0.89	ug/Kg			11/12/21 09:09	1
Ethylbenzene	ND		5.0	0.34	ug/Kg			11/12/21 09:09	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.41	ug/Kg			11/12/21 09:09	1
Hexachlorobutadiene	ND		5.0	0.33	ug/Kg			11/12/21 09:09	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.68	ug/Kg			11/12/21 09:09	1
Isopropylbenzene	ND		5.0	0.52	ug/Kg			11/12/21 09:09	1
Methylene Chloride	ND		10	0.84	ug/Kg			11/12/21 09:09	1
Methyl tert-butyl ether	ND		10	0.60	ug/Kg			11/12/21 09:09	1
1,2,3-Trichlorobenzene	ND		5.0	0.75	ug/Kg			11/12/21 09:09	1
Naphthalene	1.21	J	5.0	0.63	ug/Kg			11/12/21 09:09	1
1,2,4-Trichlorobenzene	ND		5.0	0.75	ug/Kg			11/12/21 09:09	1
n-Butylbenzene	ND		5.0	0.66	ug/Kg			11/12/21 09:09	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			11/12/21 09:09	1
N-Propylbenzene	ND		5.0	0.29	ug/Kg			11/12/21 09:09	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 320-542091/10
Matrix: Solid
Analysis Batch: 542091

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	0.44	ug/Kg			11/12/21 09:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.83	ug/Kg			11/12/21 09:09	1
4-Isopropyltoluene	ND		5.0	0.63	ug/Kg			11/12/21 09:09	1
sec-Butylbenzene	ND		5.0	0.75	ug/Kg			11/12/21 09:09	1
1,2,3-Trichloropropane	ND		5.0	0.76	ug/Kg			11/12/21 09:09	1
Styrene	ND		5.0	0.31	ug/Kg			11/12/21 09:09	1
1,2,4-Trimethylbenzene	ND		5.0	0.51	ug/Kg			11/12/21 09:09	1
trans-1,2-Dichloroethene	ND		5.0	0.38	ug/Kg			11/12/21 09:09	1
1,3,5-Trimethylbenzene	ND		5.0	0.35	ug/Kg			11/12/21 09:09	1
trans-1,3-Dichloropropene	ND		5.0	0.75	ug/Kg			11/12/21 09:09	1
tert-Butylbenzene	ND		5.0	0.54	ug/Kg			11/12/21 09:09	1
Tetrachloroethene	ND		5.0	0.61	ug/Kg			11/12/21 09:09	1
m-Xylene & p-Xylene	ND		5.0	0.81	ug/Kg			11/12/21 09:09	1
Toluene	ND		5.0	0.61	ug/Kg			11/12/21 09:09	1
o-Xylene	ND		5.0	0.33	ug/Kg			11/12/21 09:09	1
Xylenes, Total	ND		5.0	0.81	ug/Kg			11/12/21 09:09	1
Trichloroethene	ND		5.0	0.60	ug/Kg			11/12/21 09:09	1
Trichlorofluoromethane	ND		5.0	0.34	ug/Kg			11/12/21 09:09	1
Vinyl acetate	ND		10	0.69	ug/Kg			11/12/21 09:09	1
Vinyl chloride	ND		5.0	0.36	ug/Kg			11/12/21 09:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*63 - 143*		*11/12/21 09:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*32 - 156*		*11/12/21 09:09*	*1*
Toluene-d8 (Surr)	*115*		*63 - 138*		*11/12/21 09:09*	*1*
Dibromofluoromethane (Surr)	*106*		*55 - 129*		*11/12/21 09:09*	*1*

Lab Sample ID: LCS 320-542091/7
Matrix: Solid
Analysis Batch: 542091

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	50.0	47.9		ug/Kg		96	75 - 137
Ethylene Dibromide	50.0	50.5		ug/Kg		101	80 - 124
1,2-Dichlorobenzene	50.0	46.4		ug/Kg		93	68 - 121
1,3-Dichlorobenzene	50.0	48.2		ug/Kg		96	64 - 126
2-Butanone (MEK)	125	98.7		ug/Kg		79	71 - 142
1,4-Dichlorobenzene	50.0	47.9		ug/Kg		96	65 - 124
2-Chlorotoluene	50.0	48.9		ug/Kg		98	64 - 127
1,1-Dichloroethane	50.0	46.5		ug/Kg		93	76 - 134
4-Chlorotoluene	50.0	50.2		ug/Kg		100	67 - 128
1,2-Dichloroethane	50.0	47.7		ug/Kg		95	66 - 150
Acetone	125	95.9		ug/Kg		77	64 - 128
Benzene	50.0	46.3		ug/Kg		93	78 - 128
1,1-Dichloroethene	50.0	41.8		ug/Kg		84	66 - 136
Bromobenzene	50.0	49.7		ug/Kg		99	67 - 132
1,2-Dichloropropane	50.0	48.2		ug/Kg		96	80 - 129
Chlorobromomethane	50.0	42.6		ug/Kg		85	80 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-542091/7
Matrix: Solid
Analysis Batch: 542091

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	50.0	50.5		ug/Kg		101	80 - 123
Dichlorobromomethane	50.0	48.6		ug/Kg		97	80 - 137
2,2-Dichloropropane	50.0	48.0		ug/Kg		96	69 - 153
Bromoform	50.0	48.4		ug/Kg		97	80 - 136
Bromomethane	50.0	46.0		ug/Kg		92	48 - 164
cis-1,2-Dichloroethene	50.0	43.7		ug/Kg		87	74 - 131
1,1-Dichloropropene	50.0	49.1		ug/Kg		98	76 - 132
cis-1,3-Dichloropropene	50.0	52.4		ug/Kg		105	80 - 134
Carbon disulfide	50.0	38.2		ug/Kg		76	52 - 145
Carbon tetrachloride	50.0	48.1		ug/Kg		96	62 - 154
2-Hexanone	125	117		ug/Kg		93	78 - 143
Chlorobenzene	50.0	47.9		ug/Kg		96	74 - 125
Chloroethane	50.0	44.3		ug/Kg		89	54 - 148
Chloroform	50.0	44.9		ug/Kg		90	78 - 135
4-Methyl-2-pentanone (MIBK)	125	103		ug/Kg		83	79 - 150
Chloromethane	50.0	47.3		ug/Kg		95	60 - 141
Chlorodibromomethane	50.0	48.7		ug/Kg		97	80 - 133
Dibromomethane	50.0	47.9		ug/Kg		96	80 - 129
Dichlorodifluoromethane	50.0	48.9		ug/Kg		98	60 - 130
Ethylbenzene	50.0	48.6		ug/Kg		97	72 - 125
1,1,1,2-Tetrachloroethane	50.0	46.2		ug/Kg		92	77 - 134
Hexachlorobutadiene	50.0	48.8		ug/Kg		98	52 - 140
1,1,2,2-Tetrachloroethane	50.0	50.1		ug/Kg		100	71 - 134
Isopropylbenzene	50.0	48.2		ug/Kg		96	69 - 137
Methylene Chloride	50.0	41.3		ug/Kg		83	77 - 125
Methyl tert-butyl ether	50.0	57.8		ug/Kg		116	66 - 146
1,2,3-Trichlorobenzene	50.0	51.0		ug/Kg		102	54 - 140
Naphthalene	50.0	50.8		ug/Kg		102	53 - 140
1,2,4-Trichlorobenzene	50.0	49.5		ug/Kg		99	48 - 145
n-Butylbenzene	50.0	50.5		ug/Kg		101	68 - 136
1,1,1-Trichloroethane	50.0	47.5		ug/Kg		95	67 - 150
N-Propylbenzene	50.0	51.0		ug/Kg		102	63 - 128
1,1,2-Trichloroethane	50.0	48.3		ug/Kg		97	80 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.5		ug/Kg		93	62 - 138
4-Isopropyltoluene	50.0	50.0		ug/Kg		100	64 - 137
sec-Butylbenzene	50.0	50.5		ug/Kg		101	68 - 131
1,2,3-Trichloropropane	50.0	48.9		ug/Kg		98	71 - 132
Styrene	50.0	49.1		ug/Kg		98	79 - 128
1,2,4-Trimethylbenzene	50.0	49.1		ug/Kg		98	64 - 137
trans-1,2-Dichloroethene	50.0	42.2		ug/Kg		84	67 - 135
1,3,5-Trimethylbenzene	50.0	49.7		ug/Kg		99	66 - 135
trans-1,3-Dichloropropene	50.0	55.0		ug/Kg		110	80 - 148
tert-Butylbenzene	50.0	50.6		ug/Kg		101	67 - 131
Tetrachloroethene	50.0	47.8		ug/Kg		96	65 - 135
m-Xylene & p-Xylene	50.0	48.7		ug/Kg		97	73 - 128
Toluene	50.0	47.9		ug/Kg		96	80 - 124
o-Xylene	50.0	46.8		ug/Kg		94	76 - 127
Xylenes, Total	100	95.5		ug/Kg		96	75 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-542091/7
Matrix: Solid
Analysis Batch: 542091

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Trichloroethene			50.0	48.4		ug/Kg		97	80 - 126		
Trichlorofluoromethane			50.0	49.1		ug/Kg		98	43 - 158		
Vinyl acetate			50.0	52.9		ug/Kg		106	39 - 160		
Vinyl chloride			50.0	50.7		ug/Kg		101	67 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*63 - 143*
1,2-Dichloroethane-d4 (Surr)	*105*		*32 - 156*
Toluene-d8 (Surr)	*121*		*63 - 138*
Dibromofluoromethane (Surr)	*106*		*55 - 129*

Lab Sample ID: LCSD 320-542091/8
Matrix: Solid
Analysis Batch: 542091

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			50.0	55.0		ug/Kg		110	75 - 137	14	48
Ethylene Dibromide			50.0	51.8		ug/Kg		104	80 - 124	2	39
1,2-Dichlorobenzene			50.0	47.7		ug/Kg		95	68 - 121	3	28
1,3-Dichlorobenzene			50.0	48.4		ug/Kg		97	64 - 126	0	41
2-Butanone (MEK)			125	99.4		ug/Kg		80	71 - 142	1	44
1,4-Dichlorobenzene			50.0	49.8		ug/Kg		100	65 - 124	4	38
2-Chlorotoluene			50.0	49.0		ug/Kg		98	64 - 127	0	41
1,1-Dichloroethane			50.0	45.5		ug/Kg		91	76 - 134	2	24
4-Chlorotoluene			50.0	51.0		ug/Kg		102	67 - 128	2	40
1,2-Dichloroethane			50.0	49.7		ug/Kg		99	66 - 150	4	36
Acetone			125	100		ug/Kg		80	64 - 128	4	36
Benzene			50.0	46.5		ug/Kg		93	78 - 128	0	37
1,1-Dichloroethene			50.0	41.0		ug/Kg		82	66 - 136	2	42
Bromobenzene			50.0	49.2		ug/Kg		98	67 - 132	1	40
1,2-Dichloropropane			50.0	49.3		ug/Kg		99	80 - 129	2	38
Chlorobromomethane			50.0	45.1		ug/Kg		90	80 - 127	6	36
1,3-Dichloropropane			50.0	52.5		ug/Kg		105	80 - 123	4	39
Dichlorobromomethane			50.0	48.8		ug/Kg		98	80 - 137	0	37
2,2-Dichloropropane			50.0	48.1		ug/Kg		96	69 - 153	0	47
Bromoform			50.0	52.1		ug/Kg		104	80 - 136	7	45
Bromomethane			50.0	47.0		ug/Kg		94	48 - 164	2	38
cis-1,2-Dichloroethene			50.0	44.0		ug/Kg		88	74 - 131	1	37
1,1-Dichloropropene			50.0	48.0		ug/Kg		96	76 - 132	2	38
cis-1,3-Dichloropropene			50.0	52.7		ug/Kg		105	80 - 134	1	39
Carbon disulfide			50.0	38.5		ug/Kg		77	52 - 145	1	46
Carbon tetrachloride			50.0	47.6		ug/Kg		95	62 - 154	1	43
2-Hexanone			125	118		ug/Kg		94	78 - 143	1	73
Chlorobenzene			50.0	48.4		ug/Kg		97	74 - 125	1	38
Chloroethane			50.0	44.1		ug/Kg		88	54 - 148	0	34
Chloroform			50.0	45.2		ug/Kg		90	78 - 135	1	23
4-Methyl-2-pentanone (MIBK)			125	104		ug/Kg		83	79 - 150	1	48
Chloromethane			50.0	46.8		ug/Kg		94	60 - 141	1	36

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 320-542091/8
Matrix: Solid
Analysis Batch: 542091

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorodibromomethane			50.0	49.8		ug/Kg		100	80 - 133	2	24
Dibromomethane			50.0	48.5		ug/Kg		97	80 - 129	1	37
Dichlorodifluoromethane			50.0	47.0		ug/Kg		94	60 - 130	4	46
Ethylbenzene			50.0	48.7		ug/Kg		97	72 - 125	0	41
1,1,1,2-Tetrachloroethane			50.0	47.8		ug/Kg		96	77 - 134	3	25
Hexachlorobutadiene			50.0	49.3		ug/Kg		99	52 - 140	1	38
1,1,2,2-Tetrachloroethane			50.0	54.3		ug/Kg		109	71 - 134	8	31
Isopropylbenzene			50.0	48.5		ug/Kg		97	69 - 137	0	41
Methylene Chloride			50.0	43.3		ug/Kg		87	77 - 125	5	25
Methyl tert-butyl ether			50.0	61.1		ug/Kg		122	66 - 146	6	45
1,2,3-Trichlorobenzene			50.0	53.4		ug/Kg		107	54 - 140	5	42
Naphthalene			50.0	55.3		ug/Kg		111	53 - 140	8	46
1,2,4-Trichlorobenzene			50.0	51.7		ug/Kg		103	48 - 145	4	39
n-Butylbenzene			50.0	50.6		ug/Kg		101	68 - 136	0	37
1,1,1-Trichloroethane			50.0	46.4		ug/Kg		93	67 - 150	2	43
N-Propylbenzene			50.0	50.4		ug/Kg		101	63 - 128	1	42
1,1,2-Trichloroethane			50.0	50.5		ug/Kg		101	80 - 128	4	41
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	43.5		ug/Kg		87	62 - 138	7	22
4-Isopropyltoluene			50.0	49.8		ug/Kg		100	64 - 137	0	40
sec-Butylbenzene			50.0	50.1		ug/Kg		100	68 - 131	1	40
1,2,3-Trichloropropane			50.0	53.6		ug/Kg		107	71 - 132	9	41
Styrene			50.0	49.3		ug/Kg		99	79 - 128	0	40
1,2,4-Trimethylbenzene			50.0	49.9		ug/Kg		100	64 - 137	1	41
trans-1,2-Dichloroethene			50.0	42.4		ug/Kg		85	67 - 135	1	37
1,3,5-Trimethylbenzene			50.0	50.7		ug/Kg		101	66 - 135	2	42
trans-1,3-Dichloropropene			50.0	56.9		ug/Kg		114	80 - 148	3	42
tert-Butylbenzene			50.0	50.7		ug/Kg		101	67 - 131	0	42
Tetrachloroethene			50.0	48.4		ug/Kg		97	65 - 135	1	39
m-Xylene & p-Xylene			50.0	48.7		ug/Kg		97	73 - 128	0	40
Toluene			50.0	48.0		ug/Kg		96	80 - 124	0	39
o-Xylene			50.0	47.3		ug/Kg		95	76 - 127	1	40
Xylenes, Total			100	96.0		ug/Kg		96	75 - 122	1	15
Trichloroethene			50.0	48.0		ug/Kg		96	80 - 126	1	40
Trichlorofluoromethane			50.0	48.0		ug/Kg		96	43 - 158	2	32
Vinyl acetate			50.0	55.4		ug/Kg		111	39 - 160	5	50
Vinyl chloride			50.0	49.7		ug/Kg		99	67 - 127	2	37

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*63 - 143*
1,2-Dichloroethane-d4 (Surr)	*104*		*32 - 156*
Toluene-d8 (Surr)	*121*		*63 - 138*
Dibromofluoromethane (Surr)	*105*		*55 - 129*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 320-542727/11
Matrix: Solid
Analysis Batch: 542727

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	0.88	ug/Kg			11/15/21 10:22	1
Ethylene Dibromide	ND		10	0.27	ug/Kg			11/15/21 10:22	1
1,2-Dichlorobenzene	ND		5.0	0.64	ug/Kg			11/15/21 10:22	1
1,3-Dichlorobenzene	ND		5.0	0.30	ug/Kg			11/15/21 10:22	1
2-Butanone (MEK)	ND		10	1.4	ug/Kg			11/15/21 10:22	1
1,4-Dichlorobenzene	ND		5.0	0.78	ug/Kg			11/15/21 10:22	1
2-Chlorotoluene	ND		5.0	0.62	ug/Kg			11/15/21 10:22	1
1,1-Dichloroethane	ND		5.0	0.29	ug/Kg			11/15/21 10:22	1
4-Chlorotoluene	ND		5.0	0.86	ug/Kg			11/15/21 10:22	1
1,2-Dichloroethane	ND		5.0	0.73	ug/Kg			11/15/21 10:22	1
Acetone	ND		20	1.4	ug/Kg			11/15/21 10:22	1
Benzene	ND		5.0	0.26	ug/Kg			11/15/21 10:22	1
1,1-Dichloroethene	ND		5.0	0.26	ug/Kg			11/15/21 10:22	1
Bromobenzene	ND		5.0	0.52	ug/Kg			11/15/21 10:22	1
1,2-Dichloropropane	ND		5.0	0.60	ug/Kg			11/15/21 10:22	1
Chlorobromomethane	ND		5.0	0.94	ug/Kg			11/15/21 10:22	1
1,3-Dichloropropane	ND		5.0	0.57	ug/Kg			11/15/21 10:22	1
Dichlorobromomethane	ND		5.0	0.53	ug/Kg			11/15/21 10:22	1
2,2-Dichloropropane	ND		5.0	0.38	ug/Kg			11/15/21 10:22	1
Bromoform	ND		5.0	0.40	ug/Kg			11/15/21 10:22	1
Bromomethane	ND		5.0	0.86	ug/Kg			11/15/21 10:22	1
cis-1,2-Dichloroethene	ND		5.0	0.89	ug/Kg			11/15/21 10:22	1
1,1-Dichloropropene	ND		5.0	0.37	ug/Kg			11/15/21 10:22	1
cis-1,3-Dichloropropene	ND		5.0	0.64	ug/Kg			11/15/21 10:22	1
Carbon disulfide	ND		10	0.49	ug/Kg			11/15/21 10:22	1
Carbon tetrachloride	ND		5.0	0.53	ug/Kg			11/15/21 10:22	1
2-Hexanone	ND		10	0.74	ug/Kg			11/15/21 10:22	1
Chlorobenzene	ND		5.0	0.29	ug/Kg			11/15/21 10:22	1
Chloroethane	ND		5.0	0.45	ug/Kg			11/15/21 10:22	1
Chloroform	ND		5.0	0.26	ug/Kg			11/15/21 10:22	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.92	ug/Kg			11/15/21 10:22	1
Chloromethane	ND		5.0	0.50	ug/Kg			11/15/21 10:22	1
Chlorodibromomethane	ND		5.0	0.21	ug/Kg			11/15/21 10:22	1
Dibromomethane	ND		5.0	0.58	ug/Kg			11/15/21 10:22	1
Dichlorodifluoromethane	ND		5.0	0.89	ug/Kg			11/15/21 10:22	1
Ethylbenzene	ND		5.0	0.34	ug/Kg			11/15/21 10:22	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.41	ug/Kg			11/15/21 10:22	1
Hexachlorobutadiene	ND		5.0	0.33	ug/Kg			11/15/21 10:22	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.68	ug/Kg			11/15/21 10:22	1
Isopropylbenzene	ND		5.0	0.52	ug/Kg			11/15/21 10:22	1
Methylene Chloride	ND		10	0.84	ug/Kg			11/15/21 10:22	1
Methyl tert-butyl ether	ND		10	0.60	ug/Kg			11/15/21 10:22	1
1,2,3-Trichlorobenzene	ND		5.0	0.75	ug/Kg			11/15/21 10:22	1
Naphthalene	0.733	J	5.0	0.63	ug/Kg			11/15/21 10:22	1
1,2,4-Trichlorobenzene	ND		5.0	0.75	ug/Kg			11/15/21 10:22	1
n-Butylbenzene	ND		5.0	0.66	ug/Kg			11/15/21 10:22	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			11/15/21 10:22	1
N-Propylbenzene	ND		5.0	0.29	ug/Kg			11/15/21 10:22	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 320-542727/11
Matrix: Solid
Analysis Batch: 542727

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	0.44	ug/Kg			11/15/21 10:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.83	ug/Kg			11/15/21 10:22	1
4-Isopropyltoluene	ND		5.0	0.63	ug/Kg			11/15/21 10:22	1
sec-Butylbenzene	ND		5.0	0.75	ug/Kg			11/15/21 10:22	1
1,2,3-Trichloropropane	ND		5.0	0.76	ug/Kg			11/15/21 10:22	1
Styrene	ND		5.0	0.31	ug/Kg			11/15/21 10:22	1
1,2,4-Trimethylbenzene	ND		5.0	0.51	ug/Kg			11/15/21 10:22	1
trans-1,2-Dichloroethene	ND		5.0	0.38	ug/Kg			11/15/21 10:22	1
1,3,5-Trimethylbenzene	ND		5.0	0.35	ug/Kg			11/15/21 10:22	1
trans-1,3-Dichloropropene	ND		5.0	0.75	ug/Kg			11/15/21 10:22	1
tert-Butylbenzene	ND		5.0	0.54	ug/Kg			11/15/21 10:22	1
Tetrachloroethene	ND		5.0	0.61	ug/Kg			11/15/21 10:22	1
m-Xylene & p-Xylene	ND		5.0	0.81	ug/Kg			11/15/21 10:22	1
Toluene	ND		5.0	0.61	ug/Kg			11/15/21 10:22	1
o-Xylene	ND		5.0	0.33	ug/Kg			11/15/21 10:22	1
Xylenes, Total	ND		5.0	0.81	ug/Kg			11/15/21 10:22	1
Trichloroethene	ND		5.0	0.60	ug/Kg			11/15/21 10:22	1
Trichlorofluoromethane	ND		5.0	0.34	ug/Kg			11/15/21 10:22	1
Vinyl acetate	ND		10	0.69	ug/Kg			11/15/21 10:22	1
Vinyl chloride	ND		5.0	0.36	ug/Kg			11/15/21 10:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*63 - 143*		*11/15/21 10:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*32 - 156*		*11/15/21 10:22*	*1*
Toluene-d8 (Surr)	*117*		*63 - 138*		*11/15/21 10:22*	*1*
Dibromofluoromethane (Surr)	*105*		*55 - 129*		*11/15/21 10:22*	*1*

Lab Sample ID: LCS 320-542727/7
Matrix: Solid
Analysis Batch: 542727

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	50.0	63.2		ug/Kg		126	75 - 137
Ethylene Dibromide	50.0	57.0		ug/Kg		114	80 - 124
1,2-Dichlorobenzene	50.0	55.2		ug/Kg		110	68 - 121
1,3-Dichlorobenzene	50.0	57.2		ug/Kg		114	64 - 126
2-Butanone (MEK)	125	103		ug/Kg		83	71 - 142
1,4-Dichlorobenzene	50.0	56.7		ug/Kg		113	65 - 124
2-Chlorotoluene	50.0	60.1		ug/Kg		120	64 - 127
1,1-Dichloroethane	50.0	55.1		ug/Kg		110	76 - 134
4-Chlorotoluene	50.0	60.3		ug/Kg		121	67 - 128
1,2-Dichloroethane	50.0	53.9		ug/Kg		108	66 - 150
Acetone	125	108		ug/Kg		86	64 - 128
Benzene	50.0	56.3		ug/Kg		113	78 - 128
1,1-Dichloroethene	50.0	55.1		ug/Kg		110	66 - 136
Bromobenzene	50.0	58.1		ug/Kg		116	67 - 132
1,2-Dichloropropane	50.0	53.5		ug/Kg		107	80 - 129
Chlorobromomethane	50.0	49.1		ug/Kg		98	80 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-542727/7
Matrix: Solid
Analysis Batch: 542727

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	50.0	56.9		ug/Kg		114	80 - 123
Dichlorobromomethane	50.0	53.0		ug/Kg		106	80 - 137
2,2-Dichloropropane	50.0	63.9		ug/Kg		128	69 - 153
Bromoform	50.0	58.1		ug/Kg		116	80 - 136
Bromomethane	50.0	55.4		ug/Kg		111	48 - 164
cis-1,2-Dichloroethene	50.0	50.8		ug/Kg		102	74 - 131
1,1-Dichloropropene	50.0	62.3		ug/Kg		125	76 - 132
cis-1,3-Dichloropropene	50.0	56.7		ug/Kg		113	80 - 134
Carbon disulfide	50.0	52.2		ug/Kg		104	52 - 145
Carbon tetrachloride	50.0	63.0		ug/Kg		126	62 - 154
2-Hexanone	125	111		ug/Kg		89	78 - 143
Chlorobenzene	50.0	56.0		ug/Kg		112	74 - 125
Chloroethane	50.0	55.4		ug/Kg		111	54 - 148
Chloroform	50.0	53.0		ug/Kg		106	78 - 135
4-Methyl-2-pentanone (MIBK)	125	101		ug/Kg		81	79 - 150
Chloromethane	50.0	57.3		ug/Kg		115	60 - 141
Chlorodibromomethane	50.0	55.4		ug/Kg		111	80 - 133
Dibromomethane	50.0	51.7		ug/Kg		103	80 - 129
Dichlorodifluoromethane	50.0	61.0		ug/Kg		122	60 - 130
Ethylbenzene	50.0	59.9		ug/Kg		120	72 - 125
1,1,1,2-Tetrachloroethane	50.0	55.8		ug/Kg		112	77 - 134
Hexachlorobutadiene	50.0	67.3		ug/Kg		135	52 - 140
1,1,2,2-Tetrachloroethane	50.0	60.7		ug/Kg		121	71 - 134
Isopropylbenzene	50.0	61.7		ug/Kg		123	69 - 137
Methylene Chloride	50.0	48.4		ug/Kg		97	77 - 125
Methyl tert-butyl ether	50.0	66.5		ug/Kg		133	66 - 146
1,2,3-Trichlorobenzene	50.0	62.7		ug/Kg		125	54 - 140
Naphthalene	50.0	65.7		ug/Kg		131	53 - 140
1,2,4-Trichlorobenzene	50.0	61.8		ug/Kg		124	48 - 145
n-Butylbenzene	50.0	66.3		ug/Kg		133	68 - 136
1,1,1-Trichloroethane	50.0	59.4		ug/Kg		119	67 - 150
N-Propylbenzene	50.0	64.9	*+	ug/Kg		130	63 - 128
1,1,2-Trichloroethane	50.0	54.0		ug/Kg		108	80 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	60.9		ug/Kg		122	62 - 138
4-Isopropyltoluene	50.0	64.6		ug/Kg		129	64 - 137
sec-Butylbenzene	50.0	65.6		ug/Kg		131	68 - 131
1,2,3-Trichloropropane	50.0	60.5		ug/Kg		121	71 - 132
Styrene	50.0	56.9		ug/Kg		114	79 - 128
1,2,4-Trimethylbenzene	50.0	61.6		ug/Kg		123	64 - 137
trans-1,2-Dichloroethene	50.0	52.8		ug/Kg		106	67 - 135
1,3,5-Trimethylbenzene	50.0	63.4		ug/Kg		127	66 - 135
trans-1,3-Dichloropropene	50.0	58.6		ug/Kg		117	80 - 148
tert-Butylbenzene	50.0	66.1	*+	ug/Kg		132	67 - 131
Tetrachloroethene	50.0	60.4		ug/Kg		121	65 - 135
m-Xylene & p-Xylene	50.0	60.4		ug/Kg		121	73 - 128
Toluene	50.0	59.3		ug/Kg		119	80 - 124
o-Xylene	50.0	56.7		ug/Kg		113	76 - 127
Xylenes, Total	100	117		ug/Kg		117	75 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-542727/7
Matrix: Solid
Analysis Batch: 542727

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Trichloroethene			50.0	58.2		ug/Kg		116	80 - 126		
Trichlorofluoromethane			50.0	62.3		ug/Kg		125	43 - 158		
Vinyl acetate			50.0	58.7		ug/Kg		117	39 - 160		
Vinyl chloride			50.0	64.7	*+	ug/Kg		129	67 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*63 - 143*
1,2-Dichloroethane-d4 (Surr)	*109*		*32 - 156*
Toluene-d8 (Surr)	*119*		*63 - 138*
Dibromofluoromethane (Surr)	*109*		*55 - 129*

Lab Sample ID: LCSD 320-542727/8
Matrix: Solid
Analysis Batch: 542727

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			50.0	59.7		ug/Kg		119	75 - 137	6	48
Ethylene Dibromide			50.0	54.3		ug/Kg		109	80 - 124	5	39
1,2-Dichlorobenzene			50.0	55.8		ug/Kg		112	68 - 121	1	28
1,3-Dichlorobenzene			50.0	58.3		ug/Kg		117	64 - 126	2	41
2-Butanone (MEK)			125	99.7		ug/Kg		80	71 - 142	3	44
1,4-Dichlorobenzene			50.0	57.1		ug/Kg		114	65 - 124	1	38
2-Chlorotoluene			50.0	62.3		ug/Kg		125	64 - 127	4	41
1,1-Dichloroethane			50.0	54.1		ug/Kg		108	76 - 134	2	24
4-Chlorotoluene			50.0	61.4		ug/Kg		123	67 - 128	2	40
1,2-Dichloroethane			50.0	51.5		ug/Kg		103	66 - 150	5	36
Acetone			125	105		ug/Kg		84	64 - 128	3	36
Benzene			50.0	53.6		ug/Kg		107	78 - 128	5	37
1,1-Dichloroethene			50.0	52.6		ug/Kg		105	66 - 136	5	42
Bromobenzene			50.0	58.3		ug/Kg		117	67 - 132	0	40
1,2-Dichloropropane			50.0	52.3		ug/Kg		105	80 - 129	2	38
Chlorobromomethane			50.0	47.7		ug/Kg		95	80 - 127	3	36
1,3-Dichloropropane			50.0	54.9		ug/Kg		110	80 - 123	4	39
Dichlorobromomethane			50.0	51.6		ug/Kg		103	80 - 137	3	37
2,2-Dichloropropane			50.0	61.9		ug/Kg		124	69 - 153	3	47
Bromoform			50.0	56.8		ug/Kg		114	80 - 136	2	45
Bromomethane			50.0	53.6		ug/Kg		107	48 - 164	3	38
cis-1,2-Dichloroethene			50.0	49.8		ug/Kg		100	74 - 131	2	37
1,1-Dichloropropene			50.0	60.2		ug/Kg		120	76 - 132	3	38
cis-1,3-Dichloropropene			50.0	54.8		ug/Kg		110	80 - 134	3	39
Carbon disulfide			50.0	52.4		ug/Kg		105	52 - 145	0	46
Carbon tetrachloride			50.0	60.2		ug/Kg		120	62 - 154	5	43
2-Hexanone			125	113		ug/Kg		90	78 - 143	1	73
Chlorobenzene			50.0	55.6		ug/Kg		111	74 - 125	1	38
Chloroethane			50.0	53.6		ug/Kg		107	54 - 148	3	34
Chloroform			50.0	51.6		ug/Kg		103	78 - 135	3	23
4-Methyl-2-pentanone (MIBK)			125	103		ug/Kg		82	79 - 150	2	48
Chloromethane			50.0	57.4		ug/Kg		115	60 - 141	0	36

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 320-542727/8
Matrix: Solid
Analysis Batch: 542727

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorodibromomethane			50.0	53.0		ug/Kg		106	80 - 133	4	24
Dibromomethane			50.0	48.8		ug/Kg		98	80 - 129	6	37
Dichlorodifluoromethane			50.0	60.2		ug/Kg		120	60 - 130	1	46
Ethylbenzene			50.0	59.4		ug/Kg		119	72 - 125	1	41
1,1,1,2-Tetrachloroethane			50.0	55.4		ug/Kg		111	77 - 134	1	25
Hexachlorobutadiene			50.0	67.0		ug/Kg		134	52 - 140	0	38
1,1,2,2-Tetrachloroethane			50.0	59.0		ug/Kg		118	71 - 134	3	31
Isopropylbenzene			50.0	61.2		ug/Kg		122	69 - 137	1	41
Methylene Chloride			50.0	47.2		ug/Kg		94	77 - 125	3	25
Methyl tert-butyl ether			50.0	64.0		ug/Kg		128	66 - 146	4	45
1,2,3-Trichlorobenzene			50.0	62.9		ug/Kg		126	54 - 140	0	42
Naphthalene			50.0	62.9		ug/Kg		126	53 - 140	4	46
1,2,4-Trichlorobenzene			50.0	61.9		ug/Kg		124	48 - 145	0	39
n-Butylbenzene			50.0	66.9		ug/Kg		134	68 - 136	1	37
1,1,1-Trichloroethane			50.0	57.7		ug/Kg		115	67 - 150	3	43
N-Propylbenzene			50.0	64.9	*+	ug/Kg		130	63 - 128	0	42
1,1,2-Trichloroethane			50.0	53.0		ug/Kg		106	80 - 128	2	41
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	58.3		ug/Kg		117	62 - 138	4	22
4-Isopropyltoluene			50.0	65.2		ug/Kg		130	64 - 137	1	40
sec-Butylbenzene			50.0	66.6	*+	ug/Kg		133	68 - 131	2	40
1,2,3-Trichloropropane			50.0	58.8		ug/Kg		118	71 - 132	3	41
Styrene			50.0	58.0		ug/Kg		116	79 - 128	2	40
1,2,4-Trimethylbenzene			50.0	62.6		ug/Kg		125	64 - 137	2	41
trans-1,2-Dichloroethene			50.0	51.9		ug/Kg		104	67 - 135	2	37
1,3,5-Trimethylbenzene			50.0	63.8		ug/Kg		128	66 - 135	1	42
trans-1,3-Dichloropropene			50.0	56.3		ug/Kg		113	80 - 148	4	42
tert-Butylbenzene			50.0	67.6	*+	ug/Kg		135	67 - 131	2	42
Tetrachloroethene			50.0	60.7		ug/Kg		121	65 - 135	0	39
m-Xylene & p-Xylene			50.0	58.9		ug/Kg		118	73 - 128	3	40
Toluene			50.0	58.3		ug/Kg		117	80 - 124	2	39
o-Xylene			50.0	58.2		ug/Kg		116	76 - 127	3	40
Xylenes, Total			100	117		ug/Kg		117	75 - 122	0	15
Trichloroethene			50.0	56.7		ug/Kg		113	80 - 126	3	40
Trichlorofluoromethane			50.0	61.1		ug/Kg		122	43 - 158	2	32
Vinyl acetate			50.0	54.2		ug/Kg		108	39 - 160	8	50
Vinyl chloride			50.0	63.4		ug/Kg		127	67 - 127	2	37

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*63 - 143*
1,2-Dichloroethane-d4 (Surr)	*102*		*32 - 156*
Toluene-d8 (Surr)	*117*		*63 - 138*
Dibromofluoromethane (Surr)	*103*		*55 - 129*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 320-543468/10
Matrix: Solid
Analysis Batch: 543468

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	0.88	ug/Kg			11/17/21 11:14	1
Ethylene Dibromide	ND		10	0.27	ug/Kg			11/17/21 11:14	1
1,2-Dichlorobenzene	ND		5.0	0.64	ug/Kg			11/17/21 11:14	1
1,3-Dichlorobenzene	ND		5.0	0.30	ug/Kg			11/17/21 11:14	1
2-Butanone (MEK)	ND		10	1.4	ug/Kg			11/17/21 11:14	1
1,4-Dichlorobenzene	ND		5.0	0.78	ug/Kg			11/17/21 11:14	1
2-Chlorotoluene	ND		5.0	0.62	ug/Kg			11/17/21 11:14	1
1,1-Dichloroethane	ND		5.0	0.29	ug/Kg			11/17/21 11:14	1
4-Chlorotoluene	ND		5.0	0.86	ug/Kg			11/17/21 11:14	1
1,2-Dichloroethane	ND		5.0	0.73	ug/Kg			11/17/21 11:14	1
Acetone	ND		20	1.4	ug/Kg			11/17/21 11:14	1
Benzene	ND		5.0	0.26	ug/Kg			11/17/21 11:14	1
1,1-Dichloroethene	ND		5.0	0.26	ug/Kg			11/17/21 11:14	1
Bromobenzene	ND		5.0	0.52	ug/Kg			11/17/21 11:14	1
1,2-Dichloropropane	ND		5.0	0.60	ug/Kg			11/17/21 11:14	1
Chlorobromomethane	ND		5.0	0.94	ug/Kg			11/17/21 11:14	1
1,3-Dichloropropane	ND		5.0	0.57	ug/Kg			11/17/21 11:14	1
Dichlorobromomethane	ND		5.0	0.53	ug/Kg			11/17/21 11:14	1
2,2-Dichloropropane	ND		5.0	0.38	ug/Kg			11/17/21 11:14	1
Bromoform	ND		5.0	0.40	ug/Kg			11/17/21 11:14	1
Bromomethane	ND		5.0	0.86	ug/Kg			11/17/21 11:14	1
cis-1,2-Dichloroethene	ND		5.0	0.89	ug/Kg			11/17/21 11:14	1
1,1-Dichloropropene	ND		5.0	0.37	ug/Kg			11/17/21 11:14	1
cis-1,3-Dichloropropene	ND		5.0	0.64	ug/Kg			11/17/21 11:14	1
Carbon disulfide	ND		10	0.49	ug/Kg			11/17/21 11:14	1
Carbon tetrachloride	ND		5.0	0.53	ug/Kg			11/17/21 11:14	1
2-Hexanone	ND		10	0.74	ug/Kg			11/17/21 11:14	1
Chlorobenzene	ND		5.0	0.29	ug/Kg			11/17/21 11:14	1
Chloroethane	ND		5.0	0.45	ug/Kg			11/17/21 11:14	1
Chloroform	ND		5.0	0.26	ug/Kg			11/17/21 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.92	ug/Kg			11/17/21 11:14	1
Chloromethane	ND		5.0	0.50	ug/Kg			11/17/21 11:14	1
Chlorodibromomethane	ND		5.0	0.21	ug/Kg			11/17/21 11:14	1
Dibromomethane	ND		5.0	0.58	ug/Kg			11/17/21 11:14	1
Dichlorodifluoromethane	ND		5.0	0.89	ug/Kg			11/17/21 11:14	1
Ethylbenzene	ND		5.0	0.34	ug/Kg			11/17/21 11:14	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.41	ug/Kg			11/17/21 11:14	1
Hexachlorobutadiene	ND		5.0	0.33	ug/Kg			11/17/21 11:14	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.68	ug/Kg			11/17/21 11:14	1
Isopropylbenzene	ND		5.0	0.52	ug/Kg			11/17/21 11:14	1
Methylene Chloride	ND		10	0.84	ug/Kg			11/17/21 11:14	1
Methyl tert-butyl ether	ND		10	0.60	ug/Kg			11/17/21 11:14	1
1,2,3-Trichlorobenzene	ND		5.0	0.75	ug/Kg			11/17/21 11:14	1
Naphthalene	ND		5.0	0.63	ug/Kg			11/17/21 11:14	1
1,2,4-Trichlorobenzene	ND		5.0	0.75	ug/Kg			11/17/21 11:14	1
n-Butylbenzene	ND		5.0	0.66	ug/Kg			11/17/21 11:14	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			11/17/21 11:14	1
N-Propylbenzene	ND		5.0	0.29	ug/Kg			11/17/21 11:14	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 320-543468/10
Matrix: Solid
Analysis Batch: 543468

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	0.44	ug/Kg			11/17/21 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.83	ug/Kg			11/17/21 11:14	1
4-Isopropyltoluene	ND		5.0	0.63	ug/Kg			11/17/21 11:14	1
sec-Butylbenzene	ND		5.0	0.75	ug/Kg			11/17/21 11:14	1
1,2,3-Trichloropropane	ND		5.0	0.76	ug/Kg			11/17/21 11:14	1
Styrene	ND		5.0	0.31	ug/Kg			11/17/21 11:14	1
1,2,4-Trimethylbenzene	ND		5.0	0.51	ug/Kg			11/17/21 11:14	1
trans-1,2-Dichloroethene	ND		5.0	0.38	ug/Kg			11/17/21 11:14	1
1,3,5-Trimethylbenzene	ND		5.0	0.35	ug/Kg			11/17/21 11:14	1
trans-1,3-Dichloropropene	ND		5.0	0.75	ug/Kg			11/17/21 11:14	1
tert-Butylbenzene	ND		5.0	0.54	ug/Kg			11/17/21 11:14	1
Tetrachloroethene	ND		5.0	0.61	ug/Kg			11/17/21 11:14	1
m-Xylene & p-Xylene	ND		5.0	0.81	ug/Kg			11/17/21 11:14	1
Toluene	ND		5.0	0.61	ug/Kg			11/17/21 11:14	1
o-Xylene	ND		5.0	0.33	ug/Kg			11/17/21 11:14	1
Xylenes, Total	ND		5.0	0.81	ug/Kg			11/17/21 11:14	1
Trichloroethene	ND		5.0	0.60	ug/Kg			11/17/21 11:14	1
Trichlorofluoromethane	ND		5.0	0.34	ug/Kg			11/17/21 11:14	1
Vinyl acetate	ND		10	0.69	ug/Kg			11/17/21 11:14	1
Vinyl chloride	ND		5.0	0.36	ug/Kg			11/17/21 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*63 - 143*		*11/17/21 11:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*32 - 156*		*11/17/21 11:14*	*1*
Toluene-d8 (Surr)	*99*		*63 - 138*		*11/17/21 11:14*	*1*
Dibromofluoromethane (Surr)	*96*		*55 - 129*		*11/17/21 11:14*	*1*

Lab Sample ID: LCS 320-543468/7
Matrix: Solid
Analysis Batch: 543468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	50.0	46.5		ug/Kg		93	75 - 137
Ethylene Dibromide	50.0	47.8		ug/Kg		96	80 - 124
1,2-Dichlorobenzene	50.0	48.1		ug/Kg		96	68 - 121
1,3-Dichlorobenzene	50.0	46.8		ug/Kg		94	64 - 126
2-Butanone (MEK)	125	126		ug/Kg		101	71 - 142
1,4-Dichlorobenzene	50.0	46.5		ug/Kg		93	65 - 124
2-Chlorotoluene	50.0	46.9		ug/Kg		94	64 - 127
1,1-Dichloroethane	50.0	44.5		ug/Kg		89	76 - 134
4-Chlorotoluene	50.0	47.4		ug/Kg		95	67 - 128
1,2-Dichloroethane	50.0	47.3		ug/Kg		95	66 - 150
Acetone	125	133		ug/Kg		106	64 - 128
Benzene	50.0	44.7		ug/Kg		89	78 - 128
1,1-Dichloroethene	50.0	44.0		ug/Kg		88	66 - 136
Bromobenzene	50.0	48.7		ug/Kg		97	67 - 132
1,2-Dichloropropane	50.0	43.4		ug/Kg		87	80 - 129
Chlorobromomethane	50.0	46.2		ug/Kg		92	80 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-543468/7
Matrix: Solid
Analysis Batch: 543468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	50.0	46.7		ug/Kg		93	80 - 123
Dichlorobromomethane	50.0	47.9		ug/Kg		96	80 - 137
2,2-Dichloropropane	50.0	46.6		ug/Kg		93	69 - 153
Bromoform	50.0	50.0		ug/Kg		100	80 - 136
Bromomethane	50.0	44.7		ug/Kg		89	48 - 164
cis-1,2-Dichloroethene	50.0	45.2		ug/Kg		90	74 - 131
1,1-Dichloropropene	50.0	45.3		ug/Kg		91	76 - 132
cis-1,3-Dichloropropene	50.0	47.6		ug/Kg		95	80 - 134
Carbon disulfide	50.0	43.0		ug/Kg		86	52 - 145
Carbon tetrachloride	50.0	48.2		ug/Kg		96	62 - 154
2-Hexanone	125	123		ug/Kg		98	78 - 143
Chlorobenzene	50.0	46.7		ug/Kg		93	74 - 125
Chloroethane	50.0	41.9		ug/Kg		84	54 - 148
Chloroform	50.0	46.6		ug/Kg		93	78 - 135
4-Methyl-2-pentanone (MIBK)	125	121		ug/Kg		97	79 - 150
Chloromethane	50.0	37.3		ug/Kg		75	60 - 141
Chlorodibromomethane	50.0	50.7		ug/Kg		101	80 - 133
Dibromomethane	50.0	46.1		ug/Kg		92	80 - 129
Dichlorodifluoromethane	50.0	40.6		ug/Kg		81	60 - 130
Ethylbenzene	50.0	46.0		ug/Kg		92	72 - 125
1,1,1,2-Tetrachloroethane	50.0	49.2		ug/Kg		98	77 - 134
Hexachlorobutadiene	50.0	51.3		ug/Kg		103	52 - 140
1,1,2,2-Tetrachloroethane	50.0	45.8		ug/Kg		92	71 - 134
Isopropylbenzene	50.0	47.2		ug/Kg		94	69 - 137
Methylene Chloride	50.0	46.3		ug/Kg		93	77 - 125
Methyl tert-butyl ether	50.0	47.2		ug/Kg		94	66 - 146
1,2,3-Trichlorobenzene	50.0	49.4		ug/Kg		99	54 - 140
Naphthalene	50.0	46.6		ug/Kg		93	53 - 140
1,2,4-Trichlorobenzene	50.0	49.2		ug/Kg		98	48 - 145
n-Butylbenzene	50.0	47.5		ug/Kg		95	68 - 136
1,1,1-Trichloroethane	50.0	46.7		ug/Kg		93	67 - 150
N-Propylbenzene	50.0	46.9		ug/Kg		94	63 - 128
1,1,2-Trichloroethane	50.0	45.8		ug/Kg		92	80 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	43.1		ug/Kg		86	62 - 138
4-Isopropyltoluene	50.0	48.3		ug/Kg		97	64 - 137
sec-Butylbenzene	50.0	47.6		ug/Kg		95	68 - 131
1,2,3-Trichloropropane	50.0	46.7		ug/Kg		93	71 - 132
Styrene	50.0	46.8		ug/Kg		94	79 - 128
1,2,4-Trimethylbenzene	50.0	47.3		ug/Kg		95	64 - 137
trans-1,2-Dichloroethene	50.0	44.8		ug/Kg		90	67 - 135
1,3,5-Trimethylbenzene	50.0	47.4		ug/Kg		95	66 - 135
trans-1,3-Dichloropropene	50.0	47.7		ug/Kg		95	80 - 148
tert-Butylbenzene	50.0	48.4		ug/Kg		97	67 - 131
Tetrachloroethene	50.0	47.4		ug/Kg		95	65 - 135
m-Xylene & p-Xylene	50.0	45.5		ug/Kg		91	73 - 128
Toluene	50.0	45.3		ug/Kg		91	80 - 124
o-Xylene	50.0	46.4		ug/Kg		93	76 - 127
Xylenes, Total	100	91.9		ug/Kg		92	75 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-543468/7
Matrix: Solid
Analysis Batch: 543468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Trichloroethene			50.0	46.1		ug/Kg		92	80 - 126		
Trichlorofluoromethane			50.0	44.9		ug/Kg		90	43 - 158		
Vinyl acetate			50.0	40.3		ug/Kg		81	39 - 160		
Vinyl chloride			50.0	40.2		ug/Kg		80	67 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*63 - 143*
1,2-Dichloroethane-d4 (Surr)	*94*		*32 - 156*
Toluene-d8 (Surr)	*97*		*63 - 138*
Dibromofluoromethane (Surr)	*95*		*55 - 129*

Lab Sample ID: LCSD 320-543468/8
Matrix: Solid
Analysis Batch: 543468

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			50.0	46.2		ug/Kg		92	75 - 137	1	48
Ethylene Dibromide			50.0	48.5		ug/Kg		97	80 - 124	1	39
1,2-Dichlorobenzene			50.0	48.4		ug/Kg		97	68 - 121	1	28
1,3-Dichlorobenzene			50.0	47.9		ug/Kg		96	64 - 126	2	41
2-Butanone (MEK)			125	127		ug/Kg		102	71 - 142	1	44
1,4-Dichlorobenzene			50.0	48.1		ug/Kg		96	65 - 124	3	38
2-Chlorotoluene			50.0	48.0		ug/Kg		96	64 - 127	2	41
1,1-Dichloroethane			50.0	45.1		ug/Kg		90	76 - 134	1	24
4-Chlorotoluene			50.0	48.5		ug/Kg		97	67 - 128	2	40
1,2-Dichloroethane			50.0	47.5		ug/Kg		95	66 - 150	1	36
Acetone			125	134		ug/Kg		107	64 - 128	1	36
Benzene			50.0	45.9		ug/Kg		92	78 - 128	3	37
1,1-Dichloroethene			50.0	45.9		ug/Kg		92	66 - 136	4	42
Bromobenzene			50.0	49.6		ug/Kg		99	67 - 132	2	40
1,2-Dichloropropane			50.0	43.3		ug/Kg		87	80 - 129	0	38
Chlorobromomethane			50.0	45.6		ug/Kg		91	80 - 127	1	36
1,3-Dichloropropane			50.0	48.3		ug/Kg		97	80 - 123	3	39
Dichlorobromomethane			50.0	48.4		ug/Kg		97	80 - 137	1	37
2,2-Dichloropropane			50.0	47.9		ug/Kg		96	69 - 153	3	47
Bromoform			50.0	50.4		ug/Kg		101	80 - 136	1	45
Bromomethane			50.0	45.9		ug/Kg		92	48 - 164	3	38
cis-1,2-Dichloroethene			50.0	45.2		ug/Kg		90	74 - 131	0	37
1,1-Dichloropropene			50.0	46.6		ug/Kg		93	76 - 132	3	38
cis-1,3-Dichloropropene			50.0	48.0		ug/Kg		96	80 - 134	1	39
Carbon disulfide			50.0	44.4		ug/Kg		89	52 - 145	3	46
Carbon tetrachloride			50.0	50.6		ug/Kg		101	62 - 154	5	43
2-Hexanone			125	125		ug/Kg		100	78 - 143	2	73
Chlorobenzene			50.0	48.3		ug/Kg		97	74 - 125	3	38
Chloroethane			50.0	45.8		ug/Kg		92	54 - 148	9	34
Chloroform			50.0	47.0		ug/Kg		94	78 - 135	1	23
4-Methyl-2-pentanone (MIBK)			125	125		ug/Kg		100	79 - 150	3	48
Chloromethane			50.0	39.4		ug/Kg		79	60 - 141	6	36

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 320-543468/8
Matrix: Solid
Analysis Batch: 543468

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorodibromomethane			50.0	50.0		ug/Kg		100	80 - 133	1	24
Dibromomethane			50.0	45.2		ug/Kg		90	80 - 129	2	37
Dichlorodifluoromethane			50.0	41.6		ug/Kg		83	60 - 130	2	46
Ethylbenzene			50.0	47.7		ug/Kg		95	72 - 125	4	41
1,1,1,2-Tetrachloroethane			50.0	48.8		ug/Kg		98	77 - 134	1	25
Hexachlorobutadiene			50.0	54.4		ug/Kg		109	52 - 140	6	38
1,1,2,2-Tetrachloroethane			50.0	44.5		ug/Kg		89	71 - 134	3	31
Isopropylbenzene			50.0	48.9		ug/Kg		98	69 - 137	4	41
Methylene Chloride			50.0	47.8		ug/Kg		96	77 - 125	3	25
Methyl tert-butyl ether			50.0	46.0		ug/Kg		92	66 - 146	3	45
1,2,3-Trichlorobenzene			50.0	50.3		ug/Kg		101	54 - 140	2	42
Naphthalene			50.0	46.5		ug/Kg		93	53 - 140	0	46
1,2,4-Trichlorobenzene			50.0	50.9		ug/Kg		102	48 - 145	4	39
n-Butylbenzene			50.0	48.8		ug/Kg		98	68 - 136	3	37
1,1,1-Trichloroethane			50.0	49.1		ug/Kg		98	67 - 150	5	43
N-Propylbenzene			50.0	48.2		ug/Kg		96	63 - 128	3	42
1,1,2-Trichloroethane			50.0	45.4		ug/Kg		91	80 - 128	1	41
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	46.4		ug/Kg		93	62 - 138	7	22
4-Isopropyltoluene			50.0	50.1		ug/Kg		100	64 - 137	4	40
sec-Butylbenzene			50.0	49.7		ug/Kg		99	68 - 131	4	40
1,2,3-Trichloropropane			50.0	44.9		ug/Kg		90	71 - 132	4	41
Styrene			50.0	47.6		ug/Kg		95	79 - 128	2	40
1,2,4-Trimethylbenzene			50.0	48.7		ug/Kg		97	64 - 137	3	41
trans-1,2-Dichloroethene			50.0	45.5		ug/Kg		91	67 - 135	2	37
1,3,5-Trimethylbenzene			50.0	49.1		ug/Kg		98	66 - 135	4	42
trans-1,3-Dichloropropene			50.0	47.9		ug/Kg		96	80 - 148	0	42
tert-Butylbenzene			50.0	50.8		ug/Kg		102	67 - 131	5	42
Tetrachloroethene			50.0	49.7		ug/Kg		99	65 - 135	5	39
m-Xylene & p-Xylene			50.0	47.0		ug/Kg		94	73 - 128	3	40
Toluene			50.0	47.1		ug/Kg		94	80 - 124	4	39
o-Xylene			50.0	48.1		ug/Kg		96	76 - 127	4	40
Xylenes, Total			100	95.1		ug/Kg		95	75 - 122	3	15
Trichloroethene			50.0	47.9		ug/Kg		96	80 - 126	4	40
Trichlorofluoromethane			50.0	48.0		ug/Kg		96	43 - 158	7	32
Vinyl acetate			50.0	38.0		ug/Kg		76	39 - 160	6	50
Vinyl chloride			50.0	41.1		ug/Kg		82	67 - 127	2	37

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*63 - 143*
1,2-Dichloroethane-d4 (Surr)	*96*		*32 - 156*
Toluene-d8 (Surr)	*99*		*63 - 138*
Dibromofluoromethane (Surr)	*97*		*55 - 129*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 320-540739/10
Matrix: Solid
Analysis Batch: 540739

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C4-C12	ND		0.50	0.050	mg/Kg			11/07/21 13:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 131*		*11/07/21 13:00*	*1*

Lab Sample ID: LCS 320-540739/5
Matrix: Solid
Analysis Batch: 540739

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C4-C12			1.00	0.891		mg/Kg		89	79 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 131*

Lab Sample ID: LCSD 320-540739/6
Matrix: Solid
Analysis Batch: 540739

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C4-C12			1.00	1.09		mg/Kg		109	79 - 123	21	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 131*

Lab Sample ID: MB 320-542094/10
Matrix: Solid
Analysis Batch: 542094

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C4-C12	ND		0.50	0.050	mg/Kg			11/12/21 09:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 131*		*11/12/21 09:09*	*1*

Lab Sample ID: LCS 320-542094/4
Matrix: Solid
Analysis Batch: 542094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C4-C12			1.00	0.889		mg/Kg		89	79 - 123		

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 320-542094/4
Matrix: Solid
Analysis Batch: 542094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 131

Lab Sample ID: LCSD 320-542094/5
Matrix: Solid
Analysis Batch: 542094

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C4-C12			1.00	1.05		mg/Kg		105	79 - 123	16	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 131

Lab Sample ID: MB 320-542726/11
Matrix: Solid
Analysis Batch: 542726

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C4-C12	ND		0.50	0.050	mg/Kg			11/15/21 10:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 131		11/15/21 10:22	1

Lab Sample ID: LCS 320-542726/4
Matrix: Solid
Analysis Batch: 542726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C4-C12			1.00	0.952		mg/Kg		95	79 - 123		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 131

Lab Sample ID: LCSD 320-542726/5
Matrix: Solid
Analysis Batch: 542726

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C4-C12			1.00	0.968		mg/Kg		97	79 - 123	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 131

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 320-543469/10
Matrix: Solid
Analysis Batch: 543469

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C4-C12	ND		0.50	0.050	mg/Kg			11/17/21 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 131*		*11/17/21 11:14*	*1*

Lab Sample ID: LCS 320-543469/4
Matrix: Solid
Analysis Batch: 543469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C4-C12	1.00	0.889		mg/Kg		89	79 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 131*

Lab Sample ID: LCSD 320-543469/5
Matrix: Solid
Analysis Batch: 543469

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C4-C12	1.00	0.971		mg/Kg		97	79 - 123	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 131*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 320-540321/1-A
Matrix: Water
Analysis Batch: 541288

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540321

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50	16	ug/L		11/05/21 12:43	11/09/21 11:59	1
Motor Oil Range Organics [C28-C40]	ND		500	170	ug/L		11/05/21 12:43	11/09/21 11:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*72*		*56 - 145*	*11/05/21 12:43*	*11/09/21 11:59*	*1*

Lab Sample ID: LCS 320-540321/2-A
Matrix: Water
Analysis Batch: 541288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540321

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	300	300		ug/L		100	53 - 123

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 320-540321/2-A
Matrix: Water
Analysis Batch: 541288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540321

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*78*		*56 - 145*

Lab Sample ID: LCSD 320-540321/3-A
Matrix: Water
Analysis Batch: 541288

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540321

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			300	290		ug/L		97	53 - 123	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*78*		*56 - 145*

Lab Sample ID: MB 320-540584/1-A
Matrix: Solid
Analysis Batch: 541889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0		mg/Kg		11/06/21 09:57	11/11/21 17:21	1
Motor Oil Range Organics [C24-C36]	ND		5.0		mg/Kg		11/06/21 09:57	11/11/21 17:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*64*		*51 - 111*	*11/06/21 09:57*	*11/11/21 17:21*	*1*

Lab Sample ID: LCS 320-540584/2-A
Matrix: Solid
Analysis Batch: 541889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540584

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			10.0	8.75		mg/Kg		88	57 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*70*		*51 - 111*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 320-541359/1-A
Matrix: Solid
Analysis Batch: 544089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541359

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
4,4'-DDE	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
4,4'-DDT	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Aldrin	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
alpha-BHC	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
cis-Chlordane	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 320-541359/1-A
Matrix: Solid
Analysis Batch: 544089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541359

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Chlordane (technical)	ND		20		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
delta-BHC	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Dieldrin	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Endosulfan I	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Endosulfan II	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Endosulfan sulfate	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Endrin	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Endrin aldehyde	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Endrin ketone	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
trans-Chlordane	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
gamma-BHC (Lindane)	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Heptachlor	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Heptachlor epoxide	ND		1.7		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Methoxychlor	ND		3.4		ug/Kg		11/09/21 14:45	11/19/21 13:40	1
Toxaphene	ND		67		ug/Kg		11/09/21 14:45	11/19/21 13:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*64*		*46 - 109*	*11/09/21 14:45*	*11/19/21 13:40*	*1*
DCB Decachlorobiphenyl	*90*		*46 - 109*	*11/09/21 14:45*	*11/19/21 13:40*	*1*
Tetrachloro-m-xylene	*76*		*47 - 107*	*11/09/21 14:45*	*11/19/21 13:40*	*1*
Tetrachloro-m-xylene	*72*		*47 - 107*	*11/09/21 14:45*	*11/19/21 13:40*	*1*

Lab Sample ID: LCS 320-541359/2-A
Matrix: Solid
Analysis Batch: 544089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541359

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	13.0		ug/Kg		78	53 - 117
4,4'-DDE	16.7	13.4		ug/Kg		80	58 - 115
4,4'-DDT	16.7	14.3		ug/Kg		86	53 - 128
Aldrin	16.7	13.0		ug/Kg		78	55 - 109
alpha-BHC	16.7	13.1		ug/Kg		78	54 - 111
cis-Chlordane	16.7	12.4		ug/Kg		75	54 - 113
beta-BHC	16.7	12.8		ug/Kg		77	53 - 115
delta-BHC	16.7	13.0		ug/Kg		78	39 - 124
Dieldrin	16.7	13.2		ug/Kg		79	54 - 117
Endosulfan I	16.7	11.1		ug/Kg		66	42 - 118
Endosulfan II	16.7	12.5		ug/Kg		75	48 - 118
Endosulfan sulfate	16.7	14.0		ug/Kg		84	51 - 113
Endrin	16.7	13.4		ug/Kg		80	58 - 115
Endrin aldehyde	16.7	12.8		ug/Kg		77	40 - 100
Endrin ketone	16.7	13.3		ug/Kg		80	51 - 118
trans-Chlordane	16.7	12.2		ug/Kg		73	55 - 114
gamma-BHC (Lindane)	16.7	13.1		ug/Kg		78	54 - 112
Heptachlor	16.7	12.8		ug/Kg		77	50 - 118
Heptachlor epoxide	16.7	12.7		ug/Kg		76	56 - 113
Methoxychlor	16.7	14.1		ug/Kg		84	52 - 123

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 320-541359/2-A
Matrix: Solid
Analysis Batch: 544089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541359

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	52		46 - 109
Tetrachloro-m-xylene	77		47 - 107

Lab Sample ID: MB 320-542445/1-A
Matrix: Solid
Analysis Batch: 545312

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 542445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.23	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
4,4'-DDE	ND		1.7	0.21	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
4,4'-DDT	ND		1.7	0.25	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
Aldrin	ND		1.7	0.14	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
alpha-BHC	ND		1.7	0.16	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
cis-Chlordane	ND		1.7	0.18	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
beta-BHC	ND		1.7	0.22	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
Chlordane (technical)	ND		20	9.4	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
delta-BHC	ND		1.7	0.35	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
Dieldrin	ND		1.7	0.20	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
Endosulfan I	ND		1.7	0.18	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
Endosulfan II	ND		1.7	0.18	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
Endosulfan sulfate	ND		1.7	0.35	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
Endrin	ND		1.7	0.20	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
Endrin aldehyde	ND		1.7	0.57	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
Endrin ketone	ND		1.7	0.27	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
trans-Chlordane	ND		1.7	0.60	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
gamma-BHC (Lindane)	ND		1.7	0.14	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
Heptachlor	ND		1.7	0.15	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
Heptachlor epoxide	ND		1.7	0.18	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
Methoxychlor	ND		3.4	0.56	ug/Kg		11/13/21 08:25	11/23/21 14:49	1
Toxaphene	ND		67	22	ug/Kg		11/13/21 08:25	11/23/21 14:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	81		46 - 109	11/13/21 08:25	11/23/21 14:49	1
DCB Decachlorobiphenyl	76		46 - 109	11/13/21 08:25	11/23/21 14:49	1
Tetrachloro-m-xylene	78		47 - 107	11/13/21 08:25	11/23/21 14:49	1
Tetrachloro-m-xylene	71		47 - 107	11/13/21 08:25	11/23/21 14:49	1

Lab Sample ID: LCS 320-542445/2-A
Matrix: Solid
Analysis Batch: 545312

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 542445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	14.8		ug/Kg		89	53 - 117
4,4'-DDE	16.7	14.0		ug/Kg		84	58 - 115
4,4'-DDT	16.7	14.8		ug/Kg		89	53 - 128
Aldrin	16.7	12.7		ug/Kg		76	55 - 109
alpha-BHC	16.7	13.4		ug/Kg		80	54 - 111
cis-Chlordane	16.7	12.8		ug/Kg		77	54 - 113

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 320-542445/2-A
Matrix: Solid
Analysis Batch: 545312

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 542445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
beta-BHC	16.7	13.6		ug/Kg		81	53 - 115
delta-BHC	16.7	13.6		ug/Kg		81	39 - 124
Dieldrin	16.7	13.3		ug/Kg		80	54 - 117
Endosulfan I	16.7	11.5		ug/Kg		69	42 - 118
Endosulfan II	16.7	12.7		ug/Kg		76	48 - 118
Endosulfan sulfate	16.7	13.5		ug/Kg		81	51 - 113
Endrin	16.7	13.4		ug/Kg		80	58 - 115
Endrin aldehyde	16.7	12.9		ug/Kg		78	40 - 100
Endrin ketone	16.7	13.3		ug/Kg		80	51 - 118
trans-Chlordane	16.7	13.1		ug/Kg		78	55 - 114
gamma-BHC (Lindane)	16.7	13.7		ug/Kg		82	54 - 112
Heptachlor	16.7	13.4		ug/Kg		81	50 - 118
Heptachlor epoxide	16.7	13.0		ug/Kg		78	56 - 113
Methoxychlor	16.7	14.0		ug/Kg		84	52 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*82*		*46 - 109*
Tetrachloro-m-xylene	*74*		*47 - 107*

Lab Sample ID: LCS 320-542445/3-A
Matrix: Solid
Analysis Batch: 545312

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 542445

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*81*		*46 - 109*
Tetrachloro-m-xylene	*68*		*47 - 107*

Lab Sample ID: 320-81134-1 MS
Matrix: Solid
Analysis Batch: 545312

Client Sample ID: AOC1-S9A-0.5
Prep Type: Total/NA
Prep Batch: 542445

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND	F1	15.7	9.93	J	ug/Kg		63	53 - 117
4,4'-DDE	ND	F1	15.7	9.46	J	ug/Kg		60	58 - 115
4,4'-DDT	ND	F1	15.7	8.20	J F1	ug/Kg		52	53 - 128
Aldrin	ND	F1	15.7	8.21	J F1	ug/Kg		52	55 - 109
alpha-BHC	ND	F1	15.7	9.25	J	ug/Kg		59	54 - 111
cis-Chlordane	ND	F1	15.7	8.13	J F1	ug/Kg		52	54 - 113
beta-BHC	ND	F2 F1	15.7	11.0	J	ug/Kg		70	53 - 115
delta-BHC	ND		15.7	8.50	J	ug/Kg		54	39 - 124
Dieldrin	ND	F1	15.7	8.04	J F1	ug/Kg		51	54 - 117
Endosulfan I	ND	F1	15.7	5.89	J F1	ug/Kg		37	42 - 118
Endosulfan II	ND	F1	15.7	6.69	J F1	ug/Kg		43	48 - 118
Endosulfan sulfate	ND	F1	15.7	6.65	J F1	ug/Kg		42	51 - 113
Endrin	ND	F1	15.7	8.03	J F1	ug/Kg		51	58 - 115
Endrin aldehyde	ND	F1	15.7	ND	F1	ug/Kg		0	40 - 100
Endrin ketone	ND	F1	15.7	7.91	J F1	ug/Kg		50	51 - 118
trans-Chlordane	ND	F2	15.7	9.18	J	ug/Kg		58	55 - 114

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 320-81134-1 MS
Matrix: Solid
Analysis Batch: 545312

Client Sample ID: AOC1-S9A-0.5
Prep Type: Total/NA
Prep Batch: 542445

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
gamma-BHC (Lindane)	ND	F1	15.7	9.87	J	ug/Kg		63	54 - 112
Heptachlor	ND	F1	15.7	8.93	J	ug/Kg		57	50 - 118
Heptachlor epoxide	ND	F1	15.7	8.72	J F1	ug/Kg		55	56 - 113
Methoxychlor	ND	F1	15.7	ND	F1	ug/Kg		0	52 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*10*	*p S1-*	*46 - 109*
Tetrachloro-m-xylene	*46*	*S1-*	*47 - 107*

Lab Sample ID: 320-81134-1 MSD
Matrix: Solid
Analysis Batch: 545312

Client Sample ID: AOC1-S9A-0.5
Prep Type: Total/NA
Prep Batch: 542445

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND	F1	16.3	8.40	J F1	ug/Kg		52	53 - 117	17	30
4,4'-DDE	ND	F1	16.3	7.29	J F1	ug/Kg		45	58 - 115	26	30
4,4'-DDT	ND	F1	16.3	7.26	J F1	ug/Kg		45	53 - 128	12	30
Aldrin	ND	F1	16.3	6.74	J F1	ug/Kg		41	55 - 109	20	30
alpha-BHC	ND	F1	16.3	8.08	J F1	ug/Kg		50	54 - 111	13	30
cis-Chlordane	ND	F1	16.3	6.81	J F1	ug/Kg		42	54 - 113	18	30
beta-BHC	ND	F2 F1	16.3	7.61	J F1 F2	ug/Kg		47	53 - 115	37	30
delta-BHC	ND		16.3	6.54	J	ug/Kg		40	39 - 124	26	30
Dieldrin	ND	F1	16.3	6.43	J F1	ug/Kg		40	54 - 117	22	30
Endosulfan I	ND	F1	16.3	4.81	J F1	ug/Kg		30	42 - 118	20	30
Endosulfan II	ND	F1	16.3	5.55	J F1	ug/Kg		34	48 - 118	19	30
Endosulfan sulfate	ND	F1	16.3	4.91	J F1	ug/Kg		30	51 - 113	30	30
Endrin	ND	F1	16.3	6.64	J F1	ug/Kg		41	58 - 115	19	30
Endrin aldehyde	ND	F1	16.3	ND	F1	ug/Kg		0	40 - 100	NC	30
Endrin ketone	ND	F1	16.3	6.46	J F1	ug/Kg		40	51 - 118	20	30
trans-Chlordane	ND	F2	16.3	17.6	F2	ug/Kg		108	55 - 114	63	30
gamma-BHC (Lindane)	ND	F1	16.3	8.04	J F1	ug/Kg		49	54 - 112	20	30
Heptachlor	ND	F1	16.3	7.44	J F1	ug/Kg		46	50 - 118	18	30
Heptachlor epoxide	ND	F1	16.3	7.24	J F1	ug/Kg		45	56 - 113	18	30
Methoxychlor	ND	F1	16.3	ND	F1	ug/Kg		0	52 - 123	NC	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*30*	*p S1-*	*46 - 109*
Tetrachloro-m-xylene	*36*	*p S1-*	*47 - 107*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 320-540241/1-A
Matrix: Water
Analysis Batch: 543549

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540241

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.075	ug/L		11/05/21 09:42	11/17/21 20:28	1
PCB-1221	ND		0.50	0.27	ug/L		11/05/21 09:42	11/17/21 20:28	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 320-540241/1-A
Matrix: Water
Analysis Batch: 543549

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540241

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	ND		0.50	0.080	ug/L		11/05/21 09:42	11/17/21 20:28	1
PCB-1242	ND		0.50	0.13	ug/L		11/05/21 09:42	11/17/21 20:28	1
PCB-1248	ND		0.50	0.12	ug/L		11/05/21 09:42	11/17/21 20:28	1
PCB-1254	ND		0.50	0.095	ug/L		11/05/21 09:42	11/17/21 20:28	1
PCB-1260	ND		0.50	0.11	ug/L		11/05/21 09:42	11/17/21 20:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*62*		*29 - 128*	*11/05/21 09:42*	*11/17/21 20:28*	*1*

Lab Sample ID: LCS 320-540241/2-A
Matrix: Water
Analysis Batch: 543549

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540241

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			2.00	1.85		ug/L		92	63 - 114		
PCB-1260			2.00	1.74		ug/L		87	64 - 114		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*70*		*29 - 128*

Lab Sample ID: LCSD 320-540241/3-A
Matrix: Water
Analysis Batch: 543549

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540241

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			2.00	1.80		ug/L		90	63 - 114	2	30
PCB-1260			2.00	1.70		ug/L		85	64 - 114	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*72*		*29 - 128*

Lab Sample ID: MB 320-541564/1-A
Matrix: Solid
Analysis Batch: 543196

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541564

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.6	ug/Kg		11/10/21 10:54	11/16/21 13:51	1
PCB-1221	ND		33	3.6	ug/Kg		11/10/21 10:54	11/16/21 13:51	1
PCB-1232	ND		33	4.8	ug/Kg		11/10/21 10:54	11/16/21 13:51	1
PCB-1242	ND		33	5.9	ug/Kg		11/10/21 10:54	11/16/21 13:51	1
PCB-1248	ND		33	2.4	ug/Kg		11/10/21 10:54	11/16/21 13:51	1
PCB-1254	ND		33	3.8	ug/Kg		11/10/21 10:54	11/16/21 13:51	1
PCB-1260	ND		33	2.7	ug/Kg		11/10/21 10:54	11/16/21 13:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*52 - 138*	*11/10/21 10:54*	*11/16/21 13:51*	*1*
Tetrachloro-m-xylene	*65*		*56 - 114*	*11/10/21 10:54*	*11/16/21 13:51*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 320-541564/2-A
Matrix: Solid
Analysis Batch: 543196

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541564

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			66.7	57.3		ug/Kg		86	58 - 124		
PCB-1260			66.7	53.6		ug/Kg		80	55 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*79*		*52 - 138*
Tetrachloro-m-xylene	*80*		*56 - 114*

Lab Sample ID: MB 320-542456/1-A
Matrix: Solid
Analysis Batch: 544127

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 542456

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	2.6	ug/Kg		11/13/21 08:43	11/20/21 06:34	1
PCB-1221	ND		33	3.6	ug/Kg		11/13/21 08:43	11/20/21 06:34	1
PCB-1232	ND		33	4.8	ug/Kg		11/13/21 08:43	11/20/21 06:34	1
PCB-1242	ND		33	5.9	ug/Kg		11/13/21 08:43	11/20/21 06:34	1
PCB-1248	ND		33	2.4	ug/Kg		11/13/21 08:43	11/20/21 06:34	1
PCB-1254	ND		33	3.8	ug/Kg		11/13/21 08:43	11/20/21 06:34	1
PCB-1260	ND		33	2.7	ug/Kg		11/13/21 08:43	11/20/21 06:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*52 - 138*	*11/13/21 08:43*	*11/20/21 06:34*	*1*
Tetrachloro-m-xylene	*71*		*56 - 114*	*11/13/21 08:43*	*11/20/21 06:34*	*1*

Lab Sample ID: LCS 320-542456/2-A
Matrix: Solid
Analysis Batch: 544127

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 542456

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			66.7	68.3		ug/Kg		102	58 - 124		
PCB-1260			66.7	70.3		ug/Kg		106	55 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*106*		*52 - 138*
Tetrachloro-m-xylene	*91*		*56 - 114*

Lab Sample ID: 320-81134-2 MS
Matrix: Solid
Analysis Batch: 544127

Client Sample ID: AOC1-S9A-0.5 DUP
Prep Type: Total/NA
Prep Batch: 542456

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND	F2	63.4	49.8		ug/Kg		79	58 - 124		
PCB-1260	ND		63.4	46.8		ug/Kg		74	55 - 138		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*103*		*52 - 138*
Tetrachloro-m-xylene	*82*		*56 - 114*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 320-81134-2 MSD
Matrix: Solid
Analysis Batch: 544127

Client Sample ID: AOC1-S9A-0.5 DUP
Prep Type: Total/NA
Prep Batch: 542456

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND	F2	65.1	40.5	F2	ug/Kg		62	58 - 124	21	20
PCB-1260	ND		65.1	39.8		ug/Kg		61	55 - 138	16	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*88*		*52 - 138*
Tetrachloro-m-xylene	*66*		*56 - 114*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 570-194147/1-A
Matrix: Water
Analysis Batch: 194363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 194147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.010	0.0058	mg/L		11/14/21 11:09	11/15/21 14:26	1
Arsenic	ND		0.10	0.022	mg/L		11/14/21 11:09	11/15/21 14:26	1
Barium	ND		0.010	0.0016	mg/L		11/14/21 11:09	11/15/21 14:26	1
Beryllium	ND		0.010	0.0026	mg/L		11/14/21 11:09	11/15/21 14:26	1
Cadmium	ND		0.010	0.0012	mg/L		11/14/21 11:09	11/15/21 14:26	1
Cobalt	ND		0.050	0.0023	mg/L		11/14/21 11:09	11/15/21 14:26	1
Chromium	ND		0.050	0.0086	mg/L		11/14/21 11:09	11/15/21 14:26	1
Copper	ND		0.050	0.0085	mg/L		11/14/21 11:09	11/15/21 14:26	1
Molybdenum	ND		0.050	0.024	mg/L		11/14/21 11:09	11/15/21 14:26	1
Nickel	ND		0.050	0.0045	mg/L		11/14/21 11:09	11/15/21 14:26	1
Antimony	ND		0.10	0.021	mg/L		11/14/21 11:09	11/15/21 14:26	1
Selenium	ND		0.10	0.034	mg/L		11/14/21 11:09	11/15/21 14:26	1
Thallium	ND		0.050	0.019	mg/L		11/14/21 11:09	11/15/21 14:26	1
Vanadium	ND		0.010	0.0017	mg/L		11/14/21 11:09	11/15/21 14:26	1
Zinc	ND		0.25	0.014	mg/L		11/14/21 11:09	11/15/21 14:26	1
Lead	ND		0.050	0.0080	mg/L		11/14/21 11:09	11/15/21 14:26	1

Lab Sample ID: LCS 570-194147/2-A
Matrix: Water
Analysis Batch: 194363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 194147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.250	0.230		mg/L		92	80 - 120
Arsenic	0.500	0.471		mg/L		94	80 - 120
Barium	0.500	0.547		mg/L		109	80 - 120
Beryllium	0.500	0.494		mg/L		99	80 - 120
Cadmium	0.500	0.508		mg/L		102	80 - 120
Cobalt	0.500	0.502		mg/L		100	80 - 120
Chromium	0.500	0.506		mg/L		101	80 - 120
Copper	0.500	0.534		mg/L		107	80 - 120
Molybdenum	0.501	0.483		mg/L		97	80 - 120
Nickel	0.500	0.524		mg/L		105	80 - 120
Antimony	0.500	0.490		mg/L		98	80 - 120
Selenium	0.500	0.459		mg/L		92	80 - 120
Thallium	0.500	0.490		mg/L		98	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 570-194147/2-A
Matrix: Water
Analysis Batch: 194363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 194147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	0.500	0.514		mg/L		103	80 - 120
Zinc	0.500	0.513		mg/L		103	80 - 120
Lead	0.500	0.528		mg/L		106	80 - 120

Lab Sample ID: LCSD 570-194147/3-A
Matrix: Water
Analysis Batch: 194363

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 194147

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.250	0.230		mg/L		92	80 - 120	0	20
Arsenic	0.500	0.475		mg/L		95	80 - 120	1	20
Barium	0.500	0.544		mg/L		109	80 - 120	0	20
Beryllium	0.500	0.493		mg/L		99	80 - 120	0	20
Cadmium	0.500	0.510		mg/L		102	80 - 120	0	20
Cobalt	0.500	0.504		mg/L		101	80 - 120	0	20
Chromium	0.500	0.504		mg/L		101	80 - 120	0	20
Copper	0.500	0.532		mg/L		106	80 - 120	0	20
Molybdenum	0.501	0.495		mg/L		99	80 - 120	2	20
Nickel	0.500	0.524		mg/L		105	80 - 120	0	20
Antimony	0.500	0.491		mg/L		98	80 - 120	0	20
Selenium	0.500	0.486		mg/L		97	80 - 120	6	20
Thallium	0.500	0.491		mg/L		98	80 - 120	0	20
Vanadium	0.500	0.513		mg/L		103	80 - 120	0	20
Zinc	0.500	0.514		mg/L		103	80 - 120	0	20
Lead	0.500	0.529		mg/L		106	80 - 120	0	20

Lab Sample ID: MB 320-539968/1-A
Matrix: Solid
Analysis Batch: 540856

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539968

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.06	J	2.0	0.94	mg/Kg		11/04/21 13:39	11/05/21 12:35	1

Lab Sample ID: MB 320-539968/1-A
Matrix: Solid
Analysis Batch: 541471

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539968

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.50	0.090	mg/Kg		11/04/21 13:39	11/09/21 14:28	1
Barium	ND		1.0	0.12	mg/Kg		11/04/21 13:39	11/09/21 14:28	1
Beryllium	ND		0.20	0.030	mg/Kg		11/04/21 13:39	11/09/21 14:28	1
Cadmium	ND		0.20	0.030	mg/Kg		11/04/21 13:39	11/09/21 14:28	1
Cobalt	ND		0.50	0.25	mg/Kg		11/04/21 13:39	11/09/21 14:28	1
Chromium	ND		0.50	0.14	mg/Kg		11/04/21 13:39	11/09/21 14:28	1
Copper	ND		1.5	0.22	mg/Kg		11/04/21 13:39	11/09/21 14:28	1
Molybdenum	ND		2.0	0.75	mg/Kg		11/04/21 13:39	11/09/21 14:28	1
Nickel	ND		1.0	0.24	mg/Kg		11/04/21 13:39	11/09/21 14:28	1
Lead	ND		1.0	0.26	mg/Kg		11/04/21 13:39	11/09/21 14:28	1
Selenium	ND		2.0	1.4	mg/Kg		11/04/21 13:39	11/09/21 14:28	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 320-539968/1-A
Matrix: Solid
Analysis Batch: 541471

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539968

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		2.0	0.84	mg/Kg		11/04/21 13:39	11/09/21 14:28	1
Vanadium	ND		0.50	0.19	mg/Kg		11/04/21 13:39	11/09/21 14:28	1
Zinc	ND		2.0	0.19	mg/Kg		11/04/21 13:39	11/09/21 14:28	1
Arsenic	ND		2.0	1.3	mg/Kg		11/04/21 13:39	11/09/21 14:28	1

Lab Sample ID: LCS 320-539968/2-A
Matrix: Solid
Analysis Batch: 540856

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539968

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	41.5		mg/Kg		83	80 - 120

Lab Sample ID: LCS 320-539968/2-A
Matrix: Solid
Analysis Batch: 541471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539968

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.05	4.26		mg/Kg		84	80 - 120
Barium	50.0	44.8		mg/Kg		90	80 - 120
Beryllium	25.0	21.8		mg/Kg		87	80 - 120
Cadmium	25.0	22.0		mg/Kg		88	80 - 120
Cobalt	25.0	22.5		mg/Kg		90	80 - 120
Chromium	25.0	22.2		mg/Kg		89	80 - 120
Copper	25.0	22.0		mg/Kg		88	80 - 120
Molybdenum	25.0	22.4		mg/Kg		90	80 - 120
Nickel	25.0	21.9		mg/Kg		87	80 - 120
Lead	25.0	22.4		mg/Kg		90	80 - 120
Selenium	50.0	42.0		mg/Kg		84	80 - 120
Thallium	50.0	45.3		mg/Kg		91	80 - 120
Vanadium	25.0	22.1		mg/Kg		88	80 - 120
Zinc	49.9	45.0		mg/Kg		90	80 - 120
Arsenic	50.0	42.3		mg/Kg		85	80 - 120

Lab Sample ID: MB 320-541299/1-A
Matrix: Solid
Analysis Batch: 541574

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541299

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.50	0.090	mg/Kg		11/09/21 13:20	11/10/21 10:25	1
Barium	ND		1.0	0.12	mg/Kg		11/09/21 13:20	11/10/21 10:25	1
Beryllium	ND		0.20	0.030	mg/Kg		11/09/21 13:20	11/10/21 10:25	1
Cadmium	ND		0.20	0.030	mg/Kg		11/09/21 13:20	11/10/21 10:25	1
Cobalt	ND		0.50	0.25	mg/Kg		11/09/21 13:20	11/10/21 10:25	1
Chromium	ND		0.50	0.14	mg/Kg		11/09/21 13:20	11/10/21 10:25	1
Copper	0.421	J	1.5	0.22	mg/Kg		11/09/21 13:20	11/10/21 10:25	1
Molybdenum	ND		2.0	0.75	mg/Kg		11/09/21 13:20	11/10/21 10:25	1
Nickel	ND		1.0	0.24	mg/Kg		11/09/21 13:20	11/10/21 10:25	1
Lead	ND		1.0	0.26	mg/Kg		11/09/21 13:20	11/10/21 10:25	1
Selenium	ND		2.0	1.4	mg/Kg		11/09/21 13:20	11/10/21 10:25	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 320-541299/1-A
Matrix: Solid
Analysis Batch: 541574

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541299

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.94	mg/Kg		11/09/21 13:20	11/10/21 10:25	1
Thallium	ND		2.0	0.84	mg/Kg		11/09/21 13:20	11/10/21 10:25	1
Vanadium	ND		0.50	0.19	mg/Kg		11/09/21 13:20	11/10/21 10:25	1
Zinc	ND		2.0	0.19	mg/Kg		11/09/21 13:20	11/10/21 10:25	1
Arsenic	ND		2.0	1.3	mg/Kg		11/09/21 13:20	11/10/21 10:25	1

Lab Sample ID: LCS 320-541299/2-A
Matrix: Solid
Analysis Batch: 541574

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541299

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.05	4.35		mg/Kg		86	80 - 120
Barium	50.0	46.4		mg/Kg		93	80 - 120
Beryllium	25.0	22.9		mg/Kg		92	80 - 120
Cadmium	25.0	23.5		mg/Kg		94	80 - 120
Cobalt	25.0	23.1		mg/Kg		93	80 - 120
Chromium	25.0	22.6		mg/Kg		90	80 - 120
Copper	25.0	23.9		mg/Kg		95	80 - 120
Molybdenum	25.0	23.4		mg/Kg		93	80 - 120
Nickel	25.0	23.2		mg/Kg		93	80 - 120
Lead	25.0	23.5		mg/Kg		94	80 - 120
Selenium	50.0	45.4		mg/Kg		91	80 - 120
Antimony	50.0	46.1		mg/Kg		92	80 - 120
Thallium	50.0	43.4		mg/Kg		87	80 - 120
Vanadium	25.0	23.3		mg/Kg		93	80 - 120
Zinc	49.9	47.6		mg/Kg		95	80 - 120
Arsenic	50.0	45.2		mg/Kg		90	80 - 120

Lab Sample ID: 320-81134-1 MS
Matrix: Solid
Analysis Batch: 541574

Client Sample ID: AOC1-S9A-0.5
Prep Type: Total/NA
Prep Batch: 541299

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.10	J	5.00	4.43		mg/Kg		87	80 - 120
Barium	79	F1	49.5	116	F1	mg/Kg		74	80 - 120
Beryllium	0.39		24.8	22.5		mg/Kg		89	80 - 120
Cadmium	0.23		24.8	23.0		mg/Kg		92	80 - 120
Cobalt	6.2		24.8	28.2		mg/Kg		89	80 - 120
Chromium	28		24.8	52.9		mg/Kg		101	80 - 120
Copper	15	B	24.7	35.4		mg/Kg		84	80 - 120
Molybdenum	ND		24.8	22.6		mg/Kg		91	80 - 120
Nickel	25		24.8	47.4		mg/Kg		90	80 - 120
Lead	60		24.8	81.0		mg/Kg		85	80 - 120
Selenium	ND		49.5	45.4		mg/Kg		92	80 - 120
Antimony	10	F1	49.5	37.5	F1	mg/Kg		55	80 - 120
Thallium	0.84	J	49.5	42.8		mg/Kg		86	80 - 120
Vanadium	24		24.8	49.0		mg/Kg		100	80 - 120
Zinc	68	F1	49.4	105	F1	mg/Kg		73	80 - 120
Arsenic	5.1		49.5	49.0		mg/Kg		89	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 320-81134-1 MSD
Matrix: Solid
Analysis Batch: 541574

Client Sample ID: AOC1-S9A-0.5
Prep Type: Total/NA
Prep Batch: 541299

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.10	J	4.90	4.27		mg/Kg		85	80 - 120	4	35
Barium	79	F1	48.5	115	F1	mg/Kg		73	80 - 120	1	35
Beryllium	0.39		24.3	21.8		mg/Kg		88	80 - 120	3	35
Cadmium	0.23		24.3	22.4		mg/Kg		91	80 - 120	3	35
Cobalt	6.2		24.3	28.0		mg/Kg		90	80 - 120	1	35
Chromium	28		24.3	51.9		mg/Kg		100	80 - 120	2	35
Copper	15	B	24.3	36.2		mg/Kg		89	80 - 120	2	35
Molybdenum	ND		24.3	21.9		mg/Kg		90	80 - 120	3	35
Nickel	25		24.3	48.2		mg/Kg		96	80 - 120	2	35
Lead	60		24.3	82.0		mg/Kg		91	80 - 120	1	35
Selenium	ND		48.6	44.3		mg/Kg		91	80 - 120	2	35
Antimony	10	F1	48.5	37.9	F1	mg/Kg		58	80 - 120	1	35
Thallium	0.84	J	48.5	41.9		mg/Kg		86	80 - 120	2	35
Vanadium	24		24.3	50.6		mg/Kg		109	80 - 120	3	35
Zinc	68	F1	48.4	103	F1	mg/Kg		72	80 - 120	1	35
Arsenic	5.1		48.5	47.4		mg/Kg		87	80 - 120	3	35

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 570-194150/1-A
Matrix: Water
Analysis Batch: 194318

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 194150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00050	0.00014	mg/L		11/15/21 05:30	11/15/21 16:34	1

Lab Sample ID: LCS 570-194150/2-A
Matrix: Water
Analysis Batch: 194318

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 194150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0100	0.0104		mg/L		104	80 - 120

Lab Sample ID: LCSD 570-194150/3-A
Matrix: Water
Analysis Batch: 194318

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 194150

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0100	0.0103		mg/L		103	80 - 120	1	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 570-194146/1-A
Matrix: Solid
Analysis Batch: 194317

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 194146

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0181	J	0.085	0.014	mg/Kg		11/14/21 10:50	11/15/21 17:30	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 570-194146/2-A
Matrix: Solid
Analysis Batch: 194317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 194146

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.951		mg/Kg		114	85 - 121		

Lab Sample ID: LCSD 570-194146/3-A
Matrix: Solid
Analysis Batch: 194317

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 194146

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.847	0.968		mg/Kg		114	85 - 121	2	10

QC Association Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

GC/MS VOA

Prep Batch: 539553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-9	AOC4-S1-10	Total/NA	Solid	5030B	
320-81134-10	AOC4-S1-15	Total/NA	Solid	5030B	
320-81134-11	AOC4-S1-5 DUP	Total/NA	Solid	5030B	
320-81134-11	AOC4-S1-5 DUP	Total/NA	Solid	5030B	
320-81134-12	AOC9-SG3-5	Total/NA	Solid	5030B	
320-81134-13	AOC9-SG3-10	Total/NA	Solid	5030B	
320-81134-14	AOC9-SG4-5	Total/NA	Solid	5030B	
320-81134-15	AOC9-SG4-10	Total/NA	Solid	5030B	
320-81134-18	AOC9-S2-5	Total/NA	Solid	5030B	
320-81134-19	AOC9-S2-10	Total/NA	Solid	5030B	

Analysis Batch: 540739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-9	AOC4-S1-10	Total/NA	Solid	8260B/CA_LUFT MS	539553
320-81134-10	AOC4-S1-15	Total/NA	Solid	8260B/CA_LUFT MS	539553
MB 320-540739/10	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 320-540739/5	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 320-540739/6	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	

Analysis Batch: 540740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-10	AOC4-S1-15	Total/NA	Solid	8260B	539553
MB 320-540740/10	Method Blank	Total/NA	Solid	8260B	
LCS 320-540740/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 320-540740/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 541535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-22	TB11012021	Total/NA	Water	8260B	
MB 320-541535/8	Method Blank	Total/NA	Water	8260B	
LCS 320-541535/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 320-541535/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 541763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-11	AOC4-S1-5 DUP	Total/NA	Solid	8260B	539553
MB 320-541763/10	Method Blank	Total/NA	Solid	8260B	
LCS 320-541763/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 320-541763/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 542091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-12	AOC9-SG3-5	Total/NA	Solid	8260B	539553
320-81134-14	AOC9-SG4-5	Total/NA	Solid	8260B	539553
320-81134-15	AOC9-SG4-10	Total/NA	Solid	8260B	539553
320-81134-18	AOC9-S2-5	Total/NA	Solid	8260B	539553
320-81134-19	AOC9-S2-10	Total/NA	Solid	8260B	539553

GC/MS VOA (Continued)

Analysis Batch: 542091 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-542091/10	Method Blank	Total/NA	Solid	8260B	
LCS 320-542091/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 320-542091/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 542094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-11	AOC4-S1-5 DUP	Total/NA	Solid	8260B/CA_LUFT MS	539553
320-81134-12	AOC9-SG3-5	Total/NA	Solid	8260B/CA_LUFT MS	539553
320-81134-14	AOC9-SG4-5	Total/NA	Solid	8260B/CA_LUFT MS	539553
320-81134-15	AOC9-SG4-10	Total/NA	Solid	8260B/CA_LUFT MS	539553
320-81134-18	AOC9-S2-5	Total/NA	Solid	8260B/CA_LUFT MS	539553
320-81134-19	AOC9-S2-10	Total/NA	Solid	8260B/CA_LUFT MS	539553
MB 320-542094/10	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 320-542094/4	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 320-542094/5	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	

Prep Batch: 542312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-8	AOC4-S1-5	Total/NA	Solid	5030B	
320-81134-9	AOC4-S1-10	Total/NA	Solid	5030B	

Analysis Batch: 542726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-13	AOC9-SG3-10	Total/NA	Solid	8260B/CA_LUFT MS	539553
MB 320-542726/11	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 320-542726/4	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 320-542726/5	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	

Analysis Batch: 542727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-13	AOC9-SG3-10	Total/NA	Solid	8260B	539553
MB 320-542727/11	Method Blank	Total/NA	Solid	8260B	
LCS 320-542727/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 320-542727/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 543468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-8	AOC4-S1-5	Total/NA	Solid	8260B	542312
320-81134-9	AOC4-S1-10	Total/NA	Solid	8260B	542312
MB 320-543468/10	Method Blank	Total/NA	Solid	8260B	
LCS 320-543468/7	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS VOA (Continued)

Analysis Batch: 543468 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 320-543468/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 543469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-8	AOC4-S1-5	Total/NA	Solid	8260B/CA_LUFT MS	542312
MB 320-543469/10	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 320-543469/4	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 320-543469/5	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	

GC Semi VOA

Prep Batch: 540241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-21	EB11012021	Total/NA	Water	3510C	
MB 320-540241/1-A	Method Blank	Total/NA	Water	3510C	
LCS 320-540241/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 320-540241/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 540321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-21	EB11012021	Total/NA	Water	3510C	
MB 320-540321/1-A	Method Blank	Total/NA	Water	3510C	
LCS 320-540321/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 320-540321/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 540584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-8	AOC4-S1-5	Total/NA	Solid	3550B	
320-81134-9	AOC4-S1-10	Total/NA	Solid	3550B	
320-81134-10	AOC4-S1-15	Total/NA	Solid	3550B	
320-81134-11	AOC4-S1-5 DUP	Total/NA	Solid	3550B	
320-81134-12	AOC9-SG3-5	Total/NA	Solid	3550B	
320-81134-13	AOC9-SG3-10	Total/NA	Solid	3550B	
320-81134-14	AOC9-SG4-5	Total/NA	Solid	3550B	
320-81134-15	AOC9-SG4-10	Total/NA	Solid	3550B	
320-81134-18	AOC9-S2-5	Total/NA	Solid	3550B	
320-81134-19	AOC9-S2-10	Total/NA	Solid	3550B	
320-81134-20	AOC6-S9B-4	Total/NA	Solid	3550B	
MB 320-540584/1-A	Method Blank	Total/NA	Solid	3550B	
LCS 320-540584/2-A	Lab Control Sample	Total/NA	Solid	3550B	

Analysis Batch: 541288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-21	EB11012021	Total/NA	Water	8015B	540321
MB 320-540321/1-A	Method Blank	Total/NA	Water	8015B	540321
LCS 320-540321/2-A	Lab Control Sample	Total/NA	Water	8015B	540321
LCSD 320-540321/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	540321

GC Semi VOA

Prep Batch: 541359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-7	AOC1-S1-2 DUP	Total/NA	Solid	3546	
MB 320-541359/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-541359/2-A	Lab Control Sample	Total/NA	Solid	3546	

Prep Batch: 541564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-20	AOC6-S9B-4	Total/NA	Solid	3546	
MB 320-541564/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-541564/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 541889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-540584/1-A	Method Blank	Total/NA	Solid	8015B	540584
LCS 320-540584/2-A	Lab Control Sample	Total/NA	Solid	8015B	540584

Analysis Batch: 542300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-8	AOC4-S1-5	Total/NA	Solid	8015B	540584
320-81134-9	AOC4-S1-10	Total/NA	Solid	8015B	540584
320-81134-10	AOC4-S1-15	Total/NA	Solid	8015B	540584
320-81134-11	AOC4-S1-5 DUP	Total/NA	Solid	8015B	540584
320-81134-12	AOC9-SG3-5	Total/NA	Solid	8015B	540584
320-81134-13	AOC9-SG3-10	Total/NA	Solid	8015B	540584
320-81134-14	AOC9-SG4-5	Total/NA	Solid	8015B	540584
320-81134-15	AOC9-SG4-10	Total/NA	Solid	8015B	540584
320-81134-18	AOC9-S2-5	Total/NA	Solid	8015B	540584
320-81134-19	AOC9-S2-10	Total/NA	Solid	8015B	540584
320-81134-20	AOC6-S9B-4	Total/NA	Solid	8015B	540584

Prep Batch: 542445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-1	AOC1-S9A-0.5	Total/NA	Solid	3546	
320-81134-2	AOC1-S9A-0.5 DUP	Total/NA	Solid	3546	
320-81134-3	AOC1-S9A-2	Total/NA	Solid	3546	
320-81134-4	AOC1-S1-0.5	Total/NA	Solid	3546	
320-81134-5	AOC1-S1-0.5 DUP	Total/NA	Solid	3546	
320-81134-6	AOC1-S1-2	Total/NA	Solid	3546	
320-81134-16	AOC1-S2-0.5	Total/NA	Solid	3546	
320-81134-17	AOC1-S2-2	Total/NA	Solid	3546	
MB 320-542445/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-542445/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 320-542445/3-A	Lab Control Sample	Total/NA	Solid	3546	
320-81134-1 MS	AOC1-S9A-0.5	Total/NA	Solid	3546	
320-81134-1 MSD	AOC1-S9A-0.5	Total/NA	Solid	3546	

Prep Batch: 542456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-1	AOC1-S9A-0.5	Total/NA	Solid	3546	
320-81134-2	AOC1-S9A-0.5 DUP	Total/NA	Solid	3546	
320-81134-4	AOC1-S1-0.5	Total/NA	Solid	3546	
320-81134-5	AOC1-S1-0.5 DUP	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 542456 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-16	AOC1-S2-0.5	Total/NA	Solid	3546	
MB 320-542456/1-A	Method Blank	Total/NA	Solid	3546	
LCS 320-542456/2-A	Lab Control Sample	Total/NA	Solid	3546	
320-81134-2 MS	AOC1-S9A-0.5 DUP	Total/NA	Solid	3546	
320-81134-2 MSD	AOC1-S9A-0.5 DUP	Total/NA	Solid	3546	

Analysis Batch: 543196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-20	AOC6-S9B-4	Total/NA	Solid	8082	541564
MB 320-541564/1-A	Method Blank	Total/NA	Solid	8082	541564
LCS 320-541564/2-A	Lab Control Sample	Total/NA	Solid	8082	541564

Analysis Batch: 543549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-21	EB11012021	Total/NA	Water	8082	540241
MB 320-540241/1-A	Method Blank	Total/NA	Water	8082	540241
LCS 320-540241/2-A	Lab Control Sample	Total/NA	Water	8082	540241
LCSD 320-540241/3-A	Lab Control Sample Dup	Total/NA	Water	8082	540241

Analysis Batch: 544089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-541359/1-A	Method Blank	Total/NA	Solid	8081A	541359
LCS 320-541359/2-A	Lab Control Sample	Total/NA	Solid	8081A	541359

Analysis Batch: 544127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-1	AOC1-S9A-0.5	Total/NA	Solid	8082	542456
320-81134-2	AOC1-S9A-0.5 DUP	Total/NA	Solid	8082	542456
320-81134-4	AOC1-S1-0.5	Total/NA	Solid	8082	542456
320-81134-5	AOC1-S1-0.5 DUP	Total/NA	Solid	8082	542456
320-81134-16	AOC1-S2-0.5	Total/NA	Solid	8082	542456
MB 320-542456/1-A	Method Blank	Total/NA	Solid	8082	542456
LCS 320-542456/2-A	Lab Control Sample	Total/NA	Solid	8082	542456
320-81134-2 MS	AOC1-S9A-0.5 DUP	Total/NA	Solid	8082	542456
320-81134-2 MSD	AOC1-S9A-0.5 DUP	Total/NA	Solid	8082	542456

Analysis Batch: 544910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-7	AOC1-S1-2 DUP	Total/NA	Solid	8081A	541359

Analysis Batch: 545312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-1	AOC1-S9A-0.5	Total/NA	Solid	8081A	542445
320-81134-2	AOC1-S9A-0.5 DUP	Total/NA	Solid	8081A	542445
320-81134-3	AOC1-S9A-2	Total/NA	Solid	8081A	542445
320-81134-4	AOC1-S1-0.5	Total/NA	Solid	8081A	542445
320-81134-5	AOC1-S1-0.5 DUP	Total/NA	Solid	8081A	542445
320-81134-6	AOC1-S1-2	Total/NA	Solid	8081A	542445
320-81134-16	AOC1-S2-0.5	Total/NA	Solid	8081A	542445
320-81134-17	AOC1-S2-2	Total/NA	Solid	8081A	542445
MB 320-542445/1-A	Method Blank	Total/NA	Solid	8081A	542445

GC Semi VOA (Continued)

Analysis Batch: 545312 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-542445/2-A	Lab Control Sample	Total/NA	Solid	8081A	542445
LCS 320-542445/3-A	Lab Control Sample	Total/NA	Solid	8081A	542445
320-81134-1 MS	AOC1-S9A-0.5	Total/NA	Solid	8081A	542445
320-81134-1 MSD	AOC1-S9A-0.5	Total/NA	Solid	8081A	542445

Metals

Prep Batch: 194146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-8	AOC4-S1-5	Total/NA	Solid	7471A	
320-81134-9	AOC4-S1-10	Total/NA	Solid	7471A	
320-81134-10	AOC4-S1-15	Total/NA	Solid	7471A	
320-81134-11	AOC4-S1-5 DUP	Total/NA	Solid	7471A	
320-81134-12	AOC9-SG3-5	Total/NA	Solid	7471A	
320-81134-13	AOC9-SG3-10	Total/NA	Solid	7471A	
320-81134-14	AOC9-SG4-5	Total/NA	Solid	7471A	
320-81134-15	AOC9-SG4-10	Total/NA	Solid	7471A	
320-81134-18	AOC9-S2-5	Total/NA	Solid	7471A	
320-81134-19	AOC9-S2-10	Total/NA	Solid	7471A	
MB 570-194146/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 570-194146/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 570-194146/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	

Prep Batch: 194147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-21	EB11012021	Total/NA	Water	3010A	
MB 570-194147/1-A	Method Blank	Total/NA	Water	3010A	
LCS 570-194147/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 570-194147/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	

Prep Batch: 194150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-21	EB11012021	Total/NA	Water	7470A	
MB 570-194150/1-A	Method Blank	Total/NA	Water	7470A	
LCS 570-194150/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 570-194150/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	

Analysis Batch: 194317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-8	AOC4-S1-5	Total/NA	Solid	7471A	194146
320-81134-9	AOC4-S1-10	Total/NA	Solid	7471A	194146
320-81134-10	AOC4-S1-15	Total/NA	Solid	7471A	194146
320-81134-11	AOC4-S1-5 DUP	Total/NA	Solid	7471A	194146
320-81134-12	AOC9-SG3-5	Total/NA	Solid	7471A	194146
320-81134-13	AOC9-SG3-10	Total/NA	Solid	7471A	194146
320-81134-14	AOC9-SG4-5	Total/NA	Solid	7471A	194146
320-81134-15	AOC9-SG4-10	Total/NA	Solid	7471A	194146
320-81134-18	AOC9-S2-5	Total/NA	Solid	7471A	194146
320-81134-19	AOC9-S2-10	Total/NA	Solid	7471A	194146
MB 570-194146/1-A	Method Blank	Total/NA	Solid	7471A	194146
LCS 570-194146/2-A	Lab Control Sample	Total/NA	Solid	7471A	194146

Metals (Continued)

Analysis Batch: 194317 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 570-194146/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	194146

Analysis Batch: 194318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-21	EB11012021	Total/NA	Water	7470A	194150
MB 570-194150/1-A	Method Blank	Total/NA	Water	7470A	194150
LCS 570-194150/2-A	Lab Control Sample	Total/NA	Water	7470A	194150
LCSD 570-194150/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	194150

Analysis Batch: 194363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-21	EB11012021	Total/NA	Water	6010B	194147
MB 570-194147/1-A	Method Blank	Total/NA	Water	6010B	194147
LCS 570-194147/2-A	Lab Control Sample	Total/NA	Water	6010B	194147
LCSD 570-194147/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	194147

Prep Batch: 539968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-19	AOC9-S2-10	Total/NA	Solid	3050B	
MB 320-539968/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-539968/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 540856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-19	AOC9-S2-10	Total/NA	Solid	6010B	539968
MB 320-539968/1-A	Method Blank	Total/NA	Solid	6010B	539968
LCS 320-539968/2-A	Lab Control Sample	Total/NA	Solid	6010B	539968

Prep Batch: 541299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-1	AOC1-S9A-0.5	Total/NA	Solid	3050B	
320-81134-2	AOC1-S9A-0.5 DUP	Total/NA	Solid	3050B	
320-81134-4	AOC1-S1-0.5	Total/NA	Solid	3050B	
320-81134-5	AOC1-S1-0.5 DUP	Total/NA	Solid	3050B	
320-81134-8	AOC4-S1-5	Total/NA	Solid	3050B	
320-81134-9	AOC4-S1-10	Total/NA	Solid	3050B	
320-81134-10	AOC4-S1-15	Total/NA	Solid	3050B	
320-81134-11	AOC4-S1-5 DUP	Total/NA	Solid	3050B	
320-81134-12	AOC9-SG3-5	Total/NA	Solid	3050B	
320-81134-13	AOC9-SG3-10	Total/NA	Solid	3050B	
320-81134-14	AOC9-SG4-5	Total/NA	Solid	3050B	
320-81134-15	AOC9-SG4-10	Total/NA	Solid	3050B	
320-81134-16	AOC1-S2-0.5	Total/NA	Solid	3050B	
320-81134-18	AOC9-S2-5	Total/NA	Solid	3050B	
MB 320-541299/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-541299/2-A	Lab Control Sample	Total/NA	Solid	3050B	
320-81134-1 MS	AOC1-S9A-0.5	Total/NA	Solid	3050B	
320-81134-1 MSD	AOC1-S9A-0.5	Total/NA	Solid	3050B	

Metals

Analysis Batch: 541471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-19	AOC9-S2-10	Total/NA	Solid	6010B	539968
MB 320-539968/1-A	Method Blank	Total/NA	Solid	6010B	539968
LCS 320-539968/2-A	Lab Control Sample	Total/NA	Solid	6010B	539968

Analysis Batch: 541574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-1	AOC1-S9A-0.5	Total/NA	Solid	6010B	541299
320-81134-2	AOC1-S9A-0.5 DUP	Total/NA	Solid	6010B	541299
MB 320-541299/1-A	Method Blank	Total/NA	Solid	6010B	541299
LCS 320-541299/2-A	Lab Control Sample	Total/NA	Solid	6010B	541299
320-81134-1 MS	AOC1-S9A-0.5	Total/NA	Solid	6010B	541299
320-81134-1 MSD	AOC1-S9A-0.5	Total/NA	Solid	6010B	541299

Analysis Batch: 541790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-4	AOC1-S1-0.5	Total/NA	Solid	6010B	541299
320-81134-5	AOC1-S1-0.5 DUP	Total/NA	Solid	6010B	541299
320-81134-8	AOC4-S1-5	Total/NA	Solid	6010B	541299
320-81134-9	AOC4-S1-10	Total/NA	Solid	6010B	541299
320-81134-10	AOC4-S1-15	Total/NA	Solid	6010B	541299
320-81134-11	AOC4-S1-5 DUP	Total/NA	Solid	6010B	541299
320-81134-12	AOC9-SG3-5	Total/NA	Solid	6010B	541299
320-81134-13	AOC9-SG3-10	Total/NA	Solid	6010B	541299
320-81134-14	AOC9-SG4-5	Total/NA	Solid	6010B	541299
320-81134-15	AOC9-SG4-10	Total/NA	Solid	6010B	541299
320-81134-16	AOC1-S2-0.5	Total/NA	Solid	6010B	541299
320-81134-18	AOC9-S2-5	Total/NA	Solid	6010B	541299
320-81134-19	AOC9-S2-10	Total/NA	Solid	6010B	539968

Client Sample ID: AOC1-S9A-0.5

Lab Sample ID: 320-81134-1

Date Collected: 11/01/21 09:25

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.16 g	5 mL	542445	11/13/21 08:25	PT	TAL SAC
Total/NA	Analysis	8081A		10			545312	11/23/21 15:45	K1D	TAL SAC
Total/NA	Prep	3546			15.16 g	5 mL	542456	11/13/21 08:43	PT	TAL SAC
Total/NA	Analysis	8082		1			544127	11/20/21 07:15	K1D	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	541299	11/09/21 13:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			541574	11/10/21 10:32	SP	TAL SAC

Client Sample ID: AOC1-S9A-0.5 DUP

Lab Sample ID: 320-81134-2

Date Collected: 11/01/21 09:25

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.40 g	5 mL	542445	11/13/21 08:25	PT	TAL SAC
Total/NA	Analysis	8081A		20			545312	11/23/21 16:42	K1D	TAL SAC
Total/NA	Prep	3546			15.40 g	5 mL	542456	11/13/21 08:43	PT	TAL SAC
Total/NA	Analysis	8082		1			544127	11/20/21 07:35	K1D	TAL SAC
Total/NA	Prep	3050B			1.51 g	100 mL	541299	11/09/21 13:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			541574	11/10/21 10:51	SP	TAL SAC

Client Sample ID: AOC1-S9A-2

Lab Sample ID: 320-81134-3

Date Collected: 11/01/21 09:27

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.87 g	5 mL	542445	11/13/21 08:25	PT	TAL SAC
Total/NA	Analysis	8081A		1			545312	11/23/21 17:01	K1D	TAL SAC

Client Sample ID: AOC1-S1-0.5

Lab Sample ID: 320-81134-4

Date Collected: 11/01/21 12:10

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.03 g	5 mL	542445	11/13/21 08:25	PT	TAL SAC
Total/NA	Analysis	8081A		2			545312	11/23/21 17:20	K1D	TAL SAC
Total/NA	Prep	3546			15.03 g	5 mL	542456	11/13/21 08:43	PT	TAL SAC
Total/NA	Analysis	8082		1			544127	11/20/21 08:37	K1D	TAL SAC
Total/NA	Prep	3050B			1.01 g	100 mL	541299	11/09/21 13:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			541790	11/10/21 14:37	GSH	TAL SAC

Client Sample ID: AOC1-S1-0.5 DUP

Lab Sample ID: 320-81134-5

Date Collected: 11/01/21 12:10

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.01 g	5 mL	542445	11/13/21 08:25	PT	TAL SAC
Total/NA	Analysis	8081A		2			545312	11/23/21 17:58	K1D	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC1-S1-0.5 DUP
Lab Sample ID: 320-81134-5
Date Collected: 11/01/21 12:10
Matrix: Solid
Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.01 g	5 mL	542456	11/13/21 08:43	PT	TAL SAC
Total/NA	Analysis	8082		2			544127	11/20/21 08:58	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	541299	11/09/21 13:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			541790	11/10/21 14:40	GSH	TAL SAC

Client Sample ID: AOC1-S1-2
Lab Sample ID: 320-81134-6
Date Collected: 11/01/21 12:12
Matrix: Solid
Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.06 g	5 mL	542445	11/13/21 08:25	PT	TAL SAC
Total/NA	Analysis	8081A		1			545312	11/23/21 18:17	K1D	TAL SAC

Client Sample ID: AOC1-S1-2 DUP
Lab Sample ID: 320-81134-7
Date Collected: 11/01/21 12:12
Matrix: Solid
Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.23 g	5 mL	541359	11/09/21 14:45	PT	TAL SAC
Total/NA	Analysis	8081A		1			544910	11/22/21 17:23	K1D	TAL SAC

Client Sample ID: AOC4-S1-5
Lab Sample ID: 320-81134-8
Date Collected: 11/01/21 11:59
Matrix: Solid
Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			00005.00 g	5 mL	542312	11/12/21 14:03	CLF	TAL SAC
Total/NA	Analysis	8260B		1	5 mL	5 mL	543468	11/17/21 11:36	AZ1	TAL SAC
Total/NA	Prep	5030B			00005.00 g	5 mL	542312	11/12/21 14:03	CLF	TAL SAC
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	543469	11/17/21 11:36	AZ1	TAL SAC
Total/NA	Prep	3550B			30.05 g	3 mL	540584	11/06/21 09:57	PT	TAL SAC
Total/NA	Analysis	8015B		1			542300	11/13/21 11:29	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	541299	11/09/21 13:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			541790	11/10/21 14:44	GSH	TAL SAC
Total/NA	Prep	7471A			.58 g	100 mL	194146	11/14/21 10:50	WL8G	ECL 1
Total/NA	Analysis	7471A		1			194317	11/15/21 17:44	VWJ7	ECL 1

Client Sample ID: AOC4-S1-10
Lab Sample ID: 320-81134-9
Date Collected: 11/01/21 12:00
Matrix: Solid
Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			00005.16 g	5 mL	542312	11/12/21 14:05	CLF	TAL SAC
Total/NA	Analysis	8260B		1	5 mL	5 mL	543468	11/17/21 11:58	AZ1	TAL SAC

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC4-S1-10

Lab Sample ID: 320-81134-9

Date Collected: 11/01/21 12:00

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			00005.14 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	540739	11/07/21 19:36	SS	TAL SAC
Total/NA	Prep	3550B			30.08 g	3 mL	540584	11/06/21 09:57	PT	TAL SAC
Total/NA	Analysis	8015B		1			542300	11/13/21 11:58	K1D	TAL SAC
Total/NA	Prep	3050B			1.05 g	100 mL	541299	11/09/21 13:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			541790	11/10/21 14:48	GSH	TAL SAC
Total/NA	Prep	7471A			.61 g	100 mL	194146	11/14/21 10:50	WL8G	ECL 1
Total/NA	Analysis	7471A		1			194317	11/15/21 17:45	VWJ7	ECL 1

Client Sample ID: AOC4-S1-15

Lab Sample ID: 320-81134-10

Date Collected: 11/01/21 12:01

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			00005.11 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B		1	5 mL	5 mL	540740	11/07/21 19:57	SS	TAL SAC
Total/NA	Prep	5030B			00005.11 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	540739	11/07/21 19:57	SS	TAL SAC
Total/NA	Prep	3550B			30.40 g	3 mL	540584	11/06/21 09:57	PT	TAL SAC
Total/NA	Analysis	8015B		1			542300	11/13/21 12:27	K1D	TAL SAC
Total/NA	Prep	3050B			1.04 g	100 mL	541299	11/09/21 13:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			541790	11/10/21 14:52	GSH	TAL SAC
Total/NA	Prep	7471A			.60 g	100 mL	194146	11/14/21 10:50	WL8G	ECL 1
Total/NA	Analysis	7471A		1			194317	11/15/21 17:47	VWJ7	ECL 1

Client Sample ID: AOC4-S1-5 DUP

Lab Sample ID: 320-81134-11

Date Collected: 11/01/21 11:59

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			00005.10 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B		1	5 mL	5 mL	541763	11/11/21 16:37	AP1	TAL SAC
Total/NA	Prep	5030B			00005.10 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	542094	11/12/21 12:05	JRM	TAL SAC
Total/NA	Prep	3550B			30.67 g	3 mL	540584	11/06/21 09:57	PT	TAL SAC
Total/NA	Analysis	8015B		1			542300	11/13/21 12:56	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	541299	11/09/21 13:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			541790	11/10/21 14:55	GSH	TAL SAC
Total/NA	Prep	7471A			.59 g	100 mL	194146	11/14/21 10:50	WL8G	ECL 1
Total/NA	Analysis	7471A		1			194317	11/15/21 17:53	VWJ7	ECL 1

Client Sample ID: AOC9-SG3-5

Lab Sample ID: 320-81134-12

Date Collected: 11/01/21 10:37

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			00005.15 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B		1	5 mL	5 mL	542091	11/12/21 12:27	JRM	TAL SAC
Total/NA	Prep	5030B			00005.15 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	542094	11/12/21 12:27	JRM	TAL SAC
Total/NA	Prep	3550B			30.12 g	3 mL	540584	11/06/21 09:57	PT	TAL SAC
Total/NA	Analysis	8015B		1			542300	11/13/21 13:25	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	541299	11/09/21 13:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			541790	11/10/21 14:59	GSH	TAL SAC
Total/NA	Prep	7471A			.62 g	100 mL	194146	11/14/21 10:50	WL8G	ECL 1
Total/NA	Analysis	7471A		1			194317	11/15/21 17:55	VWJ7	ECL 1

Client Sample ID: AOC9-SG3-10

Lab Sample ID: 320-81134-13

Date Collected: 11/01/21 10:47

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			00005.12 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B		1	5 mL	5 mL	542727	11/15/21 17:00	AP1	TAL SAC
Total/NA	Prep	5030B			00005.12 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	542726	11/15/21 17:00	AP1	TAL SAC
Total/NA	Prep	3550B			30.51 g	3 mL	540584	11/06/21 09:57	PT	TAL SAC
Total/NA	Analysis	8015B		1			542300	11/13/21 13:54	K1D	TAL SAC
Total/NA	Prep	3050B			1.00 g	100 mL	541299	11/09/21 13:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			541790	11/10/21 15:03	GSH	TAL SAC
Total/NA	Prep	7471A			.63 g	100 mL	194146	11/14/21 10:50	WL8G	ECL 1
Total/NA	Analysis	7471A		1			194317	11/15/21 17:57	VWJ7	ECL 1

Client Sample ID: AOC9-SG4-5

Lab Sample ID: 320-81134-14

Date Collected: 11/01/21 10:00

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			00005.04 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B		1	5 mL	5 mL	542091	11/12/21 13:11	JRM	TAL SAC
Total/NA	Prep	5030B			00005.04 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	542094	11/12/21 13:11	JRM	TAL SAC
Total/NA	Prep	3550B			30.73 g	3 mL	540584	11/06/21 09:57	PT	TAL SAC
Total/NA	Analysis	8015B		1			542300	11/13/21 14:22	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	541299	11/09/21 13:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			541790	11/10/21 15:07	GSH	TAL SAC
Total/NA	Prep	7471A			.58 g	100 mL	194146	11/14/21 10:50	WL8G	ECL 1
Total/NA	Analysis	7471A		1			194317	11/15/21 17:59	VWJ7	ECL 1

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: AOC9-SG4-10

Lab Sample ID: 320-81134-15

Date Collected: 11/01/21 10:05

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			00005.33 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B		1	5 mL	5 mL	542091	11/12/21 13:33	JRM	TAL SAC
Total/NA	Prep	5030B			00005.33 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	542094	11/12/21 13:33	JRM	TAL SAC
Total/NA	Prep	3550B			30.63 g	3 mL	540584	11/06/21 09:57	PT	TAL SAC
Total/NA	Analysis	8015B		1			542300	11/13/21 14:51	K1D	TAL SAC
Total/NA	Prep	3050B			1.02 g	100 mL	541299	11/09/21 13:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			541790	11/10/21 15:18	GSH	TAL SAC
Total/NA	Prep	7471A			.59 g	100 mL	194146	11/14/21 10:50	WL8G	ECL 1
Total/NA	Analysis	7471A		1			194317	11/15/21 18:00	VWJ7	ECL 1

Client Sample ID: AOC1-S2-0.5

Lab Sample ID: 320-81134-16

Date Collected: 11/01/21 12:53

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.37 g	5 mL	542445	11/13/21 08:25	PT	TAL SAC
Total/NA	Analysis	8081A		5			545312	11/23/21 18:35	K1D	TAL SAC
Total/NA	Prep	3546			15.37 g	5 mL	542456	11/13/21 08:43	PT	TAL SAC
Total/NA	Analysis	8082		2			544127	11/20/21 09:18	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	541299	11/09/21 13:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			541790	11/10/21 15:22	GSH	TAL SAC

Client Sample ID: AOC1-S2-2

Lab Sample ID: 320-81134-17

Date Collected: 11/01/21 12:57

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.77 g	5 mL	542445	11/13/21 08:25	PT	TAL SAC
Total/NA	Analysis	8081A		1			545312	11/23/21 18:54	K1D	TAL SAC

Client Sample ID: AOC9-S2-5

Lab Sample ID: 320-81134-18

Date Collected: 11/01/21 13:00

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			00005.11 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B		1	5 mL	5 mL	542091	11/12/21 13:55	JRM	TAL SAC
Total/NA	Prep	5030B			00005.11 g	5 mL	539553	11/03/21 10:58	EMJ	TAL SAC
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	542094	11/12/21 13:55	JRM	TAL SAC
Total/NA	Prep	3550B			30.26 g	3 mL	540584	11/06/21 09:57	PT	TAL SAC
Total/NA	Analysis	8015B		1			542300	11/13/21 15:20	K1D	TAL SAC
Total/NA	Prep	3050B			1.03 g	100 mL	541299	11/09/21 13:20	JP	TAL SAC
Total/NA	Analysis	6010B		1			541790	11/10/21 15:26	GSH	TAL SAC

Client Sample ID: AOC9-S2-5

Lab Sample ID: 320-81134-18

Date Collected: 11/01/21 13:00

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			.61 g	100 mL	194146	11/14/21 10:50	WL8G	ECL 1
Total/NA	Analysis	7471A		1			194317	11/15/21 18:02	VWJ7	ECL 1

Client Sample ID: AOC9-S2-10

Lab Sample ID: 320-81134-19

Date Collected: 11/01/21 13:02

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			00005.29 g	5 mL	539553	11/03/21 11:01	EMJ	TAL SAC
Total/NA	Analysis	8260B		1	5 mL	5 mL	542091	11/12/21 14:18	JRM	TAL SAC
Total/NA	Prep	5030B			00005.29 g	5 mL	539553	11/03/21 11:01	EMJ	TAL SAC
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	542094	11/12/21 14:18	JRM	TAL SAC
Total/NA	Prep	3550B			30.21 g	3 mL	540584	11/06/21 09:57	PT	TAL SAC
Total/NA	Analysis	8015B		1			542300	11/13/21 15:48	K1D	TAL SAC
Total/NA	Prep	3050B			1.01 g	100 mL	539968	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			541471	11/09/21 15:39	GSH	TAL SAC
Total/NA	Prep	3050B			1.01 g	100 mL	539968	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			540856	11/05/21 13:43	GSH	TAL SAC
Total/NA	Prep	3050B			1.01 g	100 mL	539968	11/04/21 13:39	JP	TAL SAC
Total/NA	Analysis	6010B		1			541790	11/10/21 16:35	GSH	TAL SAC
Total/NA	Prep	7471A			.58 g	100 mL	194146	11/14/21 10:50	WL8G	ECL 1
Total/NA	Analysis	7471A		1			194317	11/15/21 18:04	VWJ7	ECL 1

Client Sample ID: AOC6-S9B-4

Lab Sample ID: 320-81134-20

Date Collected: 11/01/21 11:28

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30.45 g	3 mL	540584	11/06/21 09:57	PT	TAL SAC
Total/NA	Analysis	8015B		1			542300	11/13/21 16:17	K1D	TAL SAC
Total/NA	Prep	3546			15.93 g	5 mL	541564	11/10/21 10:54	NGK	TAL SAC
Total/NA	Analysis	8082		1			543196	11/16/21 18:50	K1D	TAL SAC

Client Sample ID: EB11012021

Lab Sample ID: 320-81134-21

Date Collected: 11/01/21 13:50

Matrix: Water

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1049.8 mL	3 mL	540321	11/05/21 12:43	AS	TAL SAC
Total/NA	Analysis	8015B		1			541288	11/09/21 13:54	K1D	TAL SAC
Total/NA	Prep	3510C			1043.4 mL	10 mL	540241	11/05/21 09:42	AS	TAL SAC
Total/NA	Analysis	8082		1			543549	11/17/21 21:27	K1D	TAL SAC
Total/NA	Prep	3010A			50 mL	50 mL	194147	11/14/21 11:09	WL8G	ECL 1
Total/NA	Analysis	6010B		1			194363	11/15/21 14:40	ULPF	ECL 1

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Client Sample ID: EB11012021

Lab Sample ID: 320-81134-21

Date Collected: 11/01/21 13:50

Matrix: Water

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			50 mL	100 mL	194150	11/15/21 05:30	WL8G	ECL 1
Total/NA	Analysis	7470A		1			194318	11/15/21 16:47	VWJ7	ECL 1

Client Sample ID: TB11012021

Lab Sample ID: 320-81134-22

Date Collected: 11/01/21 08:00

Matrix: Water

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	541535	11/10/21 13:06	EMJ	TAL SAC

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Laboratory: Eurofins TestAmerica, Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B	3510C	Water	Motor Oil Range Organics [C28-C40]
8015B	3550B	Solid	Motor Oil Range Organics [C24-C36]

Laboratory: Eurofins Calscience LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2944	09-30-22

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAC
8260B/CA_LUFTMS	Volatile Organic Compounds by GC/MS	SW846	TAL SAC
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SAC
8081A	Organochlorine Pesticides (GC)	SW846	TAL SAC
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL SAC
6010B	Metals (ICP)	SW846	ECL 1
6010B	Metals (ICP)	SW846	TAL SAC
7470A	Mercury (CVAA)	SW846	ECL 1
7471A	Mercury (CVAA)	SW846	ECL 1
3010A	Preparation, Total Metals	SW846	ECL 1
3050B	Preparation, Metals	SW846	TAL SAC
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL SAC
3546	Microwave Extraction	SW846	TAL SAC
3550B	Ultrasonic Extraction	SW846	TAL SAC
5030B	Purge and Trap	SW846	TAL SAC
7470A	Preparation, Mercury	SW846	ECL 1
7471A	Preparation, Mercury	SW846	ECL 1

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-81134-1	AOC1-S9A-0.5	Solid	11/01/21 09:25	11/02/21 12:48
320-81134-2	AOC1-S9A-0.5 DUP	Solid	11/01/21 09:25	11/02/21 12:48
320-81134-3	AOC1-S9A-2	Solid	11/01/21 09:27	11/02/21 12:48
320-81134-4	AOC1-S1-0.5	Solid	11/01/21 12:10	11/02/21 12:48
320-81134-5	AOC1-S1-0.5 DUP	Solid	11/01/21 12:10	11/02/21 12:48
320-81134-6	AOC1-S1-2	Solid	11/01/21 12:12	11/02/21 12:48
320-81134-7	AOC1-S1-2 DUP	Solid	11/01/21 12:12	11/02/21 12:48
320-81134-8	AOC4-S1-5	Solid	11/01/21 11:59	11/02/21 12:48
320-81134-9	AOC4-S1-10	Solid	11/01/21 12:00	11/02/21 12:48
320-81134-10	AOC4-S1-15	Solid	11/01/21 12:01	11/02/21 12:48
320-81134-11	AOC4-S1-5 DUP	Solid	11/01/21 11:59	11/02/21 12:48
320-81134-12	AOC9-SG3-5	Solid	11/01/21 10:37	11/02/21 12:48
320-81134-13	AOC9-SG3-10	Solid	11/01/21 10:47	11/02/21 12:48
320-81134-14	AOC9-SG4-5	Solid	11/01/21 10:00	11/02/21 12:48
320-81134-15	AOC9-SG4-10	Solid	11/01/21 10:05	11/02/21 12:48
320-81134-16	AOC1-S2-0.5	Solid	11/01/21 12:53	11/02/21 12:48
320-81134-17	AOC1-S2-2	Solid	11/01/21 12:57	11/02/21 12:48
320-81134-18	AOC9-S2-5	Solid	11/01/21 13:00	11/02/21 12:48
320-81134-19	AOC9-S2-10	Solid	11/01/21 13:02	11/02/21 12:48
320-81134-20	AOC6-S9B-4	Solid	11/01/21 11:28	11/02/21 12:48
320-81134-21	EB11012021	Water	11/01/21 13:50	11/02/21 12:48
320-81134-22	TB11012021	Water	11/01/21 08:00	11/02/21 12:48

#201272

Chain of Custody Record

320-81134

eurofins

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916 373.5600 fax 303.467 7248

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemecio	Date: 11/01/2021
Ninyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: TestAmerica
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226		COC No: 1
Alameda, California 94501	**Analysis Turnaround Time**		1 of 2 COCs
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS		Sampler: DNR
(510) 343-3001	TAT if different from Below ____		**For Lab Use Only:**
Project Name: Cole School PEA	☐ 2 weeks		Walk-in Client:
Site: 1011 Union Street, Oakland	☐ 1 week		Lab Sampling
P O # 403668001	☐ 2 days		Job / SDG No.
	☐ 1 day		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes.
AOC1-S9A-05	11/1/21	0925	G	Soil	1							X	X	X	X	
AOC1-S9A-05 DUP		0925										X	X	X	X	
AOC1-S9A-2		0927										X		X		
AOC1-S1-05		1210										X	X		X	
AOC1-S1-05 DUP		1210										X	X		X	
AOC1-S1-2		1212										X				
AOC1-S1-2 DUP		1212										X				
AOC4-S1-5		1159						X	X	X						
AOC4-S1-10		1200						X	X	X						
AOC4-S1-15		1201						X	X	X						
AOC4-S1-5 DUP		1159						X	X	X						

320-81134 Chain of Custody

Preservation Used 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH, 6= Other ____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for ____ Months

Special Instructions/QC Requirements & Comments.
Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. | Cooler Temp. (°C) Obs'd. ____ Corr'd. ____ Therm ID No. ____

Relinquished by: Daysi Nemecio (secured location Alameda office)	Company: N&M	Date/Time: 11/1/21 1527	Received by: Leslie Jang	Company: N&M	Date/Time: 11/2	11:46am
Relinquished by: Leslie Jang	Company: N&M	Date/Time: 11/2 11:46	Received by:	Company: EMA SJ	Date/Time: 11-2-21	11:46
Relinquished by:	Company: EMA SJ	Date/Time: 11/2/21 12:48	Received in Laboratory by:	Company: EMA SJ	Date/Time: 11/2/21	1248

Form No CA-C-WI-004, Rev 1 17 dated 6/27/2019

5.0c°

Chain of Custody Record

320-81134

201273

eurofins

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemecio	Date: 11/01/2021	COC No: 1
Ninyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: TAT America	2 of 2 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNR
Alameda, California 94501	**Analysis Turnaround Time**			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No
Site: 1011 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	VOCs (Method 624)	Sample Specific Notes.
AOC9-SG3-5	11/01/21	1037	G	Soil	1			X	X	X							
AOC9-SG3-10		1047						X	X	X							
AOC9-SG4-5		1000						X	X	X							
AOC9-SG4-10		1005						X	X	X							
AOC1-S2-0.5		1253										X	X		X		
AOC1-S2-2		1257										X					
AOC9-S2-5		1300						X	X	X							
AOC9-S2-10		1302						X	X	X							
AOC6-S9B-4		1128						X					X	X			
EB11012021		1350		H_2O	3			X		X	X	X	X				
TB11012021	~~11/01/21~~	~~0800~~		H_2O	3											X	

Preservation Used: 1= Ice, 2= HCl, 3= H_2SO_4; 4=HNO_3, 5=NaOH, 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.

Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.		Cooler Temp. (°C): Obs'd _____ Corr'd _____ Therm ID No.: _____		
Relinquished by: Daysi Nemecio (Courier Location: Alameda office)	Company: N&M	Date/Time: 11/1/21 15:27	Received by: Leslie Jung	Company: N&M	Date/Time: 11/2 11:46am
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 11/2 11:46	Received by: [signature]	Company: FAT SC	Date/Time: 11-2-21 11:46
Relinquished by: [signature]	Company: FAT SC	Date/Time: 11/2/21 13:45	Received in Laboratory by: [signature]	Company: Eurofins	Date/Time: 11/2/21 1245

5.0C°

Form No CA-C-WI-004, Rev 1 17 dated 6/27/2019

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247828.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81134-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/8/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290A/8290_P_Sox 17 Isomers List	6010B/3050B CAM 17 List, minus Mercury	8015B_DRO/3550B (MOD) DRO/MRO	8260B/5030B_SolidNAC (MOD) VOCs	8260B/CA_LUFTMS/5030B_SolidNAC GRO C4-C12	8015B_DRO/3510C_IVWT DRO/MRO	8081A/3510C_LVI Pesticides, Standard List	8082/3510C_LVI PCBs, Standard List	8270C_SIM/3510C_LVI PAHs	8260B/5030B VOCs, Standard List	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
AOCI-S9A-0.5 (320-81134-1)	11/1/21	09:25 Pacific		Solid			X	X	X	X										1	
AOCI-S9A-0.5 DUP (320-81134-2)	11/1/21	09:25 Pacific		Solid			X	X	X	X										1	
AOCI-S9A-2 (320-81134-3)	11/1/21	09:27 Pacific		Solid				X		X										1	
AOCI-S1-0.5 (320-81134-4)	11/1/21	12:10 Pacific		Solid			X	X	X											1	
AOCI-S1-0.5 DUP (320-81134-5)	11/1/21	12:10 Pacific		Solid			X	X	X											1	
AOCI-S1-2 (320-81134-6)	11/1/21	12:12 Pacific		Solid				X												1	
AOCI-S1-2 DUP (320-81134-7)	11/1/21	12:12 Pacific		Solid				X												1	
AOC4-S1-5 (320-81134-8)	11/1/21	11:59 Pacific		Solid							X	X	X	X						1	
AOC4-S1-10 (320-81134-9)	11/1/21	12:00 Pacific		Solid							X	X	X	X						1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	11/2/21 1630	TAS	Received by:	11/2/21 1630	BCL
Relinquished by:	11-2-21 1915	DCS	Received by:	11/2/21 1915	EGTSAC
Relinquished by			Received by:		

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.9 & 30

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247828.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 2 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81134-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/8/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290A/8290_P_Sox 17 Isomers List	6010B/3050B CAM 17 List, minus Mercury	8015B_DRO/3550B (MOD) DRO/MRO	8260B/5030B_SolidNAC (MOD) VOCs	8260B/CA_LUFTMS/5030B_SolidNAC GRO C4-C12	8015B_DRO/3510C_IWWT DRO/MRO	8081A/3510C_LVI Pesticides, Standard List	8082/3510C_LVI PCBs, Standard List	8270C_SIM/3510C_LVI PAHs	8260B/5030B VOCs, Standard List	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
AOC4-S1-15 (320-81134-10)	11/1/21	12:01 Pacific		Solid							X	X	X	X						1	
AOC4-S1-15 DUP (320-81134-11)	11/1/21	11:59 Pacific		Solid							X	X	X	X						1	
AOCI-SG3-5 (320-81134-12)	11/1/21	10:37 Pacific		Solid							X	X	X	X						1	
AOC9-SG3-10 (320-81134-13)	11/1/21	10:47 Pacific		Solid							X	X	X	X						1	
AOC9-SG4-5 (320-81134-14)	11/1/21	10:00 Pacific		Solid							X	X	X	X						1	
AOC9-SG4-10 (320-81134-15)	11/1/21	10:05 Pacific		Solid							X	X	X	X						1	
AOCI-S2-0.5 (320-81134-16)	11/1/21	12:53 Pacific		Solid			X	X	X											1	
AOCI-S2-2 (320-81134-17)	11/1/21	12:57 Pacific		Solid				X												1	
AOC9-S2-5 (320-81134-18)	11/1/21	13:00 Pacific		Solid							X	X	X	X						1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/2/21 1630	TAL SAC		11/2/21 1630	ACS
2	Relinquished by:	11-2-21 1915	ACS	Received by:	11/2/21 1915	FEDEX
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247828.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 3 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81134-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/8/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290A/8290_P_Sox 17 Isomers List	6010B/3050B CAM 17 List, minus Mercury	8015B_DRO/3550B (MOD) DRO/MRO	8260B/5030B_SolidNAC (MOD) VOCs	8260B/CA_LUFTMS/5030B_SolidNAC GRO C4-C12	8015B_DRO/3510C_IVWT DRO/MRO	8081A/3510C_LVI Pesticides, Standard List	8082/3510C_LVI PCBs, Standard List	8270C_SIM/3510C_LVI PAHs	8260B/5030B VOCs, Standard List	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
AOC9-S2-10 (320-81134-19)	11/1/21	13:02 Pacific		Solid							X	X	X	X						1	
AOC6-S9B-4 (320-81134-20)	11/1/21	11:28 Pacific		Solid			X			X		X								1	
EB11012021 (320-81134-21)	11/1/21	13:50 Pacific		Water											X	X	X	X		2	
TB11012021 (320-81134-22)	11/1/21	08:00 Pacific		Water															X	3	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/2/21 1630	EMAS		11/2/21 1630	DCS
2		11-2-21 1915	DCS		11/2/21-1915	EETSAC
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247827 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 2
Company: Eurofins Calscience LLC		Accreditations Required (See note): State - California		Job #: 320-81134-1
Address: 7440 Lincoln Way, ,	Due Date Requested: 11/15/2021			
City: Garden Grove	TAT Requested (days):			
State, Zip: CA, 92841				
Phone: 714-895-5494(Tel) 714-894-7501(Fax)	PO #:			
Email	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7471A/7471A_Prep Mercury	6010B/3010A California Administrative Manual List	7470A/7470A_Prep Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
AOC4-S1-5 (320-81134-8)	11/1/21	11 59 Pacific		Solid			X			1	
AOC4-S1-10 (320-81134-9)	11/1/21	12 00 Pacific		Solid			X			1	
AOC4-S1-15 (320-81134-10)	11/1/21	12 01 Pacific		Solid			X			1	
AOC4-S1-15 DUP (320-81134-11)	11/1/21	11.59 Pacific		Solid			X			1	
AOCI-SG3-5 (320-81134-12)	11/1/21	10 37 Pacific		Solid			X			1	
AOC9-SG3-10 (320-81134-13)	11/1/21	10 47 Pacific		Solid			X			1	
AOC9-SG4-5 (320-81134-14)	11/1/21	10 00 Pacific		Solid			X			1	
AOC9-SG4-10 (320-81134-15)	11/1/21	10 05 Pacific		Solid			X			1	
AOC9-S2-5 (320-81134-18)	11/1/21	13.00 Pacific		Solid			X			1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	11/2/21 1600	FEDEX		11/2/21 1034	ECL-C
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No: N/A | Cooler Temperature(s) °C and Other Remarks: 2.1/2.0 IR#5

Ver 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247827 2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn Gonzales@Eurofinset.com	State of Origin: California	Page: Page 2 of 2
Company: Eurofins Calscience LLC		Accreditations Required (See note): State - California		Job #: 320-81134-1
Address: 7440 Lincoln Way, ,	Due Date Requested: 11/15/2021			
City: Garden Grove	TAT Requested (days):			
State, Zip: CA, 92841				
Phone: 714-895-5494(Tel) 714-894-7501(Fax)	PO #:			
Email	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A - HCL	M Hexane
B - NaOH	N None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7471A/7471A_Prep Mercury	6010B/3010A California Administrative Manual List	7470A/7470A_Prep Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
AOC9-S2-10 (320-81134-19)	11/1/21	13:02 Pacific		Solid			X			1	
EB11012021 (320-81134-21)	11/1/21	13 50 Pacific		Water				X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time	Method of Shipment:		
Relinquished by:	Date/Time: 11/2/21 1600	Company 12/14 55	Received by:	Date/Time: 11/3/21 1035	Company ECL6
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No: N/A | Cooler Temperature(s) °C and Other Remarks: 2-1/3.0 SCS

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81134-1

Login Number: 81134
List Number: 1
Creator: Garcia, Hilario A

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81134-1

Login Number: 81134
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9 & 3.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81134-1

Login Number: 81134
List Number: 3
Creator: Ortiz-Luis, Michael

List Source: Eurofins Calscience LLC
List Creation: 11/03/21 03:13 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-81134-2
Client Project/Site: Cole School PEA
Revision: 1

For:
Ninyo & Moore
2020 Challenger Drive
Suite 103
Alameda, California 94501

Attn: Mr. Nathan Diem

Authorized for release by:
12/15/2021 12:53:09 PM

Justinn Gonzales, Project Manager I
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LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Qualifiers

Dioxin

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
q	The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Job ID: 320-81134-2

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-81134-2

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 11/23/2021. The report (revision 1) is being revised due to: Report samples to MDL or EDL for 8290A per client request. Total TEQ also added.

Receipt
The samples were received on 11/2/2021 12:48 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.0º C.

Dioxin
Method 8290A: The following sample exhibited elevated noise or matrix interferences for one or more analytes causing elevation of the detection limit (EDL): (LCS 320-539562/2-A) . The reporting limit (RL) for the affected analytes has been raised to be equal to the EDL, and a "G" qualifier applied.

Method 8290A: The bracketing continuing calibration verification (CCV) associated with batch 320-544400 has analytes with percent difference values that are between the method criteria of 20% to 25% deviation from the initial calibration curve. Per method guidelines, an average relative response factor (RRF) is calculated from the bracketing CCV and is used to quantitate any positive results in the associated samples for the affected analytes.

Method 8290A: The scheduled automatic ending resolution check did not print due to loss of communication to the SIOS data acquisition computer. Upon arrival to the laboratory, the analyst rebooted the SIOS and performed a manual ending resolution check. Although this ending resolution check was performed past the 12 hour analytical clock, all associated samples were analyzed within the 12 hour analytical clock and the resolution check indicates the instrument maintained greater than 10,000 resolution. No further corrective action was taken. AOC1-S9A-0.5 (320-81134-1), AOC6-S9B-4 (320-81134-20), (CCV 320-544985/17) and (CCV 320-544985/2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Dioxin Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Client Sample ID: AOC1-S9A-0.5 — Lab Sample ID: 320-81134-1

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDD	0.21	J q	0.95	0.10	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDF	0.35	J	4.8	0.17	pg/g	1		8290A	Total/NA
2,3,4,7,8-PeCDF	0.39	J	4.8	0.18	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.37	J B	4.8	0.12	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	0.33	J q B	4.8	0.12	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	0.38	J q	4.8	0.11	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.29	J B	4.8	0.090	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.40	J B	4.8	0.090	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDF	0.19	J B	4.8	0.10	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.35	J B	4.8	0.096	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	2.6	J B	4.8	0.10	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	1.1	J B	4.8	0.12	pg/g	1		8290A	Total/NA
OCDD	16	B	9.5	0.19	pg/g	1		8290A	Total/NA
OCDF	1.6	J B	9.5	0.14	pg/g	1		8290A	Total/NA
2,3,7,8-TCDF - RA	0.73	J	0.95	0.20	pg/g	1		8290A	Total/NA

Client Sample ID: AOC1-S9A-0.5 DUP — Lab Sample ID: 320-81134-2

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
2,3,7,8-TCDF	0.84	J	0.98	0.18	pg/g	1		8290A	Total/NA
1,2,3,7,8-PeCDF	0.35	J	4.9	0.15	pg/g	1		8290A	Total/NA
2,3,4,7,8-PeCDF	0.46	J	4.9	0.16	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDD	0.48	J B	4.9	0.20	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	0.37	J B	4.9	0.20	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDD	0.35	J	4.9	0.18	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.26	J B	4.9	0.14	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.38	J B	4.9	0.14	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.31	J B	4.9	0.15	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	3.1	J B	4.9	0.21	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	1.1	J q B	4.9	0.24	pg/g	1		8290A	Total/NA
OCDD	20	B	9.8	0.37	pg/g	1		8290A	Total/NA
OCDF	1.6	J B	9.8	0.30	pg/g	1		8290A	Total/NA

Client Sample ID: AOC1-S9A-2 — Lab Sample ID: 320-81134-3

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,4,7,8-HxCDD	0.29	J q B	4.7	0.080	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.11	J B	4.7	0.043	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDF	0.11	J B	4.7	0.043	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDF	0.19	J q B	4.7	0.049	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.12	J B	4.7	0.046	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	0.33	J B	4.7	0.021	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.15	J B	4.7	0.054	pg/g	1		8290A	Total/NA
OCDD	1.7	J B	9.4	0.084	pg/g	1		8290A	Total/NA
OCDF	0.54	J B	9.4	0.061	pg/g	1		8290A	Total/NA

Client Sample ID: AOC6-S9B-4 — Lab Sample ID: 320-81134-20

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,4,7,8-HxCDD	0.48	J q B	4.8	0.22	pg/g	1		8290A	Total/NA
1,2,3,6,7,8-HxCDD	0.42	J q B	4.8	0.22	pg/g	1		8290A	Total/NA
1,2,3,4,7,8-HxCDF	0.50	J B	4.8	0.10	pg/g	1		8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Client Sample ID: AOC6-S9B-4 (Continued)

Lab Sample ID: 320-81134-20

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,6,7,8-HxCDF	0.40	J B	4.8	0.10	pg/g	1		8290A	Total/NA
1,2,3,7,8,9-HxCDF	0.40	J B	4.8	0.12	pg/g	1		8290A	Total/NA
2,3,4,6,7,8-HxCDF	0.40	J B	4.8	0.11	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	0.45	J q B	4.8	0.049	pg/g	1		8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.48	J B	4.8	0.16	pg/g	1		8290A	Total/NA
OCDD	1.3	J B	9.5	0.20	pg/g	1		8290A	Total/NA
OCDF	0.64	J B	9.5	0.13	pg/g	1		8290A	Total/NA
2,3,7,8-TCDF - RA	0.57	J	0.95	0.086	pg/g	1		8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AOC1-S9A-0.5
Date Collected: 11/01/21 09:25
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-1
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	**0.21**	**J q**	0.95	0.10	pg/g		11/03/21 11:17	11/19/21 16:25	1
1,2,3,7,8-PeCDD	ND		4.8	0.12	pg/g		11/03/21 11:17	11/19/21 16:25	1
1,2,3,7,8-PeCDF	**0.35**	**J**	4.8	0.17	pg/g		11/03/21 11:17	11/19/21 16:25	1
2,3,4,7,8-PeCDF	**0.39**	**J**	4.8	0.18	pg/g		11/03/21 11:17	11/19/21 16:25	1
1,2,3,4,7,8-HxCDD	**0.37**	**J B**	4.8	0.12	pg/g		11/03/21 11:17	11/19/21 16:25	1
1,2,3,6,7,8-HxCDD	**0.33**	**J q B**	4.8	0.12	pg/g		11/03/21 11:17	11/19/21 16:25	1
1,2,3,7,8,9-HxCDD	**0.38**	**J q**	4.8	0.11	pg/g		11/03/21 11:17	11/19/21 16:25	1
1,2,3,4,7,8-HxCDF	**0.29**	**J B**	4.8	0.090	pg/g		11/03/21 11:17	11/19/21 16:25	1
1,2,3,6,7,8-HxCDF	**0.40**	**J B**	4.8	0.090	pg/g		11/03/21 11:17	11/19/21 16:25	1
1,2,3,7,8,9-HxCDF	**0.19**	**J B**	4.8	0.10	pg/g		11/03/21 11:17	11/19/21 16:25	1
2,3,4,6,7,8-HxCDF	**0.35**	**J B**	4.8	0.096	pg/g		11/03/21 11:17	11/19/21 16:25	1
1,2,3,4,6,7,8-HpCDD	**2.6**	**J B**	4.8	0.10	pg/g		11/03/21 11:17	11/19/21 16:25	1
1,2,3,4,6,7,8-HpCDF	**1.1**	**J B**	4.8	0.12	pg/g		11/03/21 11:17	11/19/21 16:25	1
1,2,3,4,7,8,9-HpCDF	ND		4.8	0.14	pg/g		11/03/21 11:17	11/19/21 16:25	1
OCDD	**16**	**B**	9.5	0.19	pg/g		11/03/21 11:17	11/19/21 16:25	1
OCDF	**1.6**	**J B**	9.5	0.14	pg/g		11/03/21 11:17	11/19/21 16:25	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*75*		*40 - 135*	*11/03/21 11:17*	*11/19/21 16:25*	*1*
13C-1,2,3,7,8-PeCDD	*78*		*40 - 135*	*11/03/21 11:17*	*11/19/21 16:25*	*1*
13C-1,2,3,7,8-PeCDF	*69*		*40 - 135*	*11/03/21 11:17*	*11/19/21 16:25*	*1*
13C-1,2,3,6,7,8-HxCDD	*78*		*40 - 135*	*11/03/21 11:17*	*11/19/21 16:25*	*1*
13C-1,2,3,4,7,8-HxCDF	*73*		*40 - 135*	*11/03/21 11:17*	*11/19/21 16:25*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*66*		*40 - 135*	*11/03/21 11:17*	*11/19/21 16:25*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*71*		*40 - 135*	*11/03/21 11:17*	*11/19/21 16:25*	*1*
13C-OCDD	*65*		*40 - 135*	*11/03/21 11:17*	*11/19/21 16:25*	*1*

Method: 8290A - Dioxins and Furans (HRGC/HRMS) - RA

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDF	**0.73**	**J**	0.95	0.20	pg/g		11/03/21 11:17	11/22/21 00:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDF	*88*		*40 - 135*	*11/03/21 11:17*	*11/22/21 00:27*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Client Sample ID: AOC1-S9A-0.5 DUP
Date Collected: 11/01/21 09:25
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-2
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.98	0.21	pg/g		11/03/21 11:17	11/19/21 17:13	1
2,3,7,8-TCDF	**0.84**	**J**	0.98	0.18	pg/g		11/03/21 11:17	11/19/21 17:13	1
1,2,3,7,8-PeCDD	ND		4.9	0.23	pg/g		11/03/21 11:17	11/19/21 17:13	1
1,2,3,7,8-PeCDF	**0.35**	**J**	4.9	0.15	pg/g		11/03/21 11:17	11/19/21 17:13	1
2,3,4,7,8-PeCDF	**0.46**	**J**	4.9	0.16	pg/g		11/03/21 11:17	11/19/21 17:13	1
1,2,3,4,7,8-HxCDD	**0.48**	**J B**	4.9	0.20	pg/g		11/03/21 11:17	11/19/21 17:13	1
1,2,3,6,7,8-HxCDD	**0.37**	**J B**	4.9	0.20	pg/g		11/03/21 11:17	11/19/21 17:13	1
1,2,3,7,8,9-HxCDD	**0.35**	**J**	4.9	0.18	pg/g		11/03/21 11:17	11/19/21 17:13	1
1,2,3,4,7,8-HxCDF	**0.26**	**J B**	4.9	0.14	pg/g		11/03/21 11:17	11/19/21 17:13	1
1,2,3,6,7,8-HxCDF	**0.38**	**J B**	4.9	0.14	pg/g		11/03/21 11:17	11/19/21 17:13	1
1,2,3,7,8,9-HxCDF	ND		4.9	0.16	pg/g		11/03/21 11:17	11/19/21 17:13	1
2,3,4,6,7,8-HxCDF	**0.31**	**J B**	4.9	0.15	pg/g		11/03/21 11:17	11/19/21 17:13	1
1,2,3,4,6,7,8-HpCDD	**3.1**	**J B**	4.9	0.21	pg/g		11/03/21 11:17	11/19/21 17:13	1
1,2,3,4,6,7,8-HpCDF	**1.1**	**J q B**	4.9	0.24	pg/g		11/03/21 11:17	11/19/21 17:13	1
1,2,3,4,7,8,9-HpCDF	ND		4.9	0.27	pg/g		11/03/21 11:17	11/19/21 17:13	1
OCDD	**20**	**B**	9.8	0.37	pg/g		11/03/21 11:17	11/19/21 17:13	1
OCDF	**1.6**	**J B**	9.8	0.30	pg/g		11/03/21 11:17	11/19/21 17:13	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*68*		*40 - 135*	*11/03/21 11:17*	*11/19/21 17:13*	*1*
13C-2,3,7,8-TCDF	*68*		*40 - 135*	*11/03/21 11:17*	*11/19/21 17:13*	*1*
13C-1,2,3,7,8-PeCDD	*79*		*40 - 135*	*11/03/21 11:17*	*11/19/21 17:13*	*1*
13C-1,2,3,7,8-PeCDF	*75*		*40 - 135*	*11/03/21 11:17*	*11/19/21 17:13*	*1*
13C-1,2,3,6,7,8-HxCDD	*73*		*40 - 135*	*11/03/21 11:17*	*11/19/21 17:13*	*1*
13C-1,2,3,4,7,8-HxCDF	*75*		*40 - 135*	*11/03/21 11:17*	*11/19/21 17:13*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*62*		*40 - 135*	*11/03/21 11:17*	*11/19/21 17:13*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*66*		*40 - 135*	*11/03/21 11:17*	*11/19/21 17:13*	*1*
13C-OCDD	*62*		*40 - 135*	*11/03/21 11:17*	*11/19/21 17:13*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Client Sample ID: AOC1-S9A-2
Date Collected: 11/01/21 09:27
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-3
Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.94	0.092	pg/g		11/03/21 11:17	11/19/21 23:54	1
2,3,7,8-TCDF	ND		0.94	0.031	pg/g		11/03/21 11:17	11/19/21 23:54	1
1,2,3,7,8-PeCDD	ND		4.7	0.084	pg/g		11/03/21 11:17	11/19/21 23:54	1
1,2,3,7,8-PeCDF	ND		4.7	0.049	pg/g		11/03/21 11:17	11/19/21 23:54	1
2,3,4,7,8-PeCDF	ND		4.7	0.050	pg/g		11/03/21 11:17	11/19/21 23:54	1
1,2,3,4,7,8-HxCDD	**0.29**	**J q B**	4.7	0.080	pg/g		11/03/21 11:17	11/19/21 23:54	1
1,2,3,6,7,8-HxCDD	ND		4.7	0.080	pg/g		11/03/21 11:17	11/19/21 23:54	1
1,2,3,7,8,9-HxCDD	ND		4.7	0.074	pg/g		11/03/21 11:17	11/19/21 23:54	1
1,2,3,4,7,8-HxCDF	**0.11**	**J B**	4.7	0.043	pg/g		11/03/21 11:17	11/19/21 23:54	1
1,2,3,6,7,8-HxCDF	**0.11**	**J B**	4.7	0.043	pg/g		11/03/21 11:17	11/19/21 23:54	1
1,2,3,7,8,9-HxCDF	**0.19**	**J q B**	4.7	0.049	pg/g		11/03/21 11:17	11/19/21 23:54	1
2,3,4,6,7,8-HxCDF	**0.12**	**J B**	4.7	0.046	pg/g		11/03/21 11:17	11/19/21 23:54	1
1,2,3,4,6,7,8-HpCDD	**0.33**	**J B**	4.7	0.021	pg/g		11/03/21 11:17	11/19/21 23:54	1
1,2,3,4,6,7,8-HpCDF	**0.15**	**J B**	4.7	0.054	pg/g		11/03/21 11:17	11/19/21 23:54	1
1,2,3,4,7,8,9-HpCDF	ND		4.7	0.061	pg/g		11/03/21 11:17	11/19/21 23:54	1
OCDD	**1.7**	**J B**	9.4	0.084	pg/g		11/03/21 11:17	11/19/21 23:54	1
OCDF	**0.54**	**J B**	9.4	0.061	pg/g		11/03/21 11:17	11/19/21 23:54	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*61*		*40 - 135*	*11/03/21 11:17*	*11/19/21 23:54*	*1*
13C-2,3,7,8-TCDF	*57*		*40 - 135*	*11/03/21 11:17*	*11/19/21 23:54*	*1*
13C-1,2,3,7,8-PeCDD	*65*		*40 - 135*	*11/03/21 11:17*	*11/19/21 23:54*	*1*
13C-1,2,3,7,8-PeCDF	*57*		*40 - 135*	*11/03/21 11:17*	*11/19/21 23:54*	*1*
13C-1,2,3,6,7,8-HxCDD	*63*		*40 - 135*	*11/03/21 11:17*	*11/19/21 23:54*	*1*
13C-1,2,3,4,7,8-HxCDF	*59*		*40 - 135*	*11/03/21 11:17*	*11/19/21 23:54*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*68*		*40 - 135*	*11/03/21 11:17*	*11/19/21 23:54*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*63*		*40 - 135*	*11/03/21 11:17*	*11/19/21 23:54*	*1*
13C-OCDD	*68*		*40 - 135*	*11/03/21 11:17*	*11/19/21 23:54*	*1*

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Client Sample ID: AOC6-S9B-4

Date Collected: 11/01/21 11:28
Date Received: 11/02/21 12:48

Lab Sample ID: 320-81134-20

Matrix: Solid

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.95	0.30	pg/g		11/03/21 11:17	11/20/21 00:42	1
1,2,3,7,8-PeCDD	ND		4.8	0.23	pg/g		11/03/21 11:17	11/20/21 00:42	1
1,2,3,7,8-PeCDF	ND		4.8	0.17	pg/g		11/03/21 11:17	11/20/21 00:42	1
2,3,4,7,8-PeCDF	ND		4.8	0.18	pg/g		11/03/21 11:17	11/20/21 00:42	1
1,2,3,4,7,8-HxCDD	**0.48**	**J q B**	4.8	0.22	pg/g		11/03/21 11:17	11/20/21 00:42	1
1,2,3,6,7,8-HxCDD	**0.42**	**J q B**	4.8	0.22	pg/g		11/03/21 11:17	11/20/21 00:42	1
1,2,3,7,8,9-HxCDD	ND		4.8	0.20	pg/g		11/03/21 11:17	11/20/21 00:42	1
1,2,3,4,7,8-HxCDF	**0.50**	**J B**	4.8	0.10	pg/g		11/03/21 11:17	11/20/21 00:42	1
1,2,3,6,7,8-HxCDF	**0.40**	**J B**	4.8	0.10	pg/g		11/03/21 11:17	11/20/21 00:42	1
1,2,3,7,8,9-HxCDF	**0.40**	**J B**	4.8	0.12	pg/g		11/03/21 11:17	11/20/21 00:42	1
2,3,4,6,7,8-HxCDF	**0.40**	**J B**	4.8	0.11	pg/g		11/03/21 11:17	11/20/21 00:42	1
1,2,3,4,6,7,8-HpCDD	**0.45**	**J q B**	4.8	0.049	pg/g		11/03/21 11:17	11/20/21 00:42	1
1,2,3,4,6,7,8-HpCDF	**0.48**	**J B**	4.8	0.16	pg/g		11/03/21 11:17	11/20/21 00:42	1
1,2,3,4,7,8,9-HpCDF	ND		4.8	0.18	pg/g		11/03/21 11:17	11/20/21 00:42	1
OCDD	**1.3**	**J B**	9.5	0.20	pg/g		11/03/21 11:17	11/20/21 00:42	1
OCDF	**0.64**	**J B**	9.5	0.13	pg/g		11/03/21 11:17	11/20/21 00:42	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*61*		*40 - 135*	*11/03/21 11:17*	*11/20/21 00:42*	*1*
13C-1,2,3,7,8-PeCDD	*66*		*40 - 135*	*11/03/21 11:17*	*11/20/21 00:42*	*1*
13C-1,2,3,7,8-PeCDF	*59*		*40 - 135*	*11/03/21 11:17*	*11/20/21 00:42*	*1*
13C-1,2,3,6,7,8-HxCDD	*64*		*40 - 135*	*11/03/21 11:17*	*11/20/21 00:42*	*1*
13C-1,2,3,4,7,8-HxCDF	*61*		*40 - 135*	*11/03/21 11:17*	*11/20/21 00:42*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*76*		*40 - 135*	*11/03/21 11:17*	*11/20/21 00:42*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*65*		*40 - 135*	*11/03/21 11:17*	*11/20/21 00:42*	*1*
13C-OCDD	*74*		*40 - 135*	*11/03/21 11:17*	*11/20/21 00:42*	*1*

Method: 8290A - Dioxins and Furans (HRGC/HRMS) - RA

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDF	**0.57**	**J**	0.95	0.086	pg/g		11/03/21 11:17	11/22/21 01:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDF	*77*		*40 - 135*	*11/03/21 11:17*	*11/22/21 01:06*	*1*

Toxicity Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Client Sample ID: AOC1-S9A-0.5 — Lab Sample ID: 320-81134-1

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	0.21	J q	0.95	0.10	pg/g	1	0.21	8290A
1,2,3,7,8-PeCDD	ND		4.8	0.12	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	0.35	J	4.8	0.17	pg/g	0.03	0.011	8290A
2,3,4,7,8-PeCDF	0.39	J	4.8	0.18	pg/g	0.3	0.12	8290A
1,2,3,4,7,8-HxCDD	0.37	J B	4.8	0.12	pg/g	0.1	0.037	8290A
1,2,3,6,7,8-HxCDD	0.33	J q B	4.8	0.12	pg/g	0.1	0.033	8290A
1,2,3,7,8,9-HxCDD	0.38	J q	4.8	0.11	pg/g	0.1	0.038	8290A
1,2,3,4,7,8-HxCDF	0.29	J B	4.8	0.090	pg/g	0.1	0.029	8290A
1,2,3,6,7,8-HxCDF	0.40	J B	4.8	0.090	pg/g	0.1	0.040	8290A
1,2,3,7,8,9-HxCDF	0.19	J B	4.8	0.10	pg/g	0.1	0.019	8290A
2,3,4,6,7,8-HxCDF	0.35	J B	4.8	0.096	pg/g	0.1	0.035	8290A
1,2,3,4,6,7,8-HpCDD	2.6	J B	4.8	0.10	pg/g	0.01	0.026	8290A
1,2,3,4,6,7,8-HpCDF	1.1	J B	4.8	0.12	pg/g	0.01	0.011	8290A
1,2,3,4,7,8,9-HpCDF	ND		4.8	0.14	pg/g	0.01	0.00	8290A
OCDD	16	B	9.5	0.19	pg/g	0.0003	0.0048	8290A
OCDF	1.6	J B	9.5	0.14	pg/g	0.0003	0.00048	8290A
2,3,7,8-TCDF - RA	0.73	J	0.95	0.20	pg/g	0.1	0.073	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.69	TEQ

Client Sample ID: AOC1-S9A-0.5 DUP — Lab Sample ID: 320-81134-2

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.98	0.21	pg/g	1	0.00	8290A
2,3,7,8-TCDF	0.84	J	0.98	0.18	pg/g	0.1	0.084	8290A
1,2,3,7,8-PeCDD	ND		4.9	0.23	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	0.35	J	4.9	0.15	pg/g	0.03	0.011	8290A
2,3,4,7,8-PeCDF	0.46	J	4.9	0.16	pg/g	0.3	0.14	8290A
1,2,3,4,7,8-HxCDD	0.48	J B	4.9	0.20	pg/g	0.1	0.048	8290A
1,2,3,6,7,8-HxCDD	0.37	J B	4.9	0.20	pg/g	0.1	0.037	8290A
1,2,3,7,8,9-HxCDD	0.35	J	4.9	0.18	pg/g	0.1	0.035	8290A
1,2,3,4,7,8-HxCDF	0.26	J B	4.9	0.14	pg/g	0.1	0.026	8290A
1,2,3,6,7,8-HxCDF	0.38	J B	4.9	0.14	pg/g	0.1	0.038	8290A
1,2,3,7,8,9-HxCDF	ND		4.9	0.16	pg/g	0.1	0.00	8290A
2,3,4,6,7,8-HxCDF	0.31	J B	4.9	0.15	pg/g	0.1	0.031	8290A
1,2,3,4,6,7,8-HpCDD	3.1	J B	4.9	0.21	pg/g	0.01	0.031	8290A
1,2,3,4,6,7,8-HpCDF	1.1	J q B	4.9	0.24	pg/g	0.01	0.011	8290A
1,2,3,4,7,8,9-HpCDF	ND		4.9	0.27	pg/g	0.01	0.00	8290A
OCDD	20	B	9.8	0.37	pg/g	0.0003	0.0060	8290A
OCDF	1.6	J B	9.8	0.30	pg/g	0.0003	0.00048	8290A

TEF Reference:
WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Toxicity Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Client Sample ID: AOC1-S9A-0.5 DUP (Continued)

Lab Sample ID: 320-81134-2

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.50	TEQ

Client Sample ID: AOC1-S9A-2

Lab Sample ID: 320-81134-3

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.94	0.092	pg/g	1	0.00	8290A
2,3,7,8-TCDF	ND		0.94	0.031	pg/g	0.1	0.00	8290A
1,2,3,7,8-PeCDD	ND		4.7	0.084	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	ND		4.7	0.049	pg/g	0.03	0.00	8290A
2,3,4,7,8-PeCDF	ND		4.7	0.050	pg/g	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	**0.29**	**J q B**	4.7	0.080	pg/g	0.1	**0.029**	8290A
1,2,3,6,7,8-HxCDD	ND		4.7	0.080	pg/g	0.1	0.00	8290A
1,2,3,7,8,9-HxCDD	ND		4.7	0.074	pg/g	0.1	0.00	8290A
1,2,3,4,7,8-HxCDF	**0.11**	**J B**	4.7	0.043	pg/g	0.1	**0.011**	8290A
1,2,3,6,7,8-HxCDF	**0.11**	**J B**	4.7	0.043	pg/g	0.1	**0.011**	8290A
1,2,3,7,8,9-HxCDF	**0.19**	**J q B**	4.7	0.049	pg/g	0.1	**0.019**	8290A
2,3,4,6,7,8-HxCDF	**0.12**	**J B**	4.7	0.046	pg/g	0.1	**0.012**	8290A
1,2,3,4,6,7,8-HpCDD	**0.33**	**J B**	4.7	0.021	pg/g	0.01	**0.0033**	8290A
1,2,3,4,6,7,8-HpCDF	**0.15**	**J B**	4.7	0.054	pg/g	0.01	**0.0015**	8290A
1,2,3,4,7,8,9-HpCDF	ND		4.7	0.061	pg/g	0.01	0.00	8290A
OCDD	**1.7**	**J B**	9.4	0.084	pg/g	0.0003	**0.00051**	8290A
OCDF	**0.54**	**J B**	9.4	0.061	pg/g	0.0003	**0.00016**	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.087	TEQ

Client Sample ID: AOC6-S9B-4

Lab Sample ID: 320-81134-20

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
2,3,7,8-TCDD	ND		0.95	0.30	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDD	ND		4.8	0.23	pg/g	1	0.00	8290A
1,2,3,7,8-PeCDF	ND		4.8	0.17	pg/g	0.03	0.00	8290A
2,3,4,7,8-PeCDF	ND		4.8	0.18	pg/g	0.3	0.00	8290A
1,2,3,4,7,8-HxCDD	**0.48**	**J q B**	4.8	0.22	pg/g	0.1	**0.048**	8290A
1,2,3,6,7,8-HxCDD	**0.42**	**J q B**	4.8	0.22	pg/g	0.1	**0.042**	8290A
1,2,3,7,8,9-HxCDD	ND		4.8	0.20	pg/g	0.1	0.00	8290A
1,2,3,4,7,8-HxCDF	**0.50**	**J B**	4.8	0.10	pg/g	0.1	**0.050**	8290A
1,2,3,6,7,8-HxCDF	**0.40**	**J B**	4.8	0.10	pg/g	0.1	**0.040**	8290A
1,2,3,7,8,9-HxCDF	**0.40**	**J B**	4.8	0.12	pg/g	0.1	**0.040**	8290A
2,3,4,6,7,8-HxCDF	**0.40**	**J B**	4.8	0.11	pg/g	0.1	**0.040**	8290A
1,2,3,4,6,7,8-HpCDD	**0.45**	**J q B**	4.8	0.049	pg/g	0.01	**0.0045**	8290A

TEF Reference:
WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Toxicity Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Client Sample ID: AOC6-S9B-4 (Continued)

Lab Sample ID: 320-81134-20

Analyte	Result	Qualifier	RL	EDL	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
1,2,3,4,6,7,8-HpCDF	0.48	J B	4.8	0.16	pg/g	0.01	0.0048	8290A
1,2,3,4,7,8,9-HpCDF	ND		4.8	0.18	pg/g	0.01	0.00	8290A
OCDD	1.3	J B	9.5	0.20	pg/g	0.0003	0.00039	8290A
OCDF	0.64	J B	9.5	0.13	pg/g	0.0003	0.00019	8290A
2,3,7,8-TCDF - RA	0.57	J	0.95	0.086	pg/g	0.1	0.057	8290A

Analyte	Result	Qualifier	NONE	NONE	Unit	WHO 2010 ND = 0 TEF	WHO 2010 ND = 0 TEQ	Method
Total Dioxin/Furan TEQ					pg/g		0.33	TEQ

TEF Reference:

WHO 2010 = World Health Organization (WHO) 2010 TEF, Dioxins, Furans and PCB Congeners

Isotope Dilution Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (40-135)	TCDF (40-135)	PeCDD (40-135)	PeCDF (40-135)	HxDD (40-135)	HxCDF (40-135)	HpCDD (40-135)	HpCDF (40-135)
320-81134-1	AOC1-S9A-0.5	75		78	69	78	73	66	71
320-81134-1 - RA	AOC1-S9A-0.5		88						
320-81134-2	AOC1-S9A-0.5 DUP	68	68	79	75	73	75	62	66
320-81134-3	AOC1-S9A-2	61	57	65	57	63	59	68	63
320-81134-20	AOC6-S9B-4	61		66	59	64	61	76	65
320-81134-20 - RA	AOC6-S9B-4		77						
LCS 320-539562/2-A	Lab Control Sample	61	61	64	62	66	65	66	68
LCSD 320-539562/3-A	Lab Control Sample Dup	62	62	66	64	66	67	66	67
MB 320-539562/1-A	Method Blank	68	64	60	62	71	71	75	73

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	OCDD (40-135)							
320-81134-1	AOC1-S9A-0.5	65							
320-81134-1 - RA	AOC1-S9A-0.5								
320-81134-2	AOC1-S9A-0.5 DUP	62							
320-81134-3	AOC1-S9A-2	68							
320-81134-20	AOC6-S9B-4	74							
320-81134-20 - RA	AOC6-S9B-4								
LCS 320-539562/2-A	Lab Control Sample	62							
LCSD 320-539562/3-A	Lab Control Sample Dup	66							
MB 320-539562/1-A	Method Blank	72							

Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF = 13C-1,2,3,7,8-PeCDF
HxDD = 13C-1,2,3,6,7,8-HxCDD
HxCDF = 13C-1,2,3,4,7,8-HxCDF
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
OCDD = 13C-OCDD

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 320-539562/1-A
Matrix: Solid
Analysis Batch: 544396

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539562

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.0	0.14	pg/g		11/03/21 11:17	11/19/21 10:51	1
2,3,7,8-TCDF	ND		1.0	0.044	pg/g		11/03/21 11:17	11/19/21 10:51	1
1,2,3,7,8-PeCDD	ND		5.0	0.16	pg/g		11/03/21 11:17	11/19/21 10:51	1
1,2,3,7,8-PeCDF	ND		5.0	0.086	pg/g		11/03/21 11:17	11/19/21 10:51	1
2,3,4,7,8-PeCDF	ND		5.0	0.089	pg/g		11/03/21 11:17	11/19/21 10:51	1
1,2,3,4,7,8-HxCDD	0.399	q J	5.0	0.16	pg/g		11/03/21 11:17	11/19/21 10:51	1
1,2,3,6,7,8-HxCDD	0.409	q J	5.0	0.16	pg/g		11/03/21 11:17	11/19/21 10:51	1
1,2,3,7,8,9-HxCDD	ND		5.0	0.15	pg/g		11/03/21 11:17	11/19/21 10:51	1
1,2,3,4,7,8-HxCDF	0.182	q J	5.0	0.081	pg/g		11/03/21 11:17	11/19/21 10:51	1
1,2,3,6,7,8-HxCDF	0.200	J	5.0	0.080	pg/g		11/03/21 11:17	11/19/21 10:51	1
1,2,3,7,8,9-HxCDF	0.296	q J	5.0	0.091	pg/g		11/03/21 11:17	11/19/21 10:51	1
2,3,4,6,7,8-HxCDF	0.183	J	5.0	0.086	pg/g		11/03/21 11:17	11/19/21 10:51	1
1,2,3,4,6,7,8-HpCDD	0.476	J	5.0	0.042	pg/g		11/03/21 11:17	11/19/21 10:51	1
1,2,3,4,6,7,8-HpCDF	0.281	J	5.0	0.10	pg/g		11/03/21 11:17	11/19/21 10:51	1
1,2,3,4,7,8,9-HpCDF	0.202	q J	5.0	0.11	pg/g		11/03/21 11:17	11/19/21 10:51	1
OCDD	1.64	J	10	0.15	pg/g		11/03/21 11:17	11/19/21 10:51	1
OCDF	0.535	J	10	0.092	pg/g		11/03/21 11:17	11/19/21 10:51	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*68*		*40 - 135*	*11/03/21 11:17*	*11/19/21 10:51*	*1*
13C-2,3,7,8-TCDF	*64*		*40 - 135*	*11/03/21 11:17*	*11/19/21 10:51*	*1*
13C-1,2,3,7,8-PeCDD	*60*		*40 - 135*	*11/03/21 11:17*	*11/19/21 10:51*	*1*
13C-1,2,3,7,8-PeCDF	*62*		*40 - 135*	*11/03/21 11:17*	*11/19/21 10:51*	*1*
13C-1,2,3,6,7,8-HxCDD	*71*		*40 - 135*	*11/03/21 11:17*	*11/19/21 10:51*	*1*
13C-1,2,3,4,7,8-HxCDF	*71*		*40 - 135*	*11/03/21 11:17*	*11/19/21 10:51*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*75*		*40 - 135*	*11/03/21 11:17*	*11/19/21 10:51*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*73*		*40 - 135*	*11/03/21 11:17*	*11/19/21 10:51*	*1*
13C-OCDD	*72*		*40 - 135*	*11/03/21 11:17*	*11/19/21 10:51*	*1*

Lab Sample ID: LCS 320-539562/2-A
Matrix: Solid
Analysis Batch: 544396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539562

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	20.0	21.1		pg/g		105	77 - 130
2,3,7,8-TCDF	20.0	20.7		pg/g		104	79 - 137
1,2,3,7,8-PeCDD	100	111		pg/g		111	79 - 134
1,2,3,7,8-PeCDF	100	103		pg/g		103	81 - 134
2,3,4,7,8-PeCDF	100	107		pg/g		107	76 - 132
1,2,3,4,7,8-HxCDD	100	103		pg/g		103	65 - 144
1,2,3,6,7,8-HxCDD	100	104		pg/g		104	73 - 147
1,2,3,7,8,9-HxCDD	100	102		pg/g		102	80 - 143
1,2,3,4,7,8-HxCDF	100	96.1		pg/g		96	72 - 140
1,2,3,6,7,8-HxCDF	100	98.3		pg/g		98	63 - 152
1,2,3,7,8,9-HxCDF	100	97.2		pg/g		97	72 - 152
2,3,4,6,7,8-HxCDF	100	98.1		pg/g		98	72 - 151
1,2,3,4,6,7,8-HpCDD	100	105		pg/g		105	86 - 134
1,2,3,4,6,7,8-HpCDF	100	106		pg/g		106	81 - 137
1,2,3,4,7,8,9-HpCDF	100	106		pg/g		106	79 - 139

Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-539562/2-A
Matrix: Solid
Analysis Batch: 544396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539562

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
OCDD			200	229		pg/g		115	80 - 137		
OCDF			200	246		pg/g		123	75 - 141		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*61*		*40 - 135*
13C-2,3,7,8-TCDF	*61*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*64*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*62*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*66*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*65*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*66*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*68*		*40 - 135*
13C-OCDD	*62*		*40 - 135*

Lab Sample ID: LCSD 320-539562/3-A
Matrix: Solid
Analysis Batch: 544396

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 539562

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,7,8-TCDD			20.0	22.5		pg/g		113	77 - 130	7	20
2,3,7,8-TCDF			20.0	22.8		pg/g		114	79 - 137	10	20
1,2,3,7,8-PeCDD			100	112		pg/g		112	79 - 134	1	20
1,2,3,7,8-PeCDF			100	110		pg/g		110	81 - 134	6	20
2,3,4,7,8-PeCDF			100	111		pg/g		111	76 - 132	4	20
1,2,3,4,7,8-HxCDD			100	108		pg/g		108	65 - 144	4	20
1,2,3,6,7,8-HxCDD			100	110		pg/g		110	73 - 147	5	20
1,2,3,7,8,9-HxCDD			100	109		pg/g		109	80 - 143	6	20
1,2,3,4,7,8-HxCDF			100	106		pg/g		106	72 - 140	10	20
1,2,3,6,7,8-HxCDF			100	107		pg/g		107	63 - 152	8	20
1,2,3,7,8,9-HxCDF			100	107		pg/g		107	72 - 152	10	20
2,3,4,6,7,8-HxCDF			100	109		pg/g		109	72 - 151	11	20
1,2,3,4,6,7,8-HpCDD			100	109		pg/g		109	86 - 134	5	20
1,2,3,4,6,7,8-HpCDF			100	106		pg/g		106	81 - 137	0	20
1,2,3,4,7,8,9-HpCDF			100	106		pg/g		106	79 - 139	0	20
OCDD			200	219		pg/g		110	80 - 137	5	20
OCDF			200	223		pg/g		111	75 - 141	10	20

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*62*		*40 - 135*
13C-2,3,7,8-TCDF	*62*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*66*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*64*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*66*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*67*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*66*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*67*		*40 - 135*
13C-OCDD	*66*		*40 - 135*

QC Association Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Specialty Organics

Prep Batch: 539562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-1 - RA	AOC1-S9A-0.5	Total/NA	Solid	8290	
320-81134-1	AOC1-S9A-0.5	Total/NA	Solid	8290	
320-81134-2	AOC1-S9A-0.5 DUP	Total/NA	Solid	8290	
320-81134-3	AOC1-S9A-2	Total/NA	Solid	8290	
320-81134-20 - RA	AOC6-S9B-4	Total/NA	Solid	8290	
320-81134-20	AOC6-S9B-4	Total/NA	Solid	8290	
MB 320-539562/1-A	Method Blank	Total/NA	Solid	8290	
LCS 320-539562/2-A	Lab Control Sample	Total/NA	Solid	8290	
LCSD 320-539562/3-A	Lab Control Sample Dup	Total/NA	Solid	8290	

Analysis Batch: 544396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-1	AOC1-S9A-0.5	Total/NA	Solid	8290A	539562
320-81134-2	AOC1-S9A-0.5 DUP	Total/NA	Solid	8290A	539562
MB 320-539562/1-A	Method Blank	Total/NA	Solid	8290A	539562
LCS 320-539562/2-A	Lab Control Sample	Total/NA	Solid	8290A	539562
LCSD 320-539562/3-A	Lab Control Sample Dup	Total/NA	Solid	8290A	539562

Analysis Batch: 544400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-3	AOC1-S9A-2	Total/NA	Solid	8290A	539562
320-81134-20	AOC6-S9B-4	Total/NA	Solid	8290A	539562

Analysis Batch: 544985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-81134-1 - RA	AOC1-S9A-0.5	Total/NA	Solid	8290A	539562
320-81134-20 - RA	AOC6-S9B-4	Total/NA	Solid	8290A	539562

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Client Sample ID: AOC1-S9A-0.5

Lab Sample ID: 320-81134-1

Date Collected: 11/01/21 09:25

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290	RA		10.51 g	20.0 uL	539562	11/03/21 11:17	FC	TAL SAC
Total/NA	Analysis	8290A	RA	1			544985	11/22/21 00:27	KSS	TAL SAC
Total/NA	Prep	8290			10.51 g	20.0 uL	539562	11/03/21 11:17	FC	TAL SAC
Total/NA	Analysis	8290A		1			544396	11/19/21 16:25	GRB	TAL SAC

Client Sample ID: AOC1-S9A-0.5 DUP

Lab Sample ID: 320-81134-2

Date Collected: 11/01/21 09:25

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.17 g	20.0 uL	539562	11/03/21 11:17	FC	TAL SAC
Total/NA	Analysis	8290A		1			544396	11/19/21 17:13	GRB	TAL SAC

Client Sample ID: AOC1-S9A-2

Lab Sample ID: 320-81134-3

Date Collected: 11/01/21 09:27

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.67 g	20.0 uL	539562	11/03/21 11:17	FC	TAL SAC
Total/NA	Analysis	8290A		1			544400	11/19/21 23:54	GRB	TAL SAC

Client Sample ID: AOC6-S9B-4

Lab Sample ID: 320-81134-20

Date Collected: 11/01/21 11:28

Matrix: Solid

Date Received: 11/02/21 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290	RA		10.49 g	20.0 uL	539562	11/03/21 11:17	FC	TAL SAC
Total/NA	Analysis	8290A	RA	1			544985	11/22/21 01:06	KSS	TAL SAC
Total/NA	Prep	8290			10.49 g	20.0 uL	539562	11/03/21 11:17	FC	TAL SAC
Total/NA	Analysis	8290A		1			544400	11/20/21 00:42	GRB	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Laboratory: Eurofins TestAmerica, Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TEQ		Solid	Total Dioxin/Furan TEQ

Method Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Method	Method Description	Protocol	Laboratory
8290A	Dioxins and Furans (HRGC/HRMS)	SW846	TAL SAC
TEQ	Total TEQ Calculation	Lab SOP	TAL SAC
8290	Soxhlet Extraction of Dioxins and Furans	SW846	TAL SAC

Protocol References:

Lab SOP = Laboratory Standard Operating Procedure

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ninyo & Moore
Project/Site: Cole School PEA

Job ID: 320-81134-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-81134-1	AOC1-S9A-0.5	Solid	11/01/21 09:25	11/02/21 12:48
320-81134-2	AOC1-S9A-0.5 DUP	Solid	11/01/21 09:25	11/02/21 12:48
320-81134-3	AOC1-S9A-2	Solid	11/01/21 09:27	11/02/21 12:48
320-81134-20	AOC6-S9B-4	Solid	11/01/21 11:28	11/02/21 12:48

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916 373.5600 fax 303.467 7248

Chain of Custody Record

#201272

320-81134

eurofins

TestAmerica Laboratories Inc. d/b/a Eurofins TestAmerica

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemecio	Date: 11/01/2021	COC No: 1
Ninyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: TestAmerica	1 of 2 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNR
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below ____			Lab Sampling
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No.
Site: 1011 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	Sample Specific Notes.
AOC1-S9A-05	11/1/21	0925	G	Soil	1							X	X	X	X	
AOC1-S9A-05 DUP		0925										X	X	X	X	
AOC1-S9A-2		0927										X		X		
AOC1-S1-05		1210										X	X		X	
AOC1-S1-05 DUP		1210										X	X		X	
AOC1-S1-2		1212										X				
AOC1-S1-2 DUP		1212										X				
AOC4-S1-5		1159						X	X	X						
AOC4-S1-10		1200						X	X	X						
AOC4-S1-15		1201						X	X	X						
AOC4-S1-5 DUP		1159						X	X	X						

320-81134 Chain of Custody

Preservation Used 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH, 6= Other ____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for ____ Months

Special Instructions/QC Requirements & Comments.
Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp. (°C) Obs'd. ____ Corr'd. ____ Therm ID No. ____			
Relinquished by: Daysi Nemecio secured location Alameda office	Company: N&M	Date/Time: 11/2/21 15:27	Received by: Leslie Jang	Company: N&M	Date/Time: 11/2 11:46am
Relinquished by: Leslie Jang	Company: N&M	Date/Time: 11/2 11:46	Received by: [signature]	Company: EMA SJ	Date/Time: 11-2-21 11:46
Relinquished by: [signature]	Company: EMA SJ	Date/Time: 11/2/21 12:48	Received in Laboratory by: [signature]	Company: EMA SJ	Date/Time: 11/2/21 1245

Form No CA-C-WI-004, Rev 1 17 dated 6/27/2019

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12/15/2021 (Rev. 1)

Chain of Custody Record

320-81134

201273

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento CA 95605-1500
phone 916.373.5600 fax 303.467 7248

eurofins

Regulatory Program ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nathan Diem	Site Contact: Daysi Nemecio	Date: 11/01/2021	COC No: 1
Ninyo & Moore	Email ndiem@ninyoandmoore.com	Lab Contact: Justinn Gonzales	Carrier: TAT America	2 of 2 COCs
2020 Challenger Drive, Suite 103	Tel/Fax: (510) 343-3000 ext. 15226			Sampler: DNR
Alameda, California 94501	Analysis Turnaround Time			For Lab Use Only:
(510) 343-3000	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(510) 343-3001	TAT if different from Below _____			Lab Sampling:
Project Name: Cole School PEA	☐ 2 weeks			Job / SDG No
Site: 1011 Union Street, Oakland	☐ 1 week			
P O # 403668001	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHd/mo (EPA Test Method 8015)	VOCs/TPHg (EPA Test Method 8260)	CAM 17 Metals (EPA Method 6010B/7471A)	PAHs (EPA Method 8270C SIM)	OCPs (EPA Test Method 8081A)	PCBs (EPA Test Method 8082A)	Dioxins/Furans (EPA Test Method 8290A)	Lead & Arsenic (EPA Test Method 6010)	VOCs (Method 624)	Sample Specific Notes.
AOC9-SG3-5	11/01/21	1037	G	Soil	1			X	X	X							
AOC9-SG3-10		1047						X	X	X							
AOC9-SG4-5		1000						X	X	X							
AOC9-SG4-10		1005						X	X	X							
AOC1-S2-0.5		1253										X	X		X		
AOC1-S2-2		1257										X					
AOC9-S2-5		1300						X	X	X							
AOC9-S2-10		1302						X	X	X							
AOC6-S9B-4		1128						X					X	X			
EB11012021		1350		H_2O	3			X		X	X	X	X				
TB11012021	~~11/01/21~~	~~0800~~		H_2O	3											X	

Preservation Used: 1= Ice, 2= HCl, 3= H_2SO_4; 4=HNO_3, 5=NaOH, 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments.

Hold samples for additional analysis

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp. (°C): Obs'd _____ Corr'd _____ Therm ID No.: _____		
Relinquished by: Daysi Nemecio (Courier Location: Alameda office)	Company: N&M	Date/Time: 11/1/21 1527	Received by: Leslie Jung	Company: N&M	Date/Time: 11/2 11 46am
Relinquished by: Leslie Jung	Company: N&M	Date/Time: 11/2 11 46	Received by: [illegible]	Company: FIT SD	Date/Time: 11-2-21 11:46
Relinquished by: [illegible]	Company: FIT SD	Date/Time: 11/2/21 1345	Received in Laboratory by: [illegible]	Company: FedEx	Date/Time: 11/2/21 1245

Form No CA-C-WI-004, Rev 1 17 dated 6/27/2019

5.0C°

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247828.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 1 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81134-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/8/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290A/8290_P_Sox 17 Isomers List	6010B/3050B CAM 17 List, minus Mercury	8015B_DRO/3550B (MOD) DRO/MRO	8260B/5030B_SolidNAC (MOD) VOCs	8260B/CA_LUFTMS/5030B_SolidNAC GRO C4-C12	8015B_DRO/3510C_IVWT DRO/MRO	8081A/3510C_LVI Pesticides, Standard List	8082/3510C_LVI PCBs, Standard List	8270C_SIM/3510C_LVI PAHs	8260B/5030B VOCs, Standard List	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
AOCI-S9A-0.5 (320-81134-1)	11/1/21	09:25 Pacific		Solid			X	X	X	X										1	
AOCI-S9A-0.5 DUP (320-81134-2)	11/1/21	09:25 Pacific		Solid			X	X	X	X										1	
AOCI-S9A-2 (320-81134-3)	11/1/21	09:27 Pacific		Solid				X		X										1	
AOCI-S1-0.5 (320-81134-4)	11/1/21	12:10 Pacific		Solid			X	X	X											1	
AOCI-S1-0.5 DUP (320-81134-5)	11/1/21	12:10 Pacific		Solid			X	X	X											1	
AOCI-S1-2 (320-81134-6)	11/1/21	12:12 Pacific		Solid				X												1	
AOCI-S1-2 DUP (320-81134-7)	11/1/21	12:12 Pacific		Solid				X												1	
AOC4-S1-5 (320-81134-8)	11/1/21	11:59 Pacific		Solid							X	X	X	X						1	
AOC4-S1-10 (320-81134-9)	11/1/21	12:00 Pacific		Solid							X	X	X	X						1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/2/21 1630	TAS		11/2/21 1630	BCL
2		11-2-21 1915	DCS		11/2/21 1915	EGTSAC
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.9 & 3.0

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247828.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 2 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81134-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/8/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290A/8290_P_Sox 17 Isomers List	6010B/3050B CAM 17 List, minus Mercury	8015B_DRO/3550B (MOD) DRO/MRO	8260B/5030B_SolidNAC (MOD) VOCs	8260B/CA_LUFTMS/5030B_SolidNAC GRO C4-C12	8015B_DRO/3510C_IWWT DRO/MRO	8081A/3510C_LVI Pesticides, Standard List	8082/3510C_LVI PCBs, Standard List	8270C_SIM/3510C_LVI PAHs	8260B/5030B VOCs, Standard List	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
AOC4-S1-15 (320-81134-10)	11/1/21	12:01 Pacific		Solid							X	X	X	X						1	
AOC4-S1-15 DUP (320-81134-11)	11/1/21	11:59 Pacific		Solid							X	X	X	X						1	
AOCI-SG3-5 (320-81134-12)	11/1/21	10:37 Pacific		Solid							X	X	X	X						1	
AOC9-SG3-10 (320-81134-13)	11/1/21	10:47 Pacific		Solid							X	X	X	X						1	
AOC9-SG4-5 (320-81134-14)	11/1/21	10:00 Pacific		Solid							X	X	X	X						1	
AOC9-SG4-10 (320-81134-15)	11/1/21	10:05 Pacific		Solid							X	X	X	X						1	
AOCI-S2-0.5 (320-81134-16)	11/1/21	12:53 Pacific		Solid			X	X	X											1	
AOCI-S2-2 (320-81134-17)	11/1/21	12:57 Pacific		Solid				X												1	
AOC9-S2-5 (320-81134-18)	11/1/21	13:00 Pacific		Solid							X	X	X	X						1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/2/21 1630	Eurofins		11/2/21 1630	ACS
2	Relinquished by:	11-2-21 1915	ACS	Received by:	11/2/21 1915	FEDEX
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gonzales, Justinn	Carrier Tracking No(s):	COC No: 320-247828.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: Justinn.Gonzales@Eurofinset.com	State of Origin: California	Page: Page 3 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 320-81134-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/8/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Cole School PEA	Project #: 32017058			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B (MOD) Lead, Arsenic	8081A/3546 (MOD) Standard List	8082/3546 (MOD) Standard List	8290A/8290_P_Sox 17 Isomers List	6010B/3050B CAM 17 List, minus Mercury	8015B_DRO/3550B (MOD) DRO/MRO	8260B/5030B_SolidNAC (MOD) VOCs	8260B/CA_LUFTMS/5030B_SolidNAC GRO C4-C12	8015B_DRO/3510C_IVWT DRO/MRO	8081A/3510C_LVI Pesticides, Standard List	8082/3510C_LVI PCBs, Standard List	8270C_SIM/3510C_LVI PAHs	8260B/5030B VOCs, Standard List	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
AOC9-S2-10 (320-81134-19)	11/1/21	13:02 Pacific		Solid							X	X	X	X						1	
AOC6-S9B-4 (320-81134-20)	11/1/21	11:28 Pacific		Solid			X			X		X								1	
EB11012021 (320-81134-21)	11/1/21	13:50 Pacific		Water											X	X	X	X		2	
TB11012021 (320-81134-22)	11/1/21	08:00 Pacific		Water															X	3	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/2/21 1630	EMAS		11/2/21 1630	DCS
2		11-2-21 1915	DCS		11/2/21-1915	EETSAC
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81134-2

Login Number: 81134
List Number: 1
Creator: Garcia, Hilario A

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-81134-2

Login Number: 81134
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9 & 3.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C

Data Validation Tables

QUALITY ASSUANCE/QUALITY CONTROL – DATA VALIDATION

Ninyo & Moore has prepared this data validation memorandum to summarize the findings of a Level II data validation for analytical results of soil, groundwater, and soil vapor samples collected during the Preliminary Environmental Assessment conducted at the Central Administration Center at Cole Campus located at 1011 Union Street, Oakland, California.

The analytical data obtained from the soil and soil vapor sampling activities were assessed for quality assurance/quality control (QA/QC) to ensure the data met the requirements for its intended use. QA/QC procedures were implemented during the sampling to assure the project's data quality objectives were achieved, so that the sample, analysis and reporting activities provide data that are accurate, precise, representative and legally defensible.

This project's QA/QC tasks included maintaining appropriate field documentation, sample collection following standard environmental sampling and handling methodology, collecting equipment blanks, field duplicates, and analyzing trip blanks.

Ninyo & Moore reviewed TestAmerica Laboratories Inc. (TestAmerica) and Torrent Laboratory Inc. (Torrent) laboratory analytical reports in accordance with the U.S. EPA guidance documents, National Functional Guidelines for Superfund Organic and Inorganic Methods Data Review (U.S. EPA, 2017a and U.S. EPA, 2017b). A summary of the review is provided in Table C-1. All samples were submitted in accordance with the U.S. EPA analytical procedures without significant analytical testing issues.

Two samples analyzed for VOCs were analyzed one day outside of holding time. The project samples were all non-detect and have been qualified with a "UJ" flag. For a few analyses, sample dilution was required that resulted in elevated reporting limits.

TestAmerica and Torrent prepared and/or analyzed method blank (MB) samples, laboratory control samples/laboratory control sample duplicates (LCS/LCSD), matrix spikes/matrix spike duplicates (MS/MSD) and duplicate samples in accordance with their internal QC procedures. No significant issues were identified by the laboratories on their internal QC samples.

One batch LCS/LCSD exceeded acceptance limits. Project samples that were non-detect were not qualified. Field duplicates were reported as a relative percent difference (RPD) between duplicate and original samples in tables C-3 through C-7.

Concentrations were detected in 20 MBs during this PEA. Of these detections, 17 batches did not have concentrations detected in field samples or the concentrations in the field samples were greater than 10 times the concentration detected in the MB, so they were not qualified. Concentrations that were detected in the MB at a concentration less than 10 times the concentration detected in the field sample, concentrations were qualified with a "J" flag. If the concentrations that were detected in the MB at a concentration less than 10 times the concentration detected in the field sample, and both concentrations were detected between the reporting limit (RL) and method detection limit (MDL), concentrations were qualified with a "U" flag.

Concentrations were not detected in the trip blank (TB) sample or equipment blank samples (EB). TB and EB results are presented in table C-2.

In accordance with the QA/QC review, some analytical results are qualified as estimated concentrations as noted in this section and Table C-1. These estimated analytical results are denoted with a "J" flag on Table 1 through Table 7. No data were rejected during this data validation.

REFERENCES:

US EPA, 2017a, National Functional Guidelines for Superfund Organic Methods Data Review. Dated January.

US EPA, 2017b, National Functional Guidelines for Superfund Inorganic Methods Data Review. Dated January.

Table C1. Summary of Data Review

Sample or Batch Identification	Laboratory Data Flag / Comments	J Flag	Analyte(s)	Notes
TestAmerica: J80878-1, J80878-2, J80878-3, J80878-4, J80878-5				
AOC1-S3-0.5, AOC1/AOC8-S4-0.5, AOC1/AOC8-S4-0.5DUP, AOC1/AOC8-S4-2, AOC1-S6-0.5, AOC1/AOC7-S8-0.5, AOC1/AOC8-S10-0.5, AOC1-S11-0.5, AOC3/AOC8-S1A-0.5, AOC3/AOC8-S1A-2, AOC3-S1B-0.5, AOC3-S1C-2, EB10262021, AOC1/AOC8-S4-0.5, AOC1/AOC8-S4-0.5DUP, AOC1/AOC8-S10-0.5AOC1/AOC8-S4-2, AOC1/AOC8-S10-2, AOC3/AOC8-S1A-0.5, AOC3/AOC8-S1A-2, EB10262021	J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value	J	OCPs, SVOCs, PAHs and Metals	Detected above MDL but below RL
AOC3-S1B-0.5, AOC3-S2C-0.5, AOC3-S1B-2, AOC3-S1C-2, AOC3-S2B-2, AOC3-S2C-2, AOC1/AOC8-S4-0.5, AOC1/AOC8-S4-0.5DUP, AOC1/AOC8-S4-2, AOC1/AOC8-S10-0.5, AOC1/AOC8-S10-2, AOC3/AOC8-S1A-0.5, AOC3/AOC8-S1A-2, EB10262021	B = Compound was found in the blank and sample.	U, J, None	Lead, dioxin/furans	If concentrations detected in the project sample are less than 10x of those concentrations detected in the MB, project samples are qualified. Detections qualified with a U if they are detected between the RL and the MDL
AOC1-S3-0.5, AOC1/AOC8-S4-0.5, and AOC1/AOC8-S4-0.5DUP	P = The %RPD between the primary and confirmation column/detector is >40%. The higher value has been reported	None	cis-Chlordane, 4,4'-DDE	Surrogate and MS/MSD within project control limits. No qualifiers.
AOC1-S3-0.5	p = The %RPD between the primary and confirmation column/detector is >40%. The higher value has been reported.	None	cis-Chlordane	Surrogate and MS/MSD within project control limits. No qualifiers.
AOC3/AOC8-S1A-0.5, AOC2-S12-0.5, AOC3-S2C-0.5, AOC3-S1B-2	F1 = MS and/or MSD recovery is outside acceptance limits.	None	OCPs, PCB-1260, Lead	MS and/or MSD recovery is outside acceptance limits due to matrix interference and sample dilution. Field samples were non-detect; project samples not qualified.
AOC3-S2B-0.5, AOC3-S1B-0.5	F2 = MS/MSD RPD exceeds control limits	None	PCBs, Lead	MSD RPD is outside acceptance limits. LCS is within range. No qualifiers
Batch 539464, Batch 549638	Compounds were found in the method blank and sample.	None	Lead	Concentrations detected in the project sample are greater than 10x the concentrations detected in the MB. No qualifiers.
Batch 542535	Compounds were found in the method blank and sample.	J	dioxin/furans	Concentrations detected in the project sample are less than 10x the concentrations detected in the MB. Samples with detections qualified.

Table C1. Summary of Data Review

Sample or Batch Identification	Laboratory Data Flag / Comments	J Flag	Analyte(s)	Notes
TestAmerica: J80943-1, J80943-2, J80943-3				
AOC3-S4A-0.5, AOC3-S5A-0.5, AOC3-S5A-2, AOC3/AOC8-S5B-0.5, AOC3-S6A-0.5, AOC3/AOC10-S8A-0.5, AOC3/AOC10-S8A-2, AOC3/AOC10-S8B-0.5, AOC3/AOC10-S8B-0.5, AOC3/AOC10-S8B-2, AOC3/AOC10-S9C-0.5, AOC3/AOC10-S9C-0.5DUP, AOC3/AOC10-S9C-2, AOC3-S8D-0.5, AOC3-S7D-0.5, AOC3-S7D-2, AOC3-S1D-0.5, AOC3-S3E-0.5, AOC3-S4E-0.5, AOC3/AOC8-S5B-0.5, AOC3/AOC8-S5B-2, AOC3/AOC8-S8C-0.5, AOC3/AOC8-S8C-2, AOC3/AOC8-S2D-0.5, AOC3/AOC8-S2D-2, AOC3/AOC8-S1E-0.5, AOC3/AOC8-S1E-2	J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value	J	OCPs, PAHs, Metals, PCB-1260	Detected above MDL but below RL
AOC3-S3B-0.5, AOC3-S5A-0.5, AOC3-S7A-0.5, AOC3/AOC10-S9C-2, AOC3-S5C-0.5, AOC3-S5C-2, AOC3-S4C-0.5, AOC3-S3B-2	F1 = MS and/or MSD recovery is outside acceptance limits.	None	OCPs, metals, Benzo[g,h,i]perylene	MS and/or MSD recovery is outside acceptance limits due to matrix interference and sample dilution. Field samples were non-detect; project samples not qualified.
AOC3-S5A-0.5, AOC3-S8D-0.5	P = The %RPD between the primary and confirmation column/detector is >40%. The higher value has been reported	None	4,4'-DDT, PCB-1260	Surrogate and MS/MSD within project control limits. No qualifiers.
AOC3/AOC10-S9C-2, AOC3-S5C-0.5, AOC3-S4C-0.5	F2 = MS/MSD RPD exceeds control limits	None	OCPS, Benzo[g,h,i]perylene	MSD RPD is outside acceptance limits. LCS is within range. No qualifiers
AOC3-S2E-0.5, AOC3-S3E-0.5, AOC3-S3D-0.5, AOC3-S4D-0.5, AOC3/AOC8-S5B-0.5, AOC3/AOC8-S5B-2, AOC3/AOC8-S8C-0.5, AOC3/AOC8-S8C-2, AOC3/AOC8-S2D-0.5, AOC3/AOC8-S2D-2, AOC3/AOC8-S1E-0.5, AOC3/AOC8-S1E-2	B = Compound was found in the blank and sample.	U, J, None	lead, dioxin/furans	If concentrations detected in the project sample are less than 10x of those concentrations detected in the MB, project samples are qualified. Detections qualified with a U if they are detected between the RL and the MDL
AOC3/AOC8-S5B-0.5, AOC3/AOC8-S5B-2, AOC3/AOC8-S8C-0.5, AOC3/AOC8-S8C-2, AOC3/AOC8-S2D-0.5, AOC3/AOC8-S2D-2, AOC3/AOC8-S1E-0.5, AOC3/AOC8-S1E-2	q = The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.	J	dioxin/furans	Results are estimated. Detections are qualified.
Batch-541728	Compounds were found in the method blank and sample.	J	dioxin/furans	Concentrations detected in the project sample are less than 10x the concentrations detected in the MB. Samples with detections qualified.

Table C1. Summary of Data Review

Sample or Batch Identification	Laboratory Data Flag / Comments	J Flag	Analyte(s)	Notes
TestAmerica: J80942-1, J80942-2, J80942-3				
AOC3-S6D-0.5, AOC3-S6G-0.5, AOC3-S2F-0.5, AOC3-S2F-0.5 DUP, AOC3/AOC8-S6E-0.5, AOC3/AOC8-S6E-2, AOC3/AOC8-S3G-0.5, AOC3/AOC8-S3G-2, AOC3/AOC8-S3G-2, AOC3-S5G-2, AOC3-S2G-2, AOC3-S2F-2	J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value	J	Metals, dioxin/furans	Detected above MDL but below RL
AOC3-S6D-0.5, AOC3-S6G-0.5, AOC3-S2H-2, AOC3-S5I-0.5, AOC3-S6D-2	F1 = MS and/or MSD recovery is outside acceptance limits.	None	metals	MS and/or MSD recovery is outside acceptance limits due to matrix interference and sample dilution. Field samples were non-detect; project samples not qualified.
AOC3-S6G-0.5, AOC3-S2H-2, AOC3-S5I-0.5, AOC3-S6D-2	F2 = MS/MSD RPD exceeds control limits	None	OCPs	MSD RPD is outside acceptance limits. LCS is within range. No qualifiers
AOC3-S6D-0.5, AOC3-S5D--0.5, AOC3-S5E-0.5, AOC3/AOC8-S6E-0.5, AOC3-S8E-0.5, AOC3-S9E-0.5, AOC3-S9E-0.5 DUP, AOC3-S7E-0.5, AOC3-S6F-0.5, AOC3-S6G-0.5, AOC3-S5F-0.5, AOC3-S4F-0.5, AOC3-S3F-0.5, AOC3/AOC8-S3G-0.5, AOC3-S4G-0.5, AOC3-S5G-0.5, AOC3-S2G-0.5, AOC3-S2H-0.5, AOC3-S2F-0.5, AOC3-S2F-0.5 DUP, AOC3/AOC8-S6E-0.5, AOC3/AOC8-S6E-2, AOC3/AOC8-S3G-0.5, AOC3/AOC8-S3G-2	B = Compound was found in the blank and sample.	U, None	lead, OCPs, dioxin/furans	If concentrations detected in the project sample are less than 10x of those concentrations detected in the MB, project samples are qualified. Detections qualified with a U if they are detected between the RL and the MDL
AOC3/AOC8-S6E-0.5, AOC3/AOC8-S6E-2, AOC3/AOC8-S3G-0.5	q = The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.	J	dioxin/furans	Results are estimated. Detections are qualified.
Batch 539464, Batch 544394	Compounds were found in the method blank and sample.	None	Lead, dioxin/furans	Concentrations detected in the project samples are greater than 10x the concentrations detected in the MB. No qualifiers.
Batch 542008	Compounds were found in the method blank and sample.	J, None	dioxin/furans	Concentrations detected in the project sample greater than 10x the concentrations detected in the MB are not qualified; project samples less than 10X the concentrations detected in the MB are qualified

Table C1. Summary of Data Review

Sample or Batch Identification	Laboratory Data Flag / Comments	J Flag	Analyte(s)	Notes
TestAmerica: J80944-1, J80944-2, J80944-3				
AOC3-S1I-0.5, AOC3-S6I-0.5, AOC3-S9G-0.5, AOC3/AOC8-S9I-0.5, AOC3/AOC8-S9I-0.5 DUP, AOC3/AOC8-S6H-2, AOC3/AOC8-S9I-0.5, AOC3/AOC8-S9I-2, EB10292021	J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value	J	PCB-1254, metals, dioxin/furans	Detected above MDL but below RL
AOC3-S1I-0.5	P = The %RPD between the primary and confirmation column/detector is >40%. The higher value has been reported	None	PCB-1254, dioxin/furans	Surrogate and MS/MSD within project control limits. No qualifiers.
AOC3-S6I-0.5, AOC3-S6I-0.5-DUP, AOC3-S7H-0.5, AOC3/AOC8-S9I-0.5, AOC3/AOC8-S9I-0.5 DUP, AOC3/AOC8-S6H-2, AOC3/AOC8-S9I-0.5, AOC3/AOC8-S9I-0.5 DUP, AOC3/AOC8-S9I-2, EB10292021	B = Compound was found in the blank and sample.	U, None	metals,	If concentrations detected in the project sample are less than 10x of those concentrations detected in the MB, project samples are qualified. Detections qualified with a U if they are detected between the RL and the MDL
AOC3-S8H-0.5, AOC3-S7I-0.5	F1 = MS and/or MSD recovery is outside acceptance limits.	None	OCPs	MS and/or MSD recovery is outside acceptance limits due to matrix interference and sample dilution. Field samples were non-detect; project samples not qualified.
AOC3-S8H-0.5	F2 = MS/MSD RPD exceeds control limits	None	OCPs	MSD RPD is outside acceptance limits. LCS is within range. No qualifiers
AOC3/AOC8-S9I-0.5, AOC3/AOC8-S9I-0.5 DUP, AOC3/AOC8-S9I-2, EB10292021	q = The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.	J	dioxin/furans	Results are estimated. Detections are qualified.
Batch-540856, Batch 544394	Compounds were found in the method blank and sample.	None	metals,dioxin/furans	Concentrations detected in the project samples are greater than 10x the concentrations detected in the MB. No qualifiers.
TestAmerica: J81134-1, J81134-2				
AOC1-S1-0.5, AOC4-S1-5, AOC1-S1-0.5 DUP, AOC4-S1-15, AOC4-S1-5 DUP, AOC9-SG3-5, AOC9-SG3-10, AOC9-SG4-5, AOC9-SG4-10, AOC1-S2-0.5, AOC9-S2-5, AOC9-S2-10, EB11012021, TB11012021, AOC1-S9A-0.5, AOC1-S9A-0.5 DUP, AOC1-S9A-2, AOC6-S9B-4	J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value	J	4,4'-DDT, PCB-1260, TPHmo, metals, VOCs, dioxin/furans	Detected above MDL but below RL
AOC1-S9A-0.5, AOC1-S1-0.5 DUP	F1 = MS and/or MSD recovery is outside acceptance limits.	None	OCPs, PCB-1260	MS and/or MSD recovery is outside acceptance limits due to matrix interference and sample dilution. Field samples were non-detect; project samples not qualified.

Table C1. Summary of Data Review

Sample or Batch Identification	Laboratory Data Flag / Comments	J Flag	Analyte(s)	Notes
AOC1-S9A-0.5, AOC1-S1-0.5 DUP	F2 = MS/MSD RPD exceeds control limits	None	OCPs, PCB-1016	MSD RPD is outside acceptance limits. LCS is within range. No qualifiers
AOC1-S1-0.5 DUP, AOC1-S2-0.5	P = The %RPD between the primary and confirmation column/detector is >40%. The higher value has been reported	None	PCB-1254, dioxin/furans	Surrogate and MS/MSD within project control limits. No qualifiers.
AOC4-S1-5, AOC4-S1-10	H = Sample was prepped or analyzed beyond the specified holding time	U	VOCs, TPHg	Samples were analyzed 1 day past hold time. Field samples were nondetect and qualified
AOC4-S1-5, AOC4-S1-10, AOC4-S1-15, AOC4-S1-5 DUP, AOC9-SG3-5, AOC9-SG3-10, AOC9-SG4-5, AOC9-SG4-10, AOC9-S2-5, AOC9-S2-10, AOC1-S9A-0.5, AOC1-S9A-0.5 DUP, AOC1-S9A-2, AOC6-S9B-4	B = Compound was found in the blank and sample.	U, None	metals, dioxin/furans	If concentrations detected in the project sample are less than 10x of those concentrations detected in the MB, project samples are qualified. Detections qualified with a U if they are detected between the RL and the MDL
AOC4-S1-15	*3 = ISTD response or retention time outside acceptable limits.	None	VOCs	The sample(s) was re-analyzed and ISTD response was outside control limits. The original analysis has been reported.no concentrations detected above the RLs in the field samples. No qualifier.
AOC9-SG3-10	* = LCS or LCSD is outside acceptance limits.	None	VOCs	LCS exceeds the upper range of the percent recovery limits, no concentrations detected above the RLs in the field samples. No qualifier.
AOC1-S9A-0.5, AOC1-S1-0.5 DUP, AOC1-S9A-2, AOC6-S9B-4	q = The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.	J	dioxin/furans	Results are estimated. Detections are qualified.
Batch 541574	Compounds were found in the method blank and sample.	None	metals	Concentrations detected in the project samples are greater than 10x the concentrations detected in the MB. No qualifiers.
Batch 542727	LCS or LCSD is outside acceptance limits.	None	VOCs	LCS/LCSD recoveries were above the upper range. Project samples were nondetect. No qualifiers.
Torrent: 2111530A				
AOC5-S7-0.5, AOC5-S7-2.0, AOC5-S7-5.0 Dup	E = Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument	J	dioxin/furans	Values reported with an E qualifier should be considered as estimated.
Torrent: 2111198				
AOC5-S7-0.5, AOC5-S7-2.0, AOC5-S7-5.0 Dup	E = Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument	J	dioxin/furans	Values reported with an E qualifier should be considered as estimated.

Table C1. Summary of Data Review

Sample or Batch Identification	Laboratory Data Flag / Comments	J Flag	Analyte(s)	Notes

Notes:

VOCs- volatile organic compounds, analyzed by EPA Method 8260B

OCPs - organochlorine pesticides, analyzed by EPA Method 8270C SIM

PCBs - polychlorinated biphenyls, analyzed by EPA Method 8082

TPHd and TPHmo - TPH as diesel and as motor oil, analyzed by EPA Method 8015B

TPHg - total petroleum hydrocarbons as gasoline, analyzed by EPA Method 8260B

Metals analyzed by Environmental Protection Agency (EPA) Method 6010B; mercury analyzed by EPA Method 7471A

Data validation conducted using the EPA August 2016 National Functional Guidelines for Superfund Organic and Inorganic Methods Data Review

RL - reporting limit

MDL - method detection limit

%RPD - percent relative difference

MB - method blank

EB - equipment blank

TB - trip blank

RPD - relative percent difference

MS/MSD - matrix spike/matrix spike duplicate

LCS/LCSD - laboratory control spike, laboratory control spike duplicate

CCB - continuing calibration blank

CCV - continuing calibration verification

BS - blank spike

J = concentration is considered estimated

UJ - concentration not detected, estimated detection limit

Table C-2. Equipment Blank and Trip Blank Detections

Sample ID	Date Collected	Arsenic	Lead	Other Metals	OCPS	PCBS	PAHs	TPHd and TPHmo	VOCs	SVOCs	Dioxins/ Furans
		(mg/L)			µg/L						pg/L
EB10262021	10/26/2021	ND<0.10	ND<0.05	ND	ND	ND	--	--	--	--	ND
EB10282021	10/28/2021	ND<0.10	ND<0.05	ND	ND	ND	--	--	--	--	ND
EB10292021	10/29/2021	ND<0.10	ND<0.05	ND	ND	ND	--	--	--	--	ND
EB11012021	11/1/2021	ND<0.10	ND<0.05	ND	ND	ND	ND	ND	--	--	--
EB11162021	11/16/2021	ND<0.05	ND<0.05	ND	--	--	--	--	--	ND	ND
TB11012021	11/1/2021	--	--	--	--	--	--	--	ND	--	--

Notes:

-- - not analyzed

µg/L – milligrams per liter

mg/L micrograms per liter

pg/L picograms per liter

ND - not detected above the labratory reporting limit

ND<X – analyte not detected at or above laboratory reporting limit X

Arsenic, lead and other metals analyzed by Environmental Protection Agency (EPA) Method 6010B

Dioxions/Furans analyzed by EPA Method 8290A.

OCPs - organochlorine pesticides analyzed using EPA Method 8081A

PCBs - polychlorinated biphenyls, analyzed by EPA Method 8082

PAHs - polyaromatic hydrocarbons, analyzed by Environmental Protection Agency (EPA) Method 8270C SIM

TPHd - total petroleum hydrocarbons as diesel analyzed by EPA Method 8015B.

TPHmo- total petroleum hydrocarbons as motor oil analyzed by EPA Method 8015B.

VOCs- volatile organic compounds, analyzed by EPA Method 8260B

Table C-3. RPD Calculations for Duplicate Title 22 Metals

Sample ID	Depth (feet bgs)	Date Collected	Arsenic	Lead	Antimony	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Molybdenum	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
											(mg/Kg)								
AOC1-S1-0.5	0.5	11/01/21	6.7	430	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1-S1-0.5 DUP	0.5	11/01/21	4.0	480	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Relative Percent Difference			50%	11%															
AOC1/AOC8-S4-0.5	0.5	10/26/21	7.4	730	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1/AOC8-S4-0.5 DUP	0.5	10/26/21	9.2	620	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Relative Percent Difference			22%	16%															
AOC1-S9A-0.5	0.5	10/26/21	5.1	60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1-S9A-0.5 DUP	0.5	10/26/21	4.7	72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Relative Percent Difference			8%	18%															
AOC2-S12-0.5	0.5	10/26/21	3.4	54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC2-S12-0.5 DUP	0.5	10/26/21	3.1	52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Relative Percent Difference			9%	4%															
AOC3-S2F-0.5	0.5	10/28/21	8.9	5.9	2.1	84	0.29	ND<0.12	8.8	6.6	13	ND<1.2	ND<0.083	14	ND<1.2	ND<0.29	ND<1.2	23	58
AOC3-S2F-0.5 DUP	0.5	10/28/21	13.0	12	ND<1.9	140	0.46	0.2	12	11	29	ND<1.9	ND<0.085	19	ND<1.9	ND<0.47	ND<1.9	33	96
Relative Percent Difference			37%	68%	NA	50%	45%	NA	31%	50%	76%	NA	NA	30%	NA	NA	NA	36%	49%
AOC3-S6I-0.5	0.5	10/29/21	3.7	250	12	280	0.70	ND<0.19	26	5.6	20	ND<1.9	ND<0.081	22	ND<1.9	ND<0.49	ND<1.9	25	85
AOC3-S6I-0.5 DUP	0.5	10/29/21	3.8	150	12	150	0.58	0.19	22	5.6	16	ND<1.9	ND<0.083	21	ND<1.9	ND<0.49	ND<1.9	23	87
Relative Percent Difference			3%	50%	0%	60%	19%	NA	17%	0%	22%	NA	NA	5%	NA	NA	NA	8%	2%
AOC3/AOC10-S9C-0.5	0.5	10/27/21	ND<2.6	600	ND<3.1	110	0.31	0.63	17	5.2	29	ND<0.52	0.12	18	ND<5.2	ND<1.0	ND<5.2	15	120
AOC3/AOC10-S9C-0.5 DUP	0.5	10/27/21	ND<2.5	120	ND<3	73	ND<0.25	0.50	0.5	4.3	14	ND<0.5	0.15	13	ND<5.0	ND<1.0	ND<5	11	86
Relative Percent Difference			NA	**133%**	NA	40%	NA	23%	**189%**	19%	70%	NA	22%	32%	NA	NA	NA	31%	33%
AOC3-S9E-0.5	0.5	10/28/21	7.4	130	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC3-S9E-0.5DUP	0.5	10/28/21	2.8	49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Relative Percent Difference			90%	91%															
AOC3/AOC8-S9I-0.5	1	10/29/21	7.6	190	8.9	88	0.43	0.25	23	5.7	17	ND<2	ND<0.082	17	ND<2	ND<0.5	ND<2	25	170
AOC3/AOC8-S9I-0.5DUP	0.5	10/29/21	4.4	250	11	150	0.49	ND<0.2	28	4.3	15	ND<2	0.2	16	ND<2	ND<0.49	ND<2	22	74
Relative Percent Difference			53%	27%	21%	52%	13%	NA	20%	28%	13%	NA	NA	6%	NA	NA	NA	13%	79%
AOC4-S1-5	5	11/01/21	3.7	12	11	60	0.6	ND<0.2	50	7.5	9.0	ND<2	ND<0.086	36	ND<2	ND<0.49	ND<2	31	28
AOC4-S1-5 DUP	5	11/01/21	2.8	32	11	56	0.6	ND<0.2	42	5.5	8.0	ND<2	ND<0.085	32	ND<2	ND<0.49	ND<2	26	26
Relative Percent Difference			28%	91%	0%	7%	5%	NA	17%	31%	12%	NA	NA	12%	NA	NA	NA	18%	7%
AOC5-S7-5	5	11/16/21	3.1	ND<3	ND<5	55	ND<5	ND<5	40	6.1	8.7	ND<5	ND<0.5	35	ND<5	ND<1	ND<5	30	23
AOC5-S7-5 DUP	5	11/16/21	3.1	3.1	ND<5	59	ND<5	ND<5	41	6.2	9.4	ND<5	ND<0.5	37	ND<5	ND<1	ND<5	32	25
Relative Percent Difference			0%	NA	NA	6%	NA	NA	3%	2%	8%	NA	NA	4%	NA	NA	NA	5%	8%
AOC1/AOC8-S4-0.5	1	10/26/21	7.4	730.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AOC1/AOC8-S4-0.5 DUP	1	10/26/21	9.2	620.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Relative Percent Difference			22%	16%															
AOC3/AOC8-S9I-0.5	1	10/29/21	7.6	190	8.9	88	0.43	0.25	23	5.7	17	ND<2	ND<0.082	17	ND<2	ND<0.5	ND<2	25	170
AOC3/AOC8-S9I-0.5DUP	0.5	10/29/21	4.4	250	11	150	0.49	ND<0.2	28	4.3	15	ND<2	0.2	16	ND<2	ND<0.49	ND<2	22	74
Relative Percent Difference			53%	27%	21%	52%	13%	NA	20%	28%	13%	NA	NA	6%	NA	NA	NA	13%	79%

Notes:

Metals analyzed by Environmental Protection Agency (EPA) Method 6010B; mercury analyzed by EPA Method 7471A

-- - not analyzed

bgs – below ground surface

mg/Kg – milligrams per kilogram

ND<X – analyte not detected at or above laboratory reporting limit X

Bold - indicates the RPD exceeds the project limit of 100%

Table C-4. RPD Calculations for Duplicate OCP and PCB Soil Samples

Sample ID	Depth (feet bgs)	Date Collected	OCPs						PCBs	
			4,4'-DDE	4,4'-DDT	cis-Chlordane	Dieldrin	trans-Chlordane	Other OCPs	PCB-1260	Other PCBs
			µg/kg							
AOC1-S1-0.5	0.5	11/01/21	ND<3.4	ND<3.4	ND<3.4	ND<3.4	ND<3.4	ND	ND<33	ND
AOC1-S1-0.5 DUP	0.5	11/01/21	ND<3.4	ND<3.4	ND<3.4	ND<3.4	ND<3.4	ND	ND<66	ND
Relative Percent Difference			NA	NA	NA	NA	NA	NA	NA	NA
AOC1-S1-2	2.0	11/01/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND	--	--
AOC1-S1-2 DUP	2.0	11/01/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND	--	--
Relative Percent Difference			NA	NA	NA	NA	NA	NA	--	--
AOC1/AOC8-S4-0.5	0.5	10/26/21	15	31	62	45	23	ND	43	ND
AOC1/AOC8-S4-0.5 DUP	0.5	10/26/21	13	27	70	18	25	ND	37	ND
Relative Percent Difference			14%	14%	12%	86%	8%	NA	15%	NA
AOC1/AOC7-S8-2	2.0	10/26/21	ND<3.2	ND<3.2	ND<3.2	ND<3.2	ND<3.2	ND	ND<31	ND
AOC1/AOC7-S8-2 DUP	2.0	10/26/21	ND<3.4	ND<3.4	ND<3.4	ND<3.4	ND<3.4	ND	ND<33	ND
Relative Percent Difference			NA	NA	NA	NA	NA	NA	NA	NA
AOC1-S9A-0.5	2.0	10/26/21	ND<17	ND<17	ND<17	ND<17	ND<17	ND	ND<33	ND
AOC1-S9A-0.5 DUP	2.0	10/26/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND	ND<32	ND
Relative Percent Difference			NA	NA	NA	NA	NA	NA	NA	NA
AOC2-S12-0.5	2.0	10/26/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND	ND<32	ND
AOC2-S12-0.5 DUP	0.5	10/26/21	ND<8.1	ND<8.1	ND<8.1	ND<8.1	ND<8.1	ND	ND<31	ND
Relative Percent Difference			NA	NA	NA	NA	NA	NA	NA	NA
AOC2-S12-2	2.0	10/26/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND	--	--
AOC2-S12-2 DUP	2.0	10/26/21	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND	--	--
Relative Percent Difference			NA	NA	NA	NA	NA	NA	--	--
AOC3-S2F-0.5	0.5	10/28/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND	ND<32	ND
AOC3-S2F-0.5DUP	0.5	10/28/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND	ND<32	ND
Relative Percent Difference			NA	NA	NA	NA	NA	NA	NA	NA
AOC3-S5G-2	2.0	10/28/21	ND<3.3	ND<3.3	ND<3.3	ND<3.3	ND<3.3	ND	--	--
AOC3-S5G-2DUP	2.0	10/28/21	ND<3.3	ND<3.3	ND<3.3	ND<3.3	ND<3.3	ND	--	--
Relative Percent Difference			NA	NA	NA	NA	NA	NA	--	--
AOC3-S6I-0.5	0.5	10/29/21	ND<34	ND<34	ND<34	ND<34	ND<34	ND	ND<33	ND
AOC3-S6I-0.5DUP	0.5	10/29/21	ND<34	ND<34	ND<34	ND<34	ND<34	ND	ND<33	ND
Relative Percent Difference			NA	NA	NA	NA	NA	NA	NA	NA
AOC3/AOC10-S9C-0.5	0.5	10/27/21	ND<8.3	ND<8.3	ND<8.3	ND<8.3	ND<8.3	ND	ND<32	ND
AOC3/AOC10-S9C-0.5DUP	0.5	10/27/21	ND<8.3	ND<8.3	ND<8.3	ND<8.3	ND<8.3	ND	ND<32	ND
Relative Percent Difference			NA	NA	NA	NA	NA	NA	NA	NA

Table C-4. RPD Calculations for Duplicate OCP and PCB Soil Samples

Sample ID	Depth (feet bgs)	Date Collected	OCPs						PCBs	
			4,4'-DDE	4,4'-DDT	cis-Chlordane	Dieldrin	trans-Chlordane	Other OCPs	PCB-1260	Other PCBs
AOC3-S9E-0.5	0.5	10/28/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND	ND<32	ND
AOC3-S9E-0.5DUP	0.5	10/28/21	ND<33	ND<33	ND<33	ND<33	ND<33	ND	ND<32	ND
Relative Percent Difference			NA	NA	NA	NA	NA	NA	NA	NA
AOC3/AOC8-S9I-0.5	0.5	10/29/21	ND<17	ND<17	ND<17	ND<17	ND<17	ND	ND<33	ND
AOC3/AOC8-S9I-0.5DUP	0.5	10/29/21	ND<16	ND<16	ND<16	ND<16	ND<16	ND	ND<31	ND
Relative Percent Difference			NA	NA	NA	NA	NA	NA	NA	NA
AOC1/AOC7-S8-2	2.0	10/26/21	ND<3.2	ND<3.2	ND<3.2	ND<3.2	ND<3.2	ND	ND<31	ND
AOC1/AOC7-S8-2DUP	2.0	10/26/21	ND<3.4	ND<3.4	ND<3.4	ND<3.4	ND<3.4	ND	ND<33	ND
Relative Percent Difference			NA	NA	NA	NA	NA	NA	NA	NA

Notes:

OCP - organochlorine pesticides, analyzed by Environmental Protection Agency (EPA) Method 8270C

PCB - polychlorinated biphenyls, analyzed by EPA Method 8082

bgs – below ground surface

mg/Kg – milligrams per kilogram

ND - not detected

ND<X – analyte not detected at or above laboratory reporting limit X

-- - not analyzed

NA - not applicable

Bold - indicates the RPD exceeds the project limit of 100%

Table C-5. RPD Calculations for Duplicate SVOC Soil Samples

Sample ID	Depth (feet bgs)	Date Collected	1,2,3,4,6,7,8-HpCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8-HxCDF	1,2,3,7,8,9-HxCDF	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	2,3,7,8-TCDD	2,3,7,8-TCDF	OCDD	OCDF
			(pg/g)													
AOC1-S9A-0.5	0.5	10/26/21	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<0.95	ND<0.95	16	ND<9.5
AOC1-S9A-0.5DUP	0.5	10/26/21	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<0.98	ND<0.98	20	ND<9.8
Relative Percent Difference			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.2%	NA
AOC5-S7-5	5.0	11/16/21	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<4.9	ND<0.49	ND<0.49	ND<24	ND<29
AOC5-S7-5 DUP	5.0	11/16/21	ND<5.0	12.1	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<25	ND<30
Relative Percent Difference			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AOC1/AOC8-S4-0.5	0.5	10/26/21	85	ND<4.9	40	ND<4.9	ND<4.9	ND<4.9	5.4	5	ND<4.9	4.9	2.2	7	740	90
AOC1/AOC8-S4-0.5DUP	0.5	10/26/21	60	ND<4.8	30	ND<4.8	ND<4.8	ND<4.8	7.6	ND<4.8	ND<4.8	ND<4.8	1.3	4.9	500	62
Relative Percent Difference			34.5%	NA	28.6%	NA	NA	NA	33.8%	NA	NA	NA	51.4%	35.3%	38.7%	36.8%
AOC3/AOC8-S9I-0.5	0.5	10/29/21	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<0.96	ND<0.96	22	ND<9.6
AOC3/AOC8-S9I-0.5DUP	0.5	10/29/21	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<4.8	ND<0.97	ND<0.97	26	ND<9.7
Relative Percent Difference			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	16.7%	NA

Notes:

Dioxins and Furans analyzed by Environmental Protection Agency (EPA) Method 8290A

bgs – below ground surface

pg/g – picograms per gram

NA - not applicable

ND<X – analyte not detected at or above laboratory reporting limit X

Bold - indicates the RPD exceeds the project limit of 100%

Table C-6. RPD Calculations for Duplicate TPHs, VOCs, and PAHs Soil Samples

Sample ID	Depth (feet bgs)	Date Collected	TPHd	TPHmo	VOCs	PAHs
			(mg/Kg)			
AOC4-S1-5	5.0	11/01/21	1.3	ND<5	ND	ND
AOC4-S1-5 DUP	5.0	11/01/21	1.5	5.8	ND	ND
Relative Percent Difference			14%	NA	NA	NA

Notes:

TPH - total petroleum hydrocarbons

TPHd - TPH as diesel, analyzed by Environmental Protection Agency (EPA) Method 8015B

TPHmo - TPH as motor oil, analyzed by EPA Method 8015B

VOCs- volatile organic compounds, analyzed by EPA Method 8260B

PAH - polycyclic aromatic hydrocarbons analyzed using United States Environmental Protection Agency (US EPA) Method 8270C selective ion measurement (SIM)

bgs – below ground surface

mg/Kg – milligrams per kilogram

ND - Not detected

ND<X – analyte not detected at or above laboratory reporting limit X

-- - not analyzed

NA - not applicable

Bold - indicates the RPD exceeds the project limit of 100%

Table C-7. RPD Calculations for Duplicate Fixed Gases and VOCs in Soil Vapor Samples

Sample ID	Date Collected	Depth (feet bgs)	VOCs													Fixed Gases			
			Acetone	2-Butanone (Methyl Ethyl Ketone)	Carbon Disulfide	Chloroform	Cyclohexane	cis-1,2-Dichloroethene	Ethanol	Hexane	m,p-Xylene	2,2,4-Trimethylpentane	2-Propanol	Toluene	All Other VOCs	Helium	Methane	Carbon Dioxide	Oxygen
			(µg/m^3)													%			
SG1-5	11/15/21	5.0	ND<25	ND<12	ND<13	15	ND<3.6	ND<4.1	ND<20	ND<3.7	ND<4.5	ND<4.8	ND<10	ND<3.9	ND	ND<0.10	ND<0.00021	2.3	18
SG1-5 DUP	11/15/21	5.0	ND<24	ND<12	73	14	ND<3.6	ND<4.1	ND<20	ND<3.6	ND<4.5	ND<4.8	23	ND<3.9	ND	ND<0.10	ND<0.00021	2.3	18
Relative Percent Difference			NA	NA	**>100%**	7%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0%	0%

Notes:

Fixed gases analyzed by American Society for Testing Materials (ASTM) Method D 1946-90

VOCs - Volatile organic compounds, analyzed by Environmental Protection Agency EPA TO-15

% - percent

µg/m³ - micrograms per meters cubed

bgs - below ground surface

ND - not detected

ND<X – analyte not detected at or above laboratory reporting limit X

NA - not applicable

Bold - indicates the RPD exceeds the project limit of 100%

APPENDIX D

Cancer Risks and Hazard Index Supporting Calculations

Table D-1
Health Hazards from Incidental Soil Ingestion
Residential Exposure Scenario
OUSD Cole Amin
Oakland, California

COPC	Maximum Soil Concentration (mg/kg)	Oral Reference Dose (mg/kg-d)	Residential Scenario	
			Average Daily Intake (mg/kg-d) Child	Hazard Quotient (Unitless) Child
Dioxins				
Dioxins (total)	0.0000096	7.0E-10	1.23E-10	1.75E-01
Pesticides				
4,4'-DDE	0.015	3.0E-04	1.92E-07	6.39E-04
4,4'-DDT	0.031	5.0E-04	3.96E-07	7.93E-04
Chlordane	0.095	5.0E-04	1.21E-06	2.43E-03
Dieldrin	0.045	5.0E-05	5.75E-07	1.15E-02
PCBs				
PCB-1260	0.043	NA	5.50E-07	NA
TPH				
TPH (C17-C32 aromatic high)	3.65	4.0E-02	4.67E-05	1.17E-03
TPH (C19-C32 aliphatic high)	3.65	3.0E+00	4.67E-05	1.56E-05
TPH (C9-C16 aromatic mediun	0.95	4.0E-03	1.21E-05	3.04E-03
TPH (C9-C18 aliphatic mediun	0.95	1.0E-02	1.21E-05	1.21E-03
Total Hazard Index				**2.0E-01**

Notes:
"--" not applicable or not available
Equations:
Child $INTAKE_{noncancer}$ (mg/kg-day) = (($CS_{residential}$ * $IR\text{-}S_{child}$ * EF_{child} * ED_{child} * CF) / (BW_{child} * $AT_{noncancer}$))
Noncancer Hazard = ($INTAKE_{noncancer}$ / RfD)

Table D-2
Health Hazards from Dermal Contact with Soil
Residential Exposure Scenario
OUSD Cole Amin
Oakland, California

COPC	Maximum Soil Concentration (mg/kg)	Soil-to-Skin Absorption Factor (unitless)	Oral/Dermal Reference Dose (mg/kg-d)	Residential Scenario	
				Average Daily Intake (mg/kg-d) Child	Hazard Quotient (Unitless) Child
Dioxins					
Dioxins (total)	0.0000096	0.03	7.0E-10	8.74E-12	1.25E-02
Pesticides					
4,4'-DDE	0.015	0.1	3.0E-04	4.55E-08	1.52E-04
4,4'-DDT	0.031	0.03	5.0E-04	2.82E-08	5.64E-05
Chlordane	0.095	0.1	5.0E-04	2.88E-07	5.76E-04
Dieldrin	0.045	0.1	5.0E-05	1.37E-07	2.73E-03
PCBs					
PCB-1260	0.043	0.1	NA	1.30E-07	NA
TPH					
TPH (C17-C32 aromatic high)	3.65	0.1	4.0E-02	1.11E-05	2.77E-04
TPH (C19-C32 aliphatic high)	3.65	0.1	3.0E+00	1.11E-05	3.69E-06
TPH (C9-C16 aromatic mediun	0.95	0.1	4.0E-03	2.88E-06	7.21E-04
TPH (C9-C18 aliphatic medium	0.95	0.1	1.0E-02	2.88E-06	2.88E-04
Total Hazard Index					**1.7E-02**

Notes:
"--" not applicable or not available
Equations:
Child $INTAKE_{noncancer}$ (mg/kg-day) = (($CS_{residential}$ * SA_{child} * AF_{child} * ABS * EF_{child} * ED_{child} * CF) / (BW_{child} * $AT_{noncancer}$))
Noncancer Hazard = ($INTAKE_{noncancer}$ / RfD)

Table D-3
Health Hazards from Inhalation of Outdoor Air
Residential Exposure Scenario
OUSD Cole Amin
Oakland, California

COPC	Maximum Soil Concentration (mg/kg)	PEF or VEF (m^3/kg)	Inhalation Reference Concentration[a] (ug/m^3)	Residential Scenario	
				Exposure Concentration (ug/m^3)	Hazard Quotient (Unitless)
				Child	Child
Dioxins					
Dioxins (total)	0.0000096	1.36E+09	4.0E-05	6.77E-12	1.69E-07
Pesticides					
4,4'-DDE	0.015	1.36E+09	1.2E+00	1.06E-08	8.81E-09
4,4'-DDT	0.031	1.36E+09	NA	2.19E-08	NA
Chlordane	0.095	1.36E+09	7.0E-01	6.70E-08	9.57E-08
Dieldrin	0.045	1.36E+09	2.0E-01	3.17E-08	1.59E-07
PCBs					
PCB-1260	0.043	1.36E+09	NA	3.03E-08	NA
TPH					
TPH (C17-C32 aromatic high)	3.65	1.36E+09	NA	2.57E-06	NA
TPH (C19-C32 aliphatic high)	3.65	1.36E+09	NA	2.57E-06	NA
TPH (C9-C16 aromatic medium	0.95	1.36E+09	3.0E+00	6.70E-07	2.23E-07
TPH (C9-C18 aliphatic medium	0.95	1.36E+09	1.0E+02	6.70E-07	6.70E-09
Total Hazard Index					**6.6E-07**

Notes:
"--" not applicable or not available
Equations:
Particulate: Child Exposure-$_{noncancer}$ (ug/m^3) = $(CS_{residential} * (1/PEF) * EF_{child} * ED_{child} * ET_{child}) / (AT_{noncancer})$
VOCs: Child Exposure-$_{noncancer}$ (ug/m^3) = $(CS_{residential} * Etchild * EF_{child} * ED_{child} * (1/VF)) / (AT_{noncancer})$
Noncancer Hazard = $(INTAKE_{noncancer} / RfD)$

Table D-4
Cumulative Health Hazards from Multipathway Soil Exposure
Residential Exposure Scenario
OUSD Cole Amin
Oakland, California

COPC	Maximum Soil Conc. (mg/kg)	Residential Noncancer Hazard			
		Child Resident			
		Ingestion of Soil	Dermal	Inhalation	Total HI
Dioxins					
Dioxins (total)	9.60E-06	2.E-01	1.E-02	2.E-07	2.E-01
Pesticides					
4,4'-DDE	0.015	6.E-04	2.E-04	9.E-09	8.E-04
4,4'-DDT	0.031	8.E-04	6.E-05	NA	8.E-04
Chlordane	0.095	2.E-03	6.E-04	1.E-07	3.E-03
Dieldrin	0.045	1.E-02	3.E-03	2.E-07	1.E-02
PCBs					
PCB-1260	0.043	NA	NA	NA	--
TPH					
TPH (C17-C32 aromatic high)	3.65	1.E-03	3.E-04	NA	1.E-03
TPH (C19-C32 aliphatic high)	3.65	2.E-05	4.E-06	NA	2.E-05
TPH (C9-C16 aromatic medium	0.95	3.E-03	7.E-04	2.E-07	4.E-03
TPH (C9-C18 aliphatic medium	0.95	1.E-03	3.E-04	7.E-09	2.E-03
Total Hazard Index					**2.E-01**

Note:
"--" not applicable or not available

Table D-5
Cancer Risks from Incidental Soil Ingestion
Residential Exposure Scenario
OUSD Cole Amin
Oakland, California

COPC	Maximum Soil Concentration (mg/kg)	Oral Slope Factor $(mg/kg\text{-}d)^{-1}$	Residential Scenario	
			Average Daily Intake (mg/kg-d) Adult & Child	Cancer Risk (Unitless) Adult & Child
Dioxins				
Dioxins (total)	0.0000096	1.3E+05	1.38E-11	1.80E-06
Pesticides				
4,4'-DDE	0.015	3.4E-01	2.16E-08	7.34E-09
4,4'-DDT	0.031	3.4E-01	4.46E-08	1.52E-08
Chlordane	0.095	3.5E-01	1.37E-07	4.78E-08
Dieldrin	0.045	1.6E+01	6.47E-08	1.04E-06
PCBs				
PCB-1260	0.043	2.0E+00	6.18E-08	1.24E-07
TPH				
TPH (C17-C32 aromatic high)	3.65	NA	5.25E-06	NA
TPH (C19-C32 aliphatic high)	3.65	NA	5.25E-06	NA
TPH (C9-C16 aromatic medium)	0.95	NA	1.37E-06	NA
TPH (C9-C18 aliphatic medium)	0.95	NA	1.37E-06	NA
Total Cancer Risk				**3.0E-06**

Notes:
"--" not applicable or not available
Equations:
Adult/Child $INTAKE_{cancer}$ (mg/kg-day) = $(CS_{residential} * EF * ING_{adjusted} * CF) / (AT_{cancer})$
Where $ING_{adjusted} = [(IR\text{-}S_{child} * ED_{child} / BW_{child}) + (IR\text{-}S_{adult} * ED_{adult} / BW_{adult})]$
Cancer Risk = $(INTAKE_{cancer} * CSF)$

Table D-6
Cancer Risks from Dermal Contact with Soil
Residential Exposure Scenario
OUSD Cole Amin
Oakland, California

COPC	Maximum Soil Concentration (mg/kg)	Soil-to-Skin Absorption Factor (unitless)	Oral/Dermal Slope Factor $(mg/kg\text{-}d)^{-1}$	Residential Scenario	
				Average Daily Intake (mg/kg-d) Adult & Child	Cancer Risk (Unitless) Adult & Child
Dioxins					
Dioxins (total)	0.0000096	0.03	1.3E+05	1.17E-12	1.52E-07
Pesticides					
4,4'-DDE	0.015	0.1	3.4E-01	6.07E-09	2.06E-09
4,4'-DDT	0.031	0.03	3.4E-01	3.76E-09	1.28E-09
Chlordane	0.095	0.1	3.5E-01	3.84E-08	1.35E-08
Dieldrin	0.045	0.1	1.6E+01	1.82E-08	2.91E-07
PCBs					
PCB-1260	0.043	0.1	2.0E+00	1.74E-08	3.48E-08
TPH					
TPH (C17-C32 aromatic high)	3.65	0.1	NA	1.48E-06	NA
TPH (C19-C32 aliphatic high)	3.65	0.1	NA	1.48E-06	NA
TPH (C9-C16 aromatic medium	0.95	0.1	NA	3.84E-07	NA
TPH (C9-C18 aliphatic medium	0.95	0.1	NA	3.84E-07	NA
Total Cancer Risk					**4.9E-07**

Notes:
"--" not applicable or not available
Equations:
Adult/Child $INTAKE_{cancer}$ (mg/kg-day) = $(CS_{residential} * SAF_{adjusted} * ABS * CF) / (AT_{cancer})$
Where $SAF_{adjusted} = [(SA_{child} * AF_{child} * EF_{child} * ED_{child} / BW_{child}) + (SA_{adult} * AF_{adult} * EF_{adult} * ED_{adult} / BW_{adult})]$
Cancer Risk = $(INTAKE_{cancer} * CSF)$

Table D-7
Cancer Risks from Inhalation of Outdoor Air
Residential Exposure Scenario
OUSD Cole Amin
Oakland, California

COPC	Maximum Soil Concentration (mg/kg)	PEF or VF (m3/kg)	Inhalation Unit Risk $(ug/m^3)^{-1}$	Residential Scenario	
				Exposure Concentration (ug/m^3) Adult & Child	Cancer Risk (Unitless) Adult & Child
Dioxins					
Dioxins (total)	0.0000096	1.36E+09	3.8E+01	2.51E-12	9.55E-11
Pesticides					
4,4'-DDE	0.015	1.36E+09	9.7E-05	3.93E-09	3.81E-13
4,4'-DDT	0.031	1.36E+09	9.7E-05	8.12E-09	7.87E-13
Chlordane	0.095	1.36E+09	1.0E-04	2.49E-08	2.49E-12
Dieldrin	0.045	1.36E+09	4.6E-03	1.18E-08	5.42E-11
PCBs					
PCB-1260	0.043	1.36E+09	5.7E-04	1.13E-08	6.43E-12
TPH					
TPH (C17-C32 aromatic high)	3.65	1.36E+09	NA	9.56E-07	NA
TPH (C19-C32 aliphatic high)	3.65	1.36E+09	NA	9.56E-07	NA
TPH (C9-C16 aromatic medium	0.95	1.36E+09	NA	2.49E-07	NA
TPH (C9-C18 aliphatic medium	0.95	1.36E+09	NA	2.49E-07	NA
Total Cancer Risk					**1.6E-10**

Notes:
"--" not applicable or not available
Equations:
Particulate Exposure Concentartion (ug/m^3) = $(CS*EF_{child}*ED_{child}*ET_{child})/(PEF*AT_c))+(CS*EF_{adult}*ED_{adult}*ET_{adult})/(PEF*AT_c))$
VOC Exposure Concentration (ug/m^3) = (CS * EF * ED * ET) / (VF * ATc)
Cancer Risk = $(INTAKE_{cancer} * CSF)$

Table D-8
Cumulative Cancer Risks from Multipathway Soil Exposure
Residential Exposure Scenario
OUSD Cole Amin
Oakland, California

COPC	Max. Resid Soil Conc. (mg/kg)	Residential Cancer Risk			
		Adult & Child Resident			
		Ingestion	Dermal	Inhalation	Total Risk
Dioxins					
Dioxins (total)	9.60E-06	2.E-06	2.E-07	1.E-10	2.E-06
Pesticides					
4,4'-DDE	0.015	7.E-09	2.E-09	4.E-13	9.E-09
4,4'-DDT	0.031	2.E-08	1.E-09	8.E-13	2.E-08
Chlordane	0.095	5.E-08	1.E-08	2.E-12	6.E-08
Dieldrin	0.045	1.E-06	3.E-07	5.E-11	1.E-06
PCBs					
PCB-1260	0.043	1.E-07	3.E-08	6.E-12	2.E-07
TPH					
TPH (C17-C32 aromatic high)	3.65	NA	NA	NA	--
TPH (C19-C32 aliphatic high)	3.65	NA	NA	NA	--
TPH (C9-C16 aromatic medium	0.95	NA	NA	NA	--
TPH (C9-C18 aliphatic medium	0.95	NA	NA	NA	--
Total Cancer Risk					**4.E-06**

Note:
"--" not applicable or not available

APPENDIX E

Lead and Arsenic Arithmetic Mean Calculations

Table E-1 UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.112/15/2021 2:58:56 PM
From File	OUSD As & Pb stats.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Arsenic (mg/kg)

General Statistics

Total Number of Observations	124	Number of Distinct Observations	61
Number of Detects	105	Number of Non-Detects	19
Number of Distinct Detects	59	Number of Distinct Non-Detects	5
Minimum Detect	1.9	Minimum Non-Detect	1.9
Maximum Detect	45	Maximum Non-Detect	2.6
Variance Detects	27.13	Percent Non-Detects	15.32%
Mean Detects	6.197	SD Detects	5.208
Median Detects	4.4	CV Detects	0.841
Skewness Detects	4.37	Kurtosis Detects	29.14
Mean of Logged Detects	1.622	SD of Logged Detects	0.595

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.663	**Normal GOF Test on Detected Observations Only**
5% Shapiro Wilk P Value	0	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.205	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.0867	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	5.552	KM Standard Error of Mean	0.452
KM SD	5.005	95% KM (BCA) UCL	6.385
95% KM (t) UCL	6.301	95% KM (Percentile Bootstrap) UCL	6.333
95% KM (z) UCL	6.295	95% KM Bootstrap t UCL	6.568
90% KM Chebyshev UCL	6.907	95% KM Chebyshev UCL	7.521
97.5% KM Chebyshev UCL	8.373	99% KM Chebyshev UCL	10.05

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	2.425	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.761	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.146	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.089	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.632	k star (bias corrected MLE)	2.563
Theta hat (MLE)	2.354	Theta star (bias corrected MLE)	2.418
nu hat (MLE)	552.7	nu star (bias corrected)	538.2
Mean (detects)	6.197		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)			
For such situations, GROS method may yield incorrect values of UCLs and BTVs			
This is especially true when the sample size is small.			
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates			
Minimum	0.01	Mean	5.271
Maximum	45	Median	3.9
SD	5.265	CV	0.999
k hat (MLE)	0.721	k star (bias corrected MLE)	0.709
Theta hat (MLE)	7.312	Theta star (bias corrected MLE)	7.437
nu hat (MLE)	178.8	nu star (bias corrected)	175.8
Adjusted Level of Significance (β)	0.0481		
Approximate Chi Square Value (175.77, α)	146.1	Adjusted Chi Square Value (175.77, β)	145.8
95% Gamma Approximate UCL (use when n>=50)	6.341	95% Gamma Adjusted UCL (use when n<50)	6.355
Estimates of Gamma Parameters using KM Estimates			
Mean (KM)	5.552	SD (KM)	5.005
Variance (KM)	25.05	SE of Mean (KM)	0.452
k hat (KM)	1.231	k star (KM)	1.206
nu hat (KM)	305.2	nu star (KM)	299.2
theta hat (KM)	4.511	theta star (KM)	4.603
80% gamma percentile (KM)	8.787	90% gamma percentile (KM)	12.21
95% gamma percentile (KM)	15.58	99% gamma percentile (KM)	23.3
Gamma Kaplan-Meier (KM) Statistics			
Approximate Chi Square Value (299.17, α)	260.1	Adjusted Chi Square Value (299.17, β)	259.7
95% Gamma Approximate KM-UCL (use when n>=50)	6.386	95% Gamma Adjusted KM-UCL (use when n<50)	6.397
Lognormal GOF Test on Detected Observations Only			
Shapiro Wilk Approximate Test Statistic	0.951	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk P Value	0.00214	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.124	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.0867	Detected Data Not Lognormal at 5% Significance Level	
Detected Data Not Lognormal at 5% Significance Level			
Lognormal ROS Statistics Using Imputed Non-Detects			
Mean in Original Scale	5.48	Mean in Log Scale	1.432
SD in Original Scale	5.081	SD in Log Scale	0.715
95% t UCL (assumes normality of ROS data)	6.236	95% Percentile Bootstrap UCL	6.307
95% BCA Bootstrap UCL	6.445	95% Bootstrap t UCL	6.519
95% H-UCL (Log ROS)	6.136		
Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution			
KM Mean (logged)	1.479	KM Geo Mean	4.388
KM SD (logged)	0.642	95% Critical H Value (KM-Log)	1.909
KM Standard Error of Mean (logged)	0.058	95% H-UCL (KM -Log)	6.02
KM SD (logged)	0.642	95% Critical H Value (KM-Log)	1.909
KM Standard Error of Mean (logged)	0.058		
DL/2 Statistics			
DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	5.425	Mean in Log Scale	1.396
SD in Original Scale	5.124	SD in Log Scale	0.767
95% t UCL (Assumes normality)	6.188	95% H-Stat UCL	6.218

DL/2 is not a recommended method, provided for comparisons and historical reasons			
Nonparametric Distribution Free UCL Statistics			
Data do not follow a Discernible Distribution at 5% Significance Level			
Suggested UCL to Use			
95% KM (Chebyshev) UCL	7.521		
Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.			
Recommendations are based upon data size, data distribution, and skewness.			
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).			
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.			

Table E-2 UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.112/15/2021 3:00:05 PM
From File	OUSD As & Pb stats_a.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Lead (mg/kg)

General Statistics

Total Number of Observations	162	Number of Distinct Observations	102
Number of Detects	158	Number of Non-Detects	4
Number of Distinct Detects	100	Number of Distinct Non-Detects	3
Minimum Detect	1.9	Minimum Non-Detect	3
Maximum Detect	990	Maximum Non-Detect	5.2
Variance Detects	31676	Percent Non-Detects	2.469%
Mean Detects	123.7	SD Detects	178
Median Detects	62.5	CV Detects	1.439
Skewness Detects	2.583	Kurtosis Detects	7.107
Mean of Logged Detects	3.815	SD of Logged Detects	1.612

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.67	**Normal GOF Test on Detected Observations Only**
5% Shapiro Wilk P Value	0	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.247	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.0709	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	120.7	KM Standard Error of Mean	13.89
KM SD	176.2	95% KM (BCA) UCL	143.1
95% KM (t) UCL	143.7	95% KM (Percentile Bootstrap) UCL	143.1
95% KM (z) UCL	143.6	95% KM Bootstrap t UCL	147.1
90% KM Chebyshev UCL	162.4	95% KM Chebyshev UCL	181.3
97.5% KM Chebyshev UCL	207.5	99% KM Chebyshev UCL	258.9

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.555	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.809	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.0795	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.0782	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.614	k star (bias corrected MLE)	0.607
Theta hat (MLE)	201.5	Theta star (bias corrected MLE)	203.9
nu hat (MLE)	194	nu star (bias corrected)	191.7
Mean (detects)	123.7		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)			
For such situations, GROS method may yield incorrect values of UCLs and BTVs			
This is especially true when the sample size is small.			
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates			
Minimum	0.01	Mean	120.7
Maximum	990	Median	60
SD	176.8	CV	1.465
k hat (MLE)	0.531	k star (bias corrected MLE)	0.525
Theta hat (MLE)	227.3	Theta star (bias corrected MLE)	229.8
nu hat (MLE)	172	nu star (bias corrected)	170.1
Adjusted Level of Significance (β)	0.0485		
Approximate Chi Square Value (170.11, α)	141	Adjusted Chi Square Value (170.11, β)	140.7
95% Gamma Approximate UCL (use when n>=50)	145.6	95% Gamma Adjusted UCL (use when n<50)	145.9
Estimates of Gamma Parameters using KM Estimates			
Mean (KM)	120.7	SD (KM)	176.2
Variance (KM)	31050	SE of Mean (KM)	13.89
k hat (KM)	0.469	k star (KM)	0.465
nu hat (KM)	152.1	nu star (KM)	150.6
theta hat (KM)	257.2	theta star (KM)	259.7
80% gamma percentile (KM)	197.5	90% gamma percentile (KM)	331.5
95% gamma percentile (KM)	475.9	99% gamma percentile (KM)	833.6
Gamma Kaplan-Meier (KM) Statistics			
Approximate Chi Square Value (150.58, α)	123.2	Adjusted Chi Square Value (150.58, β)	123
95% Gamma Approximate KM-UCL (use when n>=50)	147.5	95% Gamma Adjusted KM-UCL (use when n<50)	147.8
Lognormal GOF Test on Detected Observations Only			
Shapiro Wilk Approximate Test Statistic	0.936	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk P Value	6.7813E-8	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.108	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.0709	Detected Data Not Lognormal at 5% Significance Level	
Detected Data Not Lognormal at 5% Significance Level			
Lognormal ROS Statistics Using Imputed Non-Detects			
Mean in Original Scale	120.7	Mean in Log Scale	3.747
SD in Original Scale	176.8	SD in Log Scale	1.649
95% t UCL (assumes normality of ROS data)	143.7	95% Percentile Bootstrap UCL	142.4
95% BCA Bootstrap UCL	147.3	95% Bootstrap t UCL	147.1
95% H-UCL (Log ROS)	237.4		
Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution			
KM Mean (logged)	3.745	KM Geo Mean	42.32
KM SD (logged)	1.647	95% Critical H Value (KM-Log)	2.793
KM Standard Error of Mean (logged)	0.13	95% H-UCL (KM -Log)	236
KM SD (logged)	1.647	95% Critical H Value (KM-Log)	2.793
KM Standard Error of Mean (logged)	0.13		
DL/2 Statistics			
DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	120.7	Mean in Log Scale	3.737
SD in Original Scale	176.8	SD in Log Scale	1.666
95% t UCL (Assumes normality)	143.7	95% H-Stat UCL	243.3

DL/2 is not a recommended method, provided for comparisons and historical reasons			
Nonparametric Distribution Free UCL Statistics			
Data do not follow a Discernible Distribution at 5% Significance Level			
Suggested UCL to Use			
95% KM (Chebyshev) UCL	181.3		
Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.			
Recommendations are based upon data size, data distribution, and skewness.			
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).			
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.			



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Geotechnical & Environmental Sciences Consultants

Appendix I

Stormwater Management Memo for Cole Administration Building

Siegfried Engineers, February 9, 2022

SIEGFRIED

MEMORANDUM

To: Scott Gregory
Lamphier-Gregory

From: Paul Schneider, P.E.
Principal, Civil Engineer
Siegfried Engineering, Inc.
3428 Brookside Rd.,
Stockton, CA 95219

REGISTERED PROFESSIONAL ENGINEER
PAUL J. SCHNEIDER
No. 62498
Exp. 09/30/23
CIVIL
STATE OF CALIFORNIA

Date: February 9, 2022

Re: **Cole Administration Building**
1011 Union Street
Oakland, CA 94607

EXECUTIVE SUMMARY

The Cole Administration Building, located at 1011 Union Street Oakland, CA 94607 is a 2.57-acre lot that was previously paved over and served as an elementary school. The Cole Administration Building project reduces the stormwater impact and has been designed in accordance with the State Water Resource Control Board and local NPDES Provision C.3 Technical Guidelines regarding post-construction stormwater management.

Stormwater runoff is directed into five bioretention planters which will serve both as stormwater detention and treatment prior to discharge to the City of Oakland's storm drain system. Bioretention sizing calculations may be found in Attachment A and B. The location of drainage features including bioretention basins may be found in Attachment C.

The project complies with regional SFRWQCB and has completed the Department of State Architect's (DSA) plan check process. As DSA is the authority of the project the district need not enter into a maintenance agreement with the City of Oakland.

Attachments:

Attachment A: Required Capture Volume Calculations

Attachment B: Provided Capture Volume Calculations

Attachment C: Relevant Improvement Plan Sheets

Attachment A

Required Capture Volume Calculations

Stockton
3428 Brookside Rd.,
Stockton, CA 95219
t: 209.943.2021 f: 209.942.0214

San Jose
111 N. Market St., Ste. 300
San Jose, CA 95113
t: 408.754.2021

Sacramento
900 Howe Ave, #200
Sacramento, CA 95825
t: 916.520.277

Modesto
100 Sycamore Ave, #200
Modesto, CA 95354
t: 209.762.3580

Worksheet for Calculating the Water Quality Design Volume (80 percent capture method)

Instructions: After completing Section 1, make a copy of this Excel file for each Drainage Management Area within the project. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

1.0 Project Information

1-1	Project Name:		
1-2	City application ID:		
1-3	Site Address or APN:		
1-4	Tract or Parcel Map No:		
1-5	Site Mean Annual Precip. (MAP)[1]	**19.0**	**Inches**

The calculations presented here are based on the 80% capture method of sizing **volume-based treatment measures** provided in the Clean Water Program Alameda County C.3 Technical Guidance, v. 4.0. The steps presented below are explained in Chapter 5, Section 5.1 of the guidance manual, applicable portions of which are included in this file, in the tab called "Guidance from Chapter 5".

Refer to the Mean Annual Precipitation Map in Appendix D of the C.3 Technical Guidance to determine the MAP, in inches, for the site. Click here for map

1-6 Applicable Rain Gauge[2]: **Oakland Airport**

Enter "Oakland Airport" if the site MAP is 16.4 inches or greater. Enter "San Jose" if the site MAP is less than 16.4 inches.

MAP adjustment factor is automatically calculated as: **1.04**

(The "Site Mean Annual Precipitation (MAP)" is divided by the MAP for the applicable rain gauge, showin in Table 5.2, below.)

2.0 Calculate Percentage of Impervious Surface for Drainage Management Area (DMA)

2-1 Name of DMA: **DMA 1**

For items 2-2 and 2-3, enter the areas in square feet for each type of surface within the DMA.

	Type of Surface	Area of surface type within DMA (Sq. Ft)	Adjust Pervious Surface	Effective Impervious Area
2-2	Impervious surface	**583**	**1.0**	**583**
2-3	Pervious service	**1,431**	**0.1**	**143**
	Total DMA Area (square feet) =	**2,014**		

2-4 ***Total Effective Impervious Area (EIA)*** **726** **Square feet**

Note:
DMA 1 exceeds 2:1 pervious to impervious ratio and therefore is self-treating. No Bioretention needed.

3.0 Calculate Unit Basin Storage Volume in Inches

Table 5-2: Unit Basin Storage Volumes (in inches) for 80 Percent Capture Using 48-Hour Drawdowns

		Unit Basin Storage Volume (in) for Applicable Runoff Coefficients
Applicable Rain Gauge	**Mean Annual Precipitation (in)**	**Coefficient of 1.00**
Oakland Airport	18.35	0.67
San Jose	14.4	0.56

3-1 ***Unit basin storage volume from Table 5.2:*** **0.67** **Inches**

(The coefficient for this method is 1.00, due to the conversion of any landscaping to effective impervious area)

3-2 ***Adjusted unit basin storage volume:*** **0.69** **Inches**

(The unit basin storage volume is adjusted by applying the MAP adjustment factor.)

3-3 ***Required Capture Volume (in cubic feet):*** **42** **Cubic feet**

(The adjusted unit basin sizing volume [inches] is multiplied by the size of the DMA and converted to feet)

3-4 ***To size an infiltration trench, enter the surface area available:*** **Square feet**

3-5 ***Required depth of infiltration trench, given the surface area available (in 3-4):*** **Feet**

(Assumes 35% void space in rectangular trench with vertical sides.)
(Note: Infiltration trench depths are typically between 3 and 8 feet.)

Worksheet for Calculating the Water Quality Design Volume (80 percent capture method)

Instructions: After completing Section 1, make a copy of this Excel file for each Drainage Management Area within the project. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

1.0 Project Information

1-1	Project Name:		
1-2	City application ID:		
1-3	Site Address or APN:		
1-4	Tract or Parcel Map No:		
1-5	Site Mean Annual Precip. (MAP)[1]	**19.0**	**Inches**

The calculations presented here are based on the 80% capture method of sizing **volume-based treatment measures** provided in the Clean Water Program Alameda County C.3 Technical Guidance, v. 4.0. The steps presented below are explained in Chapter 5, Section 5.1 of the guidance manual, applicable portions of which are included in this file, in the tab called "Guidance from Chapter 5".

Refer to the Mean Annual Precipitation Map in Appendix D of the C.3 Technical Guidance to determine the MAP, in inches, for the site. Click here for map

1-6 Applicable Rain Gauge[2]: **Oakland Airport**

Enter "Oakland Airport" if the site MAP is 16.4 inches or greater. Enter "San Jose" if the site MAP is less than 16.4 inches.

MAP adjustment factor is automatically calculated as: **1.04**

(The "Site Mean Annual Precipitation (MAP)" is divided by the MAP for the applicable rain gauge, showin in Table 5.2, below.)

2.0 Calculate Percentage of Impervious Surface for Drainage Management Area (DMA)

2-1 Name of DMA: **DMA 2**

For items 2-2 and 2-3, enter the areas in square feet for each type of surface within the DMA.

	Type of Surface	Area of surface type within DMA (Sq. Ft)	Adjust Pervious Surface	Effective Impervious Area
2-2	Impervious surface	**23,650**	**1.0**	**23,650**
2-3	Pervious service	**5,820**	**0.1**	**582**
	Total DMA Area (square feet) =	**29,470**		

2-4 ***Total Effective Impervious Area (EIA)*** **24,232** **Square feet**

3.0 Calculate Unit Basin Storage Volume in Inches

Table 5-2: Unit Basin Storage Volumes (in inches) for 80 Percent Capture Using 48-Hour Drawdowns

		Unit Basin Storage Volume (in) for Applicable Runoff Coefficients
Applicable Rain Gauge	**Mean Annual Precipitation (in)**	**Coefficient of 1.00**
Oakland Airport	18.35	0.67
San Jose	14.4	0.56

3-1 ***Unit basin storage volume from Table 5.2:*** **0.67** **Inches**

(The coefficient for this method is 1.00, due to the conversion of any landscaping to effective impervious area)

3-2 ***Adjusted unit basin storage volume:*** **0.69** **Inches**

(The unit basin storage volume is adjusted by applying the MAP adjustment factor.)

3-3 ***Required Capture Volume (in cubic feet):*** **1,401** **Cubic feet**

(The adjusted unit basin sizing volume [inches] is multiplied by the size of the DMA and converted to feet)

3-4 ***To size an infiltration trench, enter the surface area available:*** **Square feet**

3-5 ***Required depth of infiltration trench, given the surface area available (in 3-4):*** **Feet**

(Assumes 35% void space in rectangular trench with vertical sides.)
(Note: Infiltration trench depths are typically between 3 and 8 feet.)

Worksheet for Calculating the Water Quality Design Volume (80 percent capture method)

Instructions: After completing Section 1, make a copy of this Excel file for each Drainage Management Area within the project. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

1.0 Project Information

1-1	Project Name:		
1-2	City application ID:		
1-3	Site Address or APN:		
1-4	Tract or Parcel Map No:		
1-5	Site Mean Annual Precip. (MAP)[1]	**19.0**	**Inches**

The calculations presented here are based on the 80% capture method of sizing **volume-based treatment measures** provided in the Clean Water Program Alameda County C.3 Technical Guidance, v. 4.0. The steps presented below are explained in Chapter 5, Section 5.1 of the guidance manual, applicable portions of which are included in this file, in the tab called "Guidance from Chapter 5".

Refer to the Mean Annual Precipitation Map in Appendix D of the C.3 Technical Guidance to determine the MAP, in inches, for the site. Click here for map

1-6 Applicable Rain Gauge[2]: **Oakland Airport**

Enter "Oakland Airport" if the site MAP is 16.4 inches or greater. Enter "San Jose" if the site MAP is less than 16.4 inches.

MAP adjustment factor is automatically calculated as: **1.04**

(The "Site Mean Annual Precipitation (MAP)" is divided by the MAP for the applicable rain gauge, showin in Table 5.2, below.)

2.0 Calculate Percentage of Impervious Surface for Drainage Management Area (DMA)

2-1 Name of DMA: **DMA 3**

For items 2-2 and 2-3, enter the areas in square feet for each type of surface within the DMA.

	Type of Surface	Area of surface type within DMA (Sq. Ft)	Adjust Pervious Surface	Effective Impervious Area
2-2	Impervious surface	**17,773**	**1.0**	**17,773**
2-3	Pervious service	**3,590**	**0.1**	**359**
	Total DMA Area (square feet) =	**21,363**		

2-4 ***Total Effective Impervious Area (EIA)*** **18,132** **Square feet**

3.0 Calculate Unit Basin Storage Volume in Inches

Table 5-2: Unit Basin Storage Volumes (in inches) for 80 Percent Capture Using 48-Hour Drawdowns

		Unit Basin Storage Volume (in) for Applicable Runoff Coefficients
Applicable Rain Gauge	**Mean Annual Precipitation (in)**	**Coefficient of 1.00**
Oakland Airport	18.35	0.67
San Jose	14.4	0.56

3-1 ***Unit basin storage volume from Table 5.2:*** **0.67** **Inches**

(The coefficient for this method is 1.00, due to the conversion of any landscaping to effective impervious area)

3-2 ***Adjusted unit basin storage volume:*** **0.69** **Inches**

(The unit basin storage volume is adjusted by applying the MAP adjustment factor.)

3-3 ***Required Capture Volume (in cubic feet):*** **1,048** **Cubic feet**

(The adjusted unit basin sizing volume [inches] is multiplied by the size of the DMA and converted to feet)

3-4 ***To size an infiltration trench, enter the surface area available:*** **Square feet**

3-5 ***Required depth of infiltration trench, given the surface area available (in 3-4):*** **Feet**

(Assumes 35% void space in rectangular trench with vertical sides.)
(Note: Infiltration trench depths are typically between 3 and 8 feet.)

Worksheet for Calculating the Water Quality Design Volume (80 percent capture method)

Instructions: After completing Section 1, make a copy of this Excel file for each Drainage Management Area within the project. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

1.0 Project Information

1-1	Project Name:		
1-2	City application ID:		
1-3	Site Address or APN:		
1-4	Tract or Parcel Map No:		
1-5	Site Mean Annual Precip. (MAP)[1]	**19.0**	**Inches**

The calculations presented here are based on the 80% capture method of sizing **volume-based treatment measures** provided in the Clean Water Program Alameda County C.3 Technical Guidance, v. 4.0. The steps presented below are explained in Chapter 5, Section 5.1 of the guidance manual, applicable portions of which are included in this file, in the tab called "Guidance from Chapter 5".

Refer to the Mean Annual Precipitation Map in Appendix D of the C.3 Technical Guidance to determine the MAP, in inches, for the site. Click here for map

1-6 Applicable Rain Gauge[2]: **Oakland Airport**

Enter "Oakland Airport" if the site MAP is 16.4 inches or greater. Enter "San Jose" if the site MAP is less than 16.4 inches.

MAP adjustment factor is automatically calculated as: **1.04**

(The "Site Mean Annual Precipitation (MAP)" is divided by the MAP for the applicable rain gauge, showin in Table 5.2, below.)

2.0 Calculate Percentage of Impervious Surface for Drainage Management Area (DMA)

2-1 Name of DMA: **DMA 4**

For items 2-2 and 2-3, enter the areas in square feet for each type of surface within the DMA.

	Type of Surface	Area of surface type within DMA (Sq. Ft)	Adjust Pervious Surface	Effective Impervious Area
2-2	Impervious surface	**14,847**	**1.0**	**14,847**
2-3	Pervious service	**3,457**	**0.1**	**346**
	Total DMA Area (square feet) =	**18,304**		

2-4 ***Total Effective Impervious Area (EIA)*** **15,193** **Square feet**

3.0 Calculate Unit Basin Storage Volume in Inches

Table 5-2: Unit Basin Storage Volumes (in inches) for 80 Percent Capture Using 48-Hour Drawdowns

		Unit Basin Storage Volume (in) for Applicable Runoff Coefficients
Applicable Rain Gauge	**Mean Annual Precipitation (in)**	**Coefficient of 1.00**
Oakland Airport	18.35	0.67
San Jose	14.4	0.56

3-1 ***Unit basin storage volume from Table 5.2:*** **0.67** **Inches**

(The coefficient for this method is 1.00, due to the conversion of any landscaping to effective impervious area)

3-2 ***Adjusted unit basin storage volume:*** **0.69** **Inches**

(The unit basin storage volume is adjusted by applying the MAP adjustment factor.)

3-3 ***Required Capture Volume (in cubic feet):*** **878** **Cubic feet**

(The adjusted unit basin sizing volume [inches] is multiplied by the size of the DMA and converted to feet)

3-4 ***To size an infiltration trench, enter the surface area available:*** **Square feet**

3-5 ***Required depth of infiltration trench, given the surface area available (in 3-4):*** **Feet**

(Assumes 35% void space in rectangular trench with vertical sides.)
(Note: Infiltration trench depths are typically between 3 and 8 feet.)

Worksheet for Calculating the Water Quality Design Volume (80 percent capture method)

Instructions: After completing Section 1, make a copy of this Excel file for each Drainage Management Area within the project. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

1.0 Project Information

1-1	Project Name:		
1-2	City application ID:		
1-3	Site Address or APN:		
1-4	Tract or Parcel Map No:		
1-5	Site Mean Annual Precip. (MAP)[1]	**19.0**	**Inches**

The calculations presented here are based on the 80% capture method of sizing **volume-based treatment measures** provided in the Clean Water Program Alameda County C.3 Technical Guidance, v. 4.0. The steps presented below are explained in Chapter 5, Section 5.1 of the guidance manual, applicable portions of which are included in this file, in the tab called "Guidance from Chapter 5".

Refer to the Mean Annual Precipitation Map in Appendix D of the C.3 Technical Guidance to determine the MAP, in inches, for the site. Click here for map

1-6 Applicable Rain Gauge[2]: **Oakland Airport**

Enter "Oakland Airport" if the site MAP is 16.4 inches or greater. Enter "San Jose" if the site MAP is less than 16.4 inches.

MAP adjustment factor is automatically calculated as: **1.04**

(The "Site Mean Annual Precipitation (MAP)" is divided by the MAP for the applicable rain gauge, showin in Table 5.2, below.)

2.0 Calculate Percentage of Impervious Surface for Drainage Management Area (DMA)

2-1 Name of DMA: **DMA 5**

For items 2-2 and 2-3, enter the areas in square feet for each type of surface within the DMA.

	Type of Surface	Area of surface type within DMA (Sq. Ft)	Adjust Pervious Surface	Effective Impervious Area
2-2	Impervious surface	**30,793**	**1.0**	**30,793**
2-3	Pervious service	**9,075**	**0.1**	**908**
	Total DMA Area (square feet) =	**39,868**		

2-4 ***Total Effective Impervious Area (EIA)*** **31,701** **Square feet**

3.0 Calculate Unit Basin Storage Volume in Inches

Table 5-2: Unit Basin Storage Volumes (in inches) for 80 Percent Capture Using 48-Hour Drawdowns

		Unit Basin Storage Volume (in) for Applicable Runoff Coefficients
Applicable Rain Gauge	**Mean Annual Precipitation (in)**	**Coefficient of 1.00**
Oakland Airport	18.35	0.67
San Jose	14.4	0.56

3-1 ***Unit basin storage volume from Table 5.2:*** **0.67** **Inches**

(The coefficient for this method is 1.00, due to the conversion of any landscaping to effective impervious area)

3-2 ***Adjusted unit basin storage volume:*** **0.69** **Inches**

(The unit basin storage volume is adjusted by applying the MAP adjustment factor.)

3-3 ***Required Capture Volume (in cubic feet):*** **1,833** **Cubic feet**

(The adjusted unit basin sizing volume [inches] is multiplied by the size of the DMA and converted to feet)

3-4 ***To size an infiltration trench, enter the surface area available:*** **Square feet**

3-5 ***Required depth of infiltration trench, given the surface area available (in 3-4):*** **Feet**

(Assumes 35% void space in rectangular trench with vertical sides.)
(Note: Infiltration trench depths are typically between 3 and 8 feet.)

Attachment B

Provided Capture Volume Calculations

Stockton
3428 Brookside Rd.,
Stockton, CA 95219
t: 209.943.2021 f: 209.942.0214

San Jose
111 N. Market St., Ste. 300
San Jose, CA 95113
t: 408.754.2021

Sacramento
900 Howe Ave, #200
Sacramento, CA 95825
t: 916.520.277

Modesto
100 Sycamore Ave, #200
Modesto, CA 95354
t: 209.762.3580

SIEGFRIED

3428 Brookside Road
Stockton, CA 95219
209.943.2021 Fax: 209.942.0214

Job Number: 19150
Project Name: Cole Administration Center
Workbook Name: Bioretention Volume Calculations
Sheet Name:

Drainage Management Area 1(Self-Treating)

Description	Porosity	Depth(ft)	Area(sf)	Volume Provided(cf)	Volume Required(cf)
Ponding		0.5	0	0	
Planter Media	0.25	1.5	0	0	
Rock	0.35	1	0	0	
				0	

Drainage Management Area 2

Description	Porosity	Depth(ft)	Area(sf)	Volume Provided(cf)	Volume Required(cf)
Ponding		1	834	834	
Planter Media	0.25	1.5	834	313	
Rock	0.35	1	834	292	
				1439	1401

Drainage Management Area 3

Description	Porosity	Depth(ft)	Area(sf)	Volume Provided(cf)	Volume Required(cf)
Ponding		0.5	860	430	
Planter Media	0.25	1.5	860	323	
Rock	0.35	1	860	301	
				1054	1048

Drainage Management Area 4

Description	Porosity	Depth(ft)	Area(sf)	Volume Provided(cf)	Volume Required(cf)
Ponding		1	510	510	
Planter Media	0.25	1.5	510	191	
Rock	0.35	1	510	179	
				880	878

Drainage Management Area 5

Description	Porosity	Depth(ft)	Area(sf)	Volume Provided(cf)	Volume Required(cf)
Ponding		1	1070	1070	
Planter Media	0.25	1.5	1070	401	
Rock	0.35	1	1070	375	
				1846	1833

Total Bioretention Area =	3274
Total Required Capture Volume =	5160
Total Provided Capture Volume=	5218

Notes:

1. Required capture volume per Alameda County C.3 Technical Guidance V4.0 worksheet for Calculation the Water Quality Design Volume.

Attachment C

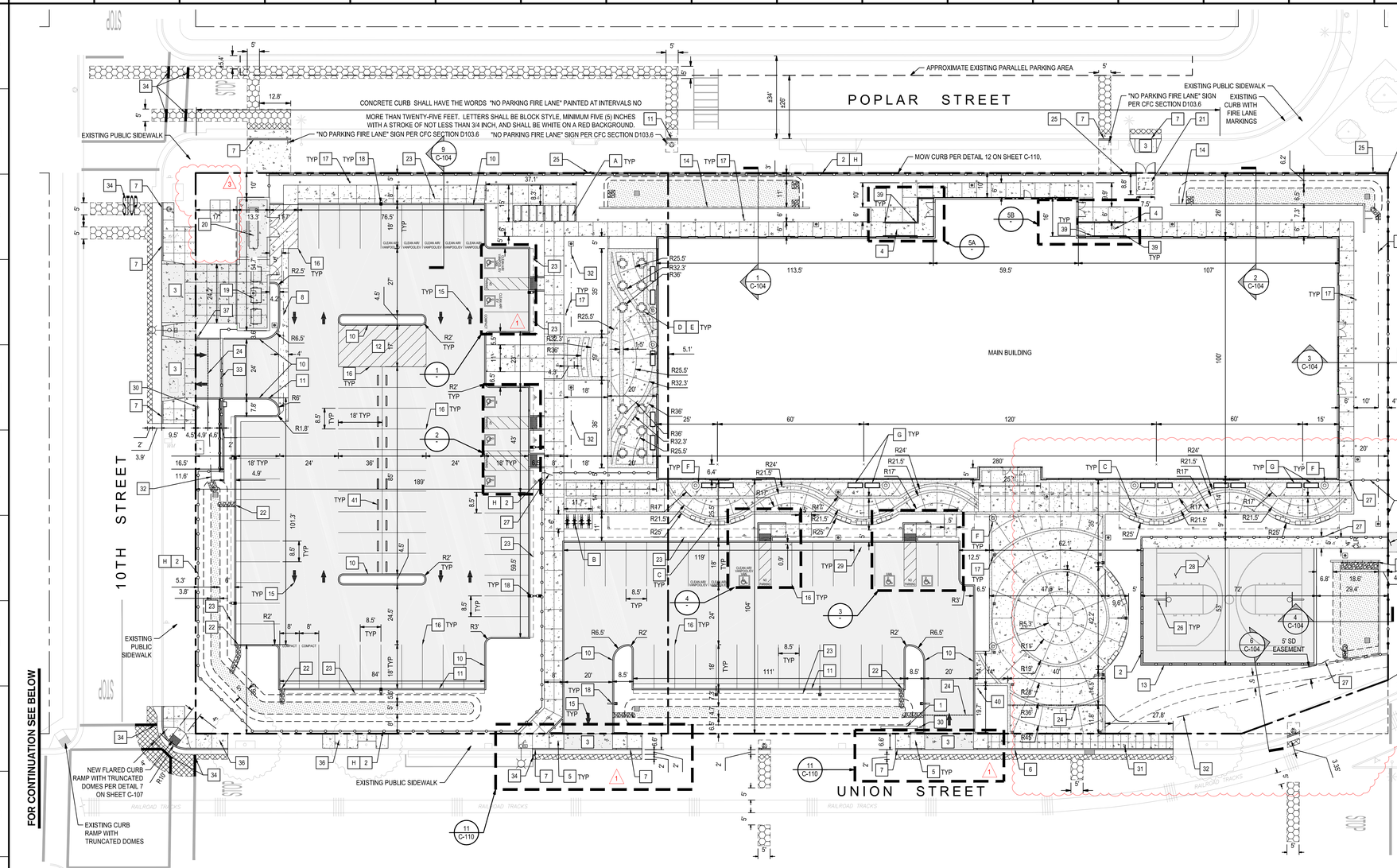
Relevant Improvement Plan Sheets

Stockton
3428 Brookside Rd.,
Stockton, CA 95219
t: 209.943.2021 f: 209.942.0214

San Jose
111 N. Market St., Ste. 300
San Jose, CA 95113
t: 408.754.2021

Sacramento
900 Howe Ave, #200
Sacramento, CA 95825
t: 916.520.277

Modesto
100 Sycamore Ave, #200
Modesto, CA 95354
t: 209.762.3580



LEGEND

PEDESTRIAN CONCRETE
4.0" (3000 PSI) CONCRETE W / #3 @ 18" O.C. EA WAY OVER 4.0" CLASS II AB OVER 8" NATIVE MATERIAL SCARIFIED AND COMPACTED TO 90% RELATIVE COMPACTION AT 2% ABOVE OPTIMUM PER THE PROJECT'S GEOTECHNICAL REPORT. INSTALL CONCRETE JOINTS PER DETAIL 3/C-107. STANDARD GREY COLOR CONCRETE, MEDIUM BROOM FINISH.

DECORATIVE CONCRETE BANDING
4.0" (3000 PSI) CONCRETE W / #3 @ 18" O.C. EA WAY OVER 4.0" CLASS II AB OVER 8" NATIVE MATERIAL SCARIFIED AND COMPACTED TO 90% RELATIVE COMPACTION AT 2% ABOVE OPTIMUM PER THE PROJECT'S GEOTECHNICAL REPORT. INSTALL CONCRETE JOINTS PER DETAIL 3/C-107. COLORED AND STONE TEXTURED STAMPED CONCRETE.

HEAVY DUTY CONCRETE PAVEMENT (T1 = 8.0)
8" (4000 PSI) CONCRETE W / #4 @ 18" O.C. OVER 6.0" CLASS II AB OVER 8" NATIVE MATERIAL SCARIFIED AND COMPACTED TO 95% RELATIVE COMPACTION AT 2% ABOVE OPTIMUM PER THE PROJECT'S GEOTECHNICAL REPORT. INSTALL CONCRETE JOINTS PER DETAIL 3/C-107.

ASPHALT PAVEMENT (T1 = 6.0)
3.5" AC OVER 6.0" CLASS II AB OVER 12" NATIVE MATERIAL SCARIFIED AND COMPACTED TO 95% RELATIVE COMPACTION AT 2% ABOVE OPTIMUM PER THE PROJECT'S GEOTECHNICAL REPORT. SEE DETAIL 8/C-110 FOR BASKETBALL COURT PAVING SECTION. 5

DEEP LIFT PAVEMENT
MINIMUM 10" AC DEPTH

TRENCH REPAIR
MINIMUM 8" AC DEEP LIFT

CRUSHED ROCK
PER DETAIL 9 ON SHEET C-107

BIORETENTION
PER DETAIL 10 ON SHEET C-107

NOTE:

BUILDING CORNER POINTS ARE APPROXIMATE AND PROVIDED FOR BUILDING PAD PREPARATION ONLY. CONTRACTOR SHALL REFERENCE STRUCTRUAL ENGINEER'S FOUNDATION PLAN FOR ACTUAL BUILDING DIMENSIONS.

GENERAL PAVING AND DIMENSIONING NOTES:

ALL MATERIAL AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIE PROJECT SHALL CONFORM TO ALL APPLICABLE CITY OF OAKLAND STANDARD SPECIFICATIONS (LATEST EDITION).

1. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY QUESTION THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS NECESSARY FOR CONSTRUCTION OF THIS PROJECT.
2. ALL CURB RADII ARE 2.5', UNLESS OTHERWISE NOTED.
3. ALL COORDINATE POINTS ARE AT FACE OF CURB OR RADIUS POINT. BUILDING CONTROL POINTS ARE AT THE OUTER MOST EDGE OF THE BUILDING ENVELOPE.
4. THE CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT, CURBS, AND SIDEWALKS AT NEW PAVEMENT, CURB AND SIDEWALK JUNCTURES. NO JAGGED OR IRREGULAR CUTS WILL BE ALLOWED OR ACCEPTED.
5. ALL PAINT SHALL BE 4" WIDE WHITE REFLECTIVE PAINT: WHITE ON TOP OF 6" WIDE BLACK STRIPE ON CONCRETE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
6. ALL PAVEMENT MARKINGS SHALL RECEIVE TWO COATS OF PAINT.
7. ALL SIGNS SHALL CONFORM TO MUTCD, LATEST EDITION.
8. ALL CONCRETE SIDEWALK SHALL BE 5' IN WIDTH UNLESS OTHERWISE SPECIFIED.
9. ALL CURBS ARE 6" HIGH UNLESS OTHERWISE NOTED.
10. BUILDINGS ARE SHOWN FOR REFERENCE ONLY, REFER TO ARCHITECTURAL PLANS.

PARKING SUMMARY NOTES:

	REQUIRED	PROVIDED
MIN. NUMBER OF AUTO SPACES (PER OAKLAND MUNICIPAL CODE):	= 1 PER 600 SF GROUND FLOOR + 1 PER 1,000 SF OTHER FLOOR =(25,542/600)+(27,250/1000) = 84 1 OFF-STREET LOADING BERTH	94 TOTAL (84 STAFF + 30 VISITOR) 1 BERTH
ACCESSIBLE SPACES:	3 STAFF (INCLUDING 1 VAN) 2 VISITOR (INCLUDING 1 VAN)	3 STAFF (INCLUDING 1 VAN) 2 VISITOR (INCLUDING 1 VAN)
NUMBER OF EV READY SPACES (PER OAKLAND MUNICIPAL CODE): INSTALLED	7 STAFF SPACES EV READY 7 STAFF SPACES EV CONDUIT INSTALLED 3 VISITOR SPACES EV READY 3 VISITOR SPACES EV CONDUIT INSTALLED	7 STAFF SPACES EV READY 7 STAFF SPACES EV CONDUIT 3 VISITOR SPACES EV READY 3 VISITOR SPACES EV CONDUIT
CLEAN AIR VEHICLE SPACES:	6 STAFF SPACES 3 VISITOR SPACES	7 STAFF SPACES 3 VISITOR SPACES
ACCESSIBLE EV READY SPACES:	2 STAFF (INCLUDING 1 VAN) 1 VISITOR VAN *ACCESSIBLE CLEAN AIR VEHICLE SPACES PROVIDED ARE IN ADDITION TO MIN. REQUIRED STANDARD (NON CLEAN AIR/EVSE READY) ACCESSIBLE SPACES	2 STAFF (INCLUDING 1 VAN)* 1 VISITOR VAN*

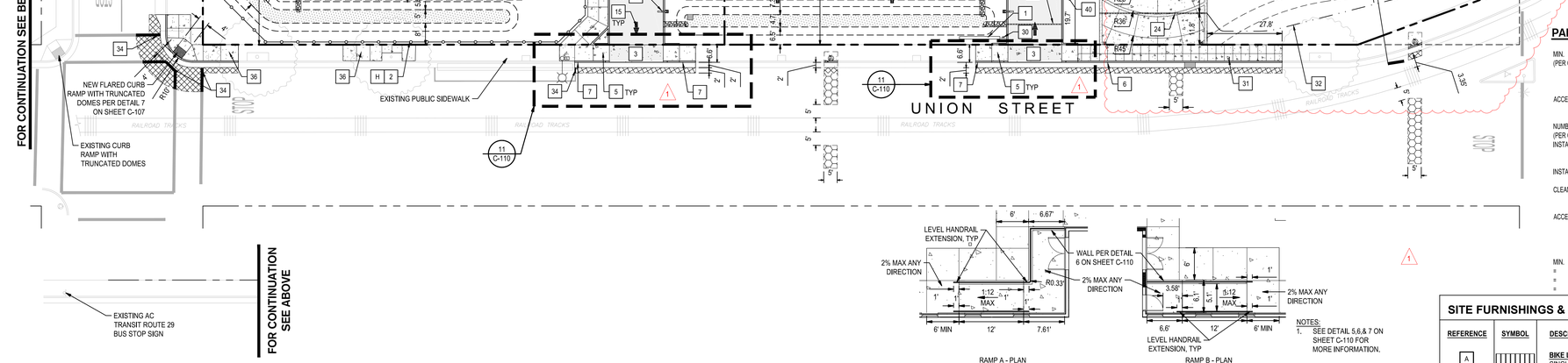
MIN. NUMBER OF BIKE SPACES: = 1 LONG TERM PER 20 EMPLOYEES
= 300/20 = 15 LONG TERM 16 LONG TERM
= 1 SHORT TERM PER 20,000 SF
= (60,828/20,000) = 4 SHORT TERM 8 SHORT TERM

KEY NOTES

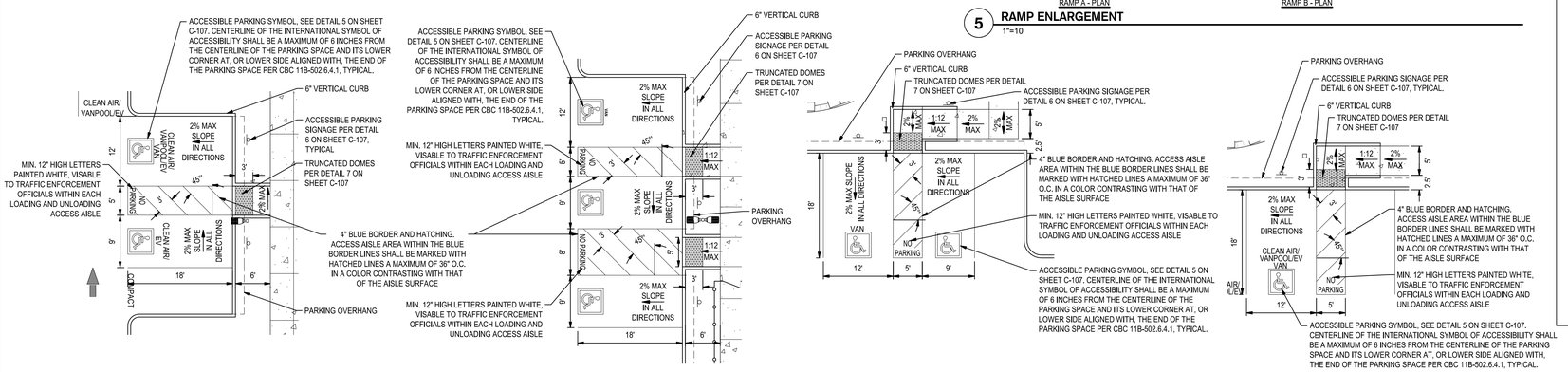
1	BUILDING ADDRESS SIGN, SEE ARCHITECTURAL PLANS
2	NEW 6' HIGH ORNAMENTAL IRON SECURITY FENCING SEE DETAIL 1 ON SHEET C-108
3	NEW DRIVEWAY PER CITY OF OAKLAND STD. DWG. S-2
4	ACCESSIBLE RAMP WITH HANDRAILS, SEE DETAIL 5 ON SHEET C-110.
5	CURB RAMP PER DETAIL 11 ON SHEET C-110
6	TYPE A CONCRETE CURB, GUTTER, & SIDEWALK PER C.O.O. TD. DWG. S1. MODIFY CURB HEIGHT TO MATCH EXISTING PER SHEET C-104.
7	TYPE A CONCRETE CURB, GUTTER, & SIDEWALK PER C.O.O. STD. DWG. S1. MODIFY GUTTER TO MATCH EXISTING WHERE OCCURS.
8	4' VALLEY GUTTER PER DETAIL 11 ON SHEET C-107
9	3' WIDE ACCESS GATE 5
10	INSTALL 6" VERTICAL CURB PER DETAIL 1 ON SHEET C-107
11	INSTALL 6" VERTICAL CURB AND GUTTER PER DETAIL 2 ON SHEET C-107
12	COMMERCIAL DELIVERY PARKING ZONE
13	12" MOW CURB PER DETAIL 9 ON SHEET C-110
14	RETAINING WALL PER DETAIL 8 ON SHEET C-104
15	INSTALL WHITE ARROW MARKING PER DETAIL 2 ON SHEET C-108
16	4" WIDE WHITE STRIPE
17	PROPOSED BOLLARD, SHOWN FOR REFERENCE ONLY SEE ARCHITECTURAL AND ELECTRICAL PLANS
18	PROPOSED SITE LIGHT, SHOWN FOR REFERENCE ONLY SEE ELECTRICAL PLANS. LIGHT POLE FOOTING PER DETAIL 4 ON SHEET C-110.
19	TRASH ENCLOSURE, SEE ARCHITECTURAL PLANS
20	PROPOSED GENERATOR ENCLOSURE SHOWN FOR REFERENCE ONLY, SEE ARCHITECTURAL AND ELECTRICAL PLANS
21	PROPOSED TRANSFORMER LOCATION, SEE ELECTRICAL PLANS
22	CURB CUT PER DETAIL 9 ON SHEET C-107
23	PARKING OVERHANG
24	INSTALL TRENCH DRAIN PER DETAIL 12 ON SHEET C-107
25	INSTALL 3' WIDE FIRE ACCESS MAN GATE W/ KNOX BOX
26	SEE DETAIL 10B ON SHEET C-110 BASKETBALL HOOP ASSEMBLY SYSTEM 5
27	INSTALL 3' WIDE SECURITY ACCESS GATE W/ KNOX BOX, SEE ARCHITECTURAL PLAN SHEET A-101
28	SEE DETAIL 10A ON SHEET C-110 FOR BASKETBALL COURT LAYOUT. 5
29	INSTALL CONCRETE TIRE CURB STOP PER DETAIL 4 ON SHEET C-107
30	INSTALL TOW AWAY SIGN PER DETAIL 8 ON SHEET C-107
31	PROPOSED RE-LOCATION OF EXISTING NO PARKING SIGN, LOWEST EDGE OF SIGN SHALL BE MIN. OF 80" FROM EXISTING GRADE.
32	VEGETATED SWALE PER DETAIL 3 ON SHEET C-108
33	NEW 6' HIGH ORNAMENTAL SECURITY FENCE AUTOMATIC ROLLING GATE SEE DETAIL 1 AND 9 ON SHEET C-108
34	REPLACE DAMAGED STRIPING TO MATCH EXISTING PRIOR TO REMOVAL. 2 COATS OF PAINT.
35	DIRECT BORE WATER LINE UNDER EXISTING RAILROAD
36	SIDEWALK ONLY PER C.O.O. STD. DWG. S1.
37	ACCESS KEYPAD LOCATION, VERIFY LOCATION WITH OWNER
38	INTENTIONALLY LEFT BLANK 5
39	1' LEVEL HANDRAIL EXTENSION AFTER GRADE BREAK AT BOTH TOP AND BOTTOM LANDINGS OF RAMP, TYP.
40	FLAG POLE, SEE ARCHITECTURAL/STRUCTURAL PLANS
41	WHEEL STOP, SEE DETAIL 4 ON SHEET C-107

SITE FURNISHINGS & AMENITIES SCHEDULE

REFERENCE	SYMBOL	DESCRIPTION	MANUFACTURER	MODEL NUMBER	COLOR / FINISH
A		**BIKE LOCKERS** SINGLE TIER, 2 DOOR, SWING HANDLE DOOR LOCK.	CYCLESAFE	PP-SM-M16	TELEGREY 4, RAL 7047
B		**BIKE RACK** SQUARE TUBE U RACK, SURFACE MOUNTED.	THE PARK CATALOG	509-2040	POWDER-COATED, IRON GRAY #7011
C		**BENCH** STRAIGHT 3-UNIT, BACKLESS, INTERMEDIATE ARMS ONLY, SURFACE MOUNTED.	LANDSCAPEFORMS	PLEXUS-II	POWDER-COATED STORMCLOUD
D		**TABLE** 36" ROUND (29 1/4" HIGH TO TABLE TOP), PERFORATED, NO CENTER HOLE, CATENA BASE, MOVABLE	LANDSCAPEFORMS	CATENA TABLE	POWDER-COATED STORMCLOUD
E		**CHAIR** (4 PER TABLE) MOVABLE (17" HIGH TO SEAT)	LANDSCAPEFORMS	CATENA CHAIR	POWDER-COATED STORMCLOUD
F		**LITTER RECEPTACLES** TOP OPENING, FREE STANDING, SURFACE MOUNTED.	LANDSCAPEFORMS	PLEXUS	POWDER-COATED STORMCLOUD
G		**PLANTER POTS** (SRC) STANDARD STEEL REINFORCED CONCRETE. 36"Hx24"Dx72"L	QCP	QS-CAL247236P	STRATA SRC-FRENCH GRAY
H		**FENCE** 6' HIGH ORNAMENTAL TUBE STEEL SECURITY FENCE	AMERISTAR	MONTAGE II GENESIS STYLE	POWDER-COATED, FOR COLOR SEE ARCHITECTURAL FINISH SCHEDULE ON SHEET A-601



5 RAMP ENLARGEMENT
1"=10'



1 ACCESSIBILITY PARKING ENLARGEMENT 1"=10'
2 ACCESSIBILITY PARKING ENLARGEMENT 1"=10'
3 ACCESSIBILITY PARKING ENLARGEMENT 1"=10'
4 ACCESSIBILITY PARKING ENLARGEMENT 1"=10'

0' 10' 20' 40'
SCALE: 1"=20'

SIEGFRIED
CIVIL
STRUCTURAL
LANDSCAPE ARCHITECTURE
SURVEYING
PLANNING
ATHLETIC FACILITY DESIGN
3428 Brookside Road, Stockton, California 95219
209-943-2021 www.siegfriedengr.com Fax 209-942-0214

NOTE: If this drawing is not 30"x42" it has been revised from its original size and the scales noted on drawing/details are no longer applicable.

NO.	DATE	ISSUE DESCRIPTION
1	03/09/2021	DSA BACK CHECK #2
2	11/10/2021	RFI 004 ELECTRICAL TRENCH
3	12/14/2021	RFI 016 WATER RELOCATION
5	12/21/2021	DSA REVISION #1

S H A H
KAWASAKI
ARCHITECTS
570 10th Street, Suite 201
Oakland, CA 94607

CENTRAL ADMINISTRATIVE CENTER AT COLE CAMPUS

1011 UNION STREET,
OAKLAND, CA 94607

REGISTERED PROFESSIONAL ENGINEER
NIKI J. SCHNEIDER
No. 62498
Exp. 09/30/23
CIVIL
STATE OF CALIFORNIA
DATE SIGNED: 12/21/21

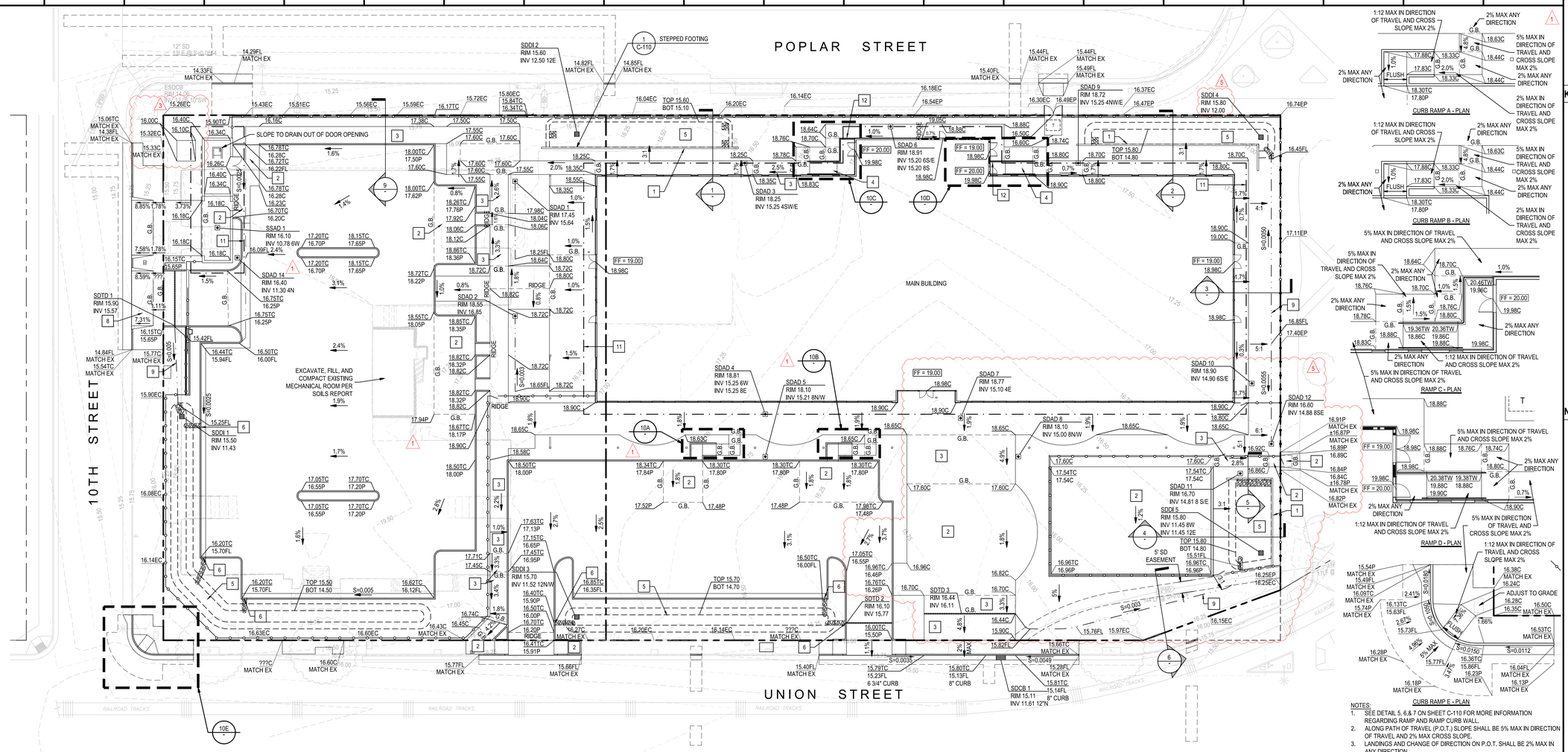
Drawing Title: **SITE AND PAVING PLAN**

Drawing No.: **C-103**

SKA Project Number: 19718
SEI Project Number: 19150

OUSD Project Number: 19119

12/21/2021 6:14 PM P:\19projects\19150 OUSD Cole Administration Center\Plans and Graphics\Improvement Plans\19150-C-103 SITE AND PAVING PLAN.dwg



NOTES:
1. SEE DETAIL 5, 6,& 7 ON SHEET C-110 FOR MORE INFORMATION REGARDING RAMP AND RAMP CURB WALL.
2. ALONG PATH OF TRAVEL (P.O.T.) SLOPE SHALL BE 5% MAX IN DIRECTION OF TRAVEL AND 2% MAX CROSS SLOPE.
3. LANDINGS AND CHANGE OF DIRECTION ON P.O.T. SHALL BE 2% MAX IN ANY DIRECTION.
4. CURB RAMPS AND RAMPS SHALL BE 8.33% (1:12) MAX IN DIRECTION OF TRAVEL AND 2% MAX CROSS SLOPE.

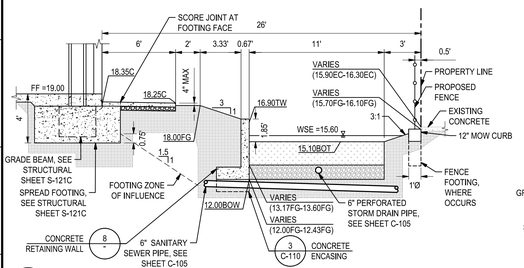
10 RAMP ENLARGEMENT
1"=10'

KEY NOTES

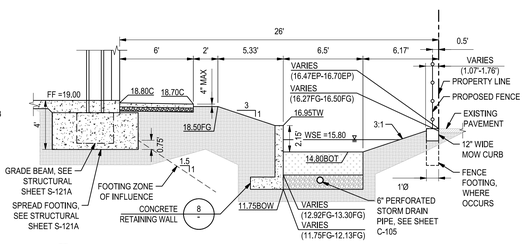
1	RETAINING WALL SEE DETAIL 8 THIS SHEET
2	2% MAXIMUM IN ANY DIRECTION
3	5% MAXIMUM IN DIRECTION OF TRAVEL
4	1:12 ACCESSIBLE RAMP WITH HANDRAILS PER DETAIL 5 ON SHEET C-110
5	BIORETENTION BASIN PER DETAIL 10 ON SHEET C-107
6	CURB CUT PER DETAIL 9 ON SHEET C-107
7	ADJUST TO GRADE
8	ADJUST TO GRADE EXISTING UTILITY VAULT LID BY CHIPPING AND RESETTING FRAME TO MATCH DRIVEWAY SLOPE, COORDINATE WITH UTILITY PROVIDER
9	VEGETATED SWALE PER DETAIL 3 ON SHEET C-108
10	INTENTIONALLY LEFT BLANK
11	APPROXIMATE OVER EXCAVATION LINE
12	EXTEND RAMP CURB FOR RAISED CONCRETE AREA PER DETAIL 6 ON SHEET C-110. HAND/GUARD RAIL REINFORCING PER DETAIL 7 ON C-110.

NOTES

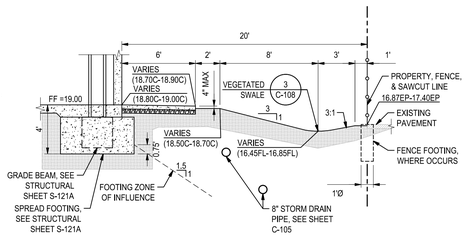
1. 0.02" DIFFERENCE BETWEEN INTERIOR FF AND EXTERIOR CONCRETE AT DOOR LANDINGS, TYPICAL AT ALL DOORS, SEE ARCHITECTURAL PLAN SHEET A-016 FOR MORE INFORMATION.
2. SITE GRADING AND SITE PREPARATION SHALL BE IN ACCORDANCE WITH SECTION 6.3 OF THE GEOTECHNICAL REPORT.
   2.A. SECTION 6.3.3 BUILDING PAD GRADING APPLY THE MAIN BUILDING, MPR, AND TRASH/GENERATOR ENCLOSURE. SEE GEOTECH REPORT FOR MORE INFORMATION. THE OVER EXCAVATION OUTLINE IS SHOWN FOR REFERENCE ONLY, REFER TO GEOTECHNICAL REPORT FOR MORE INFORMATION.
3. FOOTINGS IN DETAILS ARE SHOWN FOR REFERENCE ONLY, REFER TO STRUCTURAL PLANS. THE LARGEST FOOTING SIZES ARE DISPLAYED TO CAPTURE THE WORST CASE.
4. SEE DETAILS 6, 7, & 8 ON SHEET C-108 FOR TYPICAL BENDS, HOOKS, AND LAP SPLICE LENGTHS.



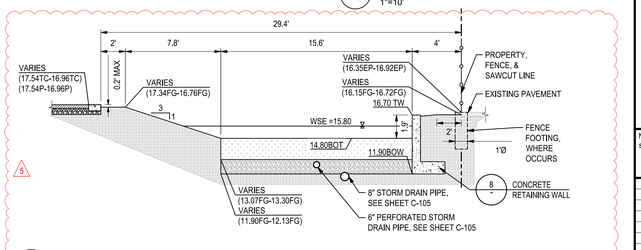
1 MAIN BUILDING WEST GRADING SECTION #1
1" = 5'



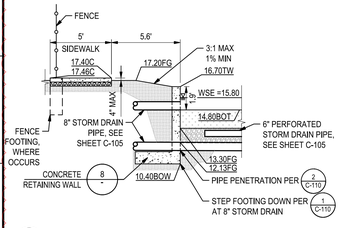
2 MAIN BUILDING WEST GRADING SECTION #2
1" = 5'



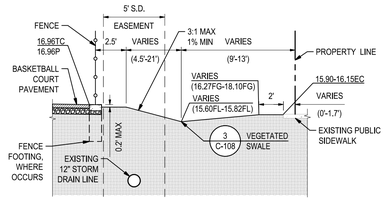
3 MAIN BUILDING NORTH GRADING SECTION
1" = 5'



4 BIORETENTION GRADING SECTION AT BASKETBALL COURT
1" = 5'

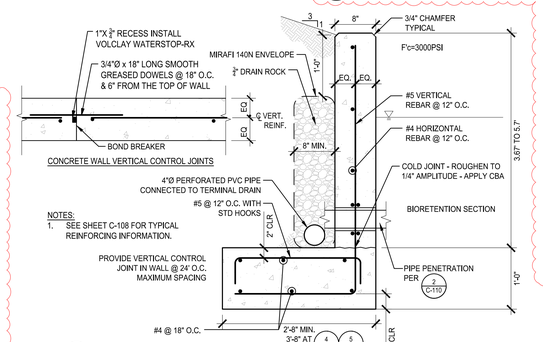


5 BIORETENTION DEEPENED WALL SECTION
1" = 5'

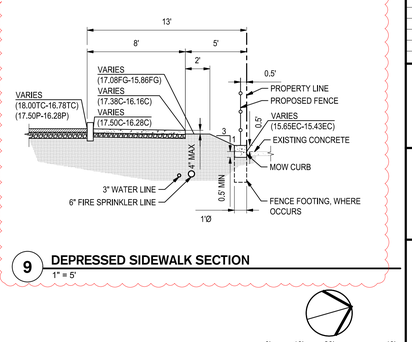


6 SWALE AT BASKETBALL COURTS
1" = 5'

7 INTENTIONALLY LEFT BLANK
NOT SCALE



8 CONCRETE RETAINING WALL
NO SCALE



9 DEPRESSED SIDEWALK SECTION
1" = 5'

0' 10' 20' 40'
SCALE: 1"=20'

SIEGFRIED
CIVIL
STRUCTURAL
LANDSCAPE ARCHITECTURE
SURVEYING
PLANNING
ATHLETIC FACILITY DESIGN
3428 Brookside Road, Stockton, California 95219
209-943-2021 www.siegfriedeng.com FX: 209-942-0214

NOTE: If this drawing is not 30"x42" it has been revised from its original size and the scales noted on drawing/details are no longer applicable.

NO.	DATE	ISSUE DESCRIPTION
1	03/09/2021	DSA BACK CHECK #2
2	11/10/2021	RFI 004 ELECTRICAL TRENCH
3	12/14/2021	RFI 016 WATER RELOCATION
5	12/21/2021	DSA REVISION #1

SHAH KAWASAKI ARCHITECTS
570 10th Street, Suite 201
Oakland, CA 94607

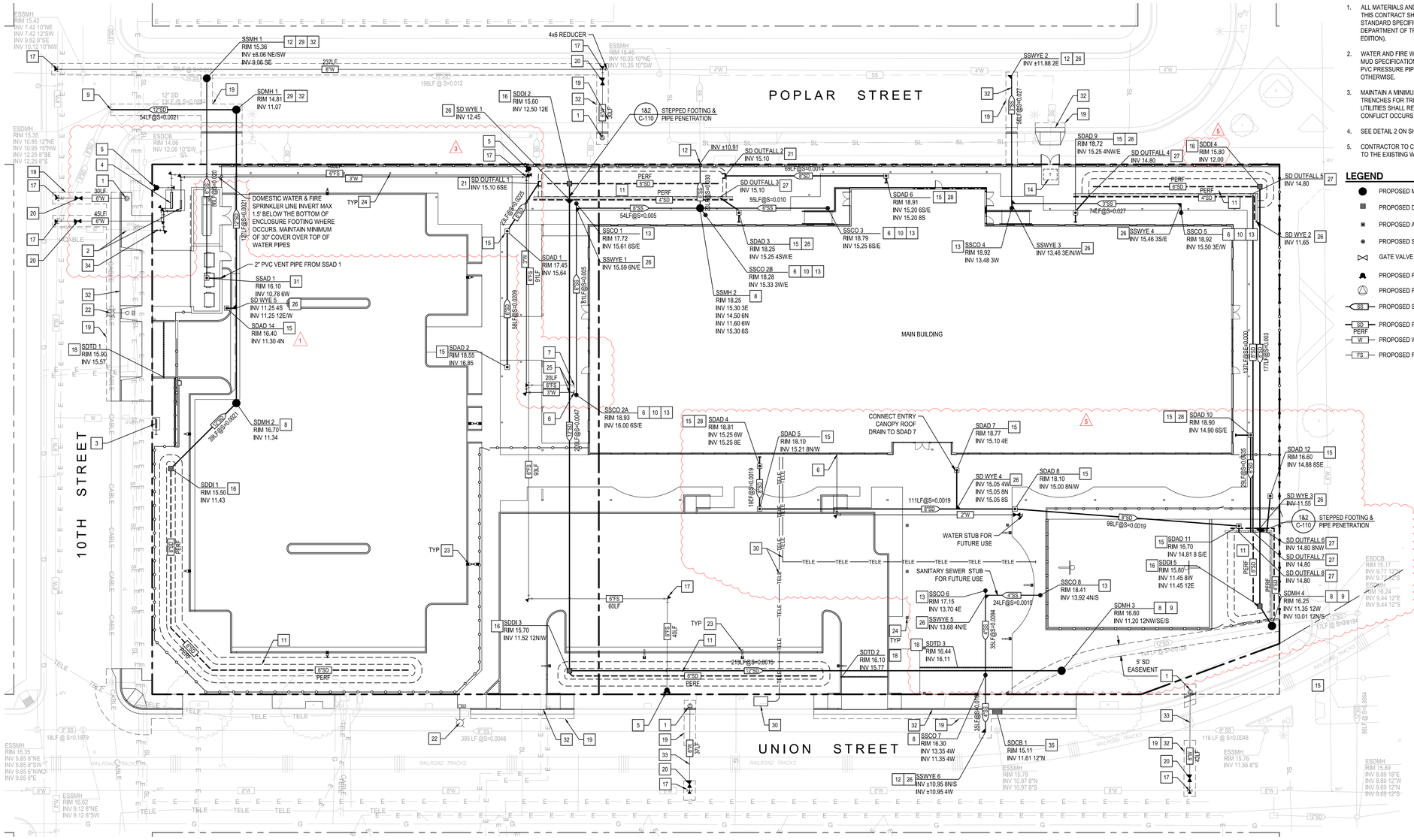
CENTRAL ADMINISTRATIVE CENTER AT COLE CAMPUS
1011 UNION STREET,
OAKLAND, CA 94607

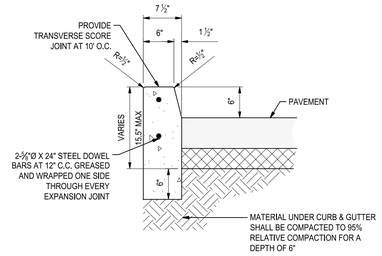
REGISTERED PROFESSIONAL ENGINEER PAUL V. SCHREIER No. 62498 Exp. 09/30/23 CIVIL STATE OF CALIFORNIA
DATE SIGNED: 12/21/21

Drawing Title: GRADING PLAN
Drawing No.: C-104

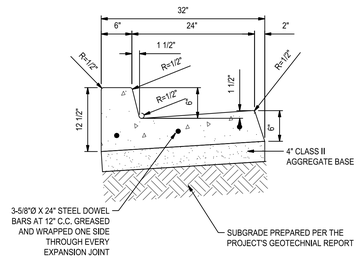
SKA Project Number: 19718
SEI Project Number: 19150
OUSD Project Number: 19119

12/21/2021 6:13 PM F:\19projects\19150 OUSD Cole Administration Center\Plans and Graphics\Improvement Plans\19150-C-104-GRADING PLAN.dwg


POPLAR STREET
10TH STREET
UNION STREET
MAIN BUILDING
SSMH 1
RIM 15.36
INV ±8.06 NE/SW
INV 9.06 SE
SDMH 1
RIM 14.81
INV 11.07
SDMH 2
RIM 16.70
INV 11.34
SDDI 1
RIM 15.50
INV 11.43
SDDI 2
RIM 15.60
INV 12.50 12E
SDDI 3
RIM 15.70
INV 11.52 12N/W
SD WYE 1
INV 12.45
SD OUTFALL 1
INV 15.10 6SE
SD OUTFALL 2
INV 15.10
SD OUTFALL 3
INV 15.10
SD OUTFALL 4
INV 14.80
SD OUTFALL 5
INV 14.80
SD WYE 2
INV 11.65
SD OUTFALL 6
INV 14.80 8NW
SD OUTFALL 7
INV 14.80
SD OUTFALL 8
INV 14.80
SD WYE 3
INV 11.55
SD WYE 4
INV 15.05 4W
INV 15.05 8N
INV 15.05 8S
SD WYE 5
INV 11.25 4S
INV 11.25 12E/W
SSWYE 1
INV 15.59 6N/E
SSWYE 2
INV ±11.88 2E
SSWYE 3
INV 13.46 3E/N/W
SSWYE 4
INV 15.46 3S/E
SSWYE 5
INV 13.68 4N/E
SSWYE 6
INV ±10.95 8N/S
INV ±10.95 4W
SSCO 1
RIM 17.72
INV 15.61 6S/E
SSCO 2A
RIM 18.93
INV 16.00 6S/E
SSCO 2B
RIM 18.28
INV 15.33 3W/E
SSCO 3
RIM 18.79
INV 15.25 6S/E
SSCO 4
RIM 18.92
INV 13.48 3W
SSCO 5
RIM 18.92
INV 15.50 3E/W
SSCO 6
RIM 17.15
INV 13.70 4E
SSCO 7
RIM 16.30
INV 13.35 4W
INV 11.35 4W
SSCO 8
RIM 18.41
INV 13.92 4N/S
SDCB 1
RIM 15.11
INV 11.61 12"N
SDAD 1
RIM 17.45
INV 15.64
SDAD 2
RIM 18.55
INV 16.85
SDAD 3
RIM 18.25
INV 15.25 4SW/E
SDAD 4
RIM 18.81
INV 15.25 6W
INV 15.25 8E
SDAD 5
RIM 18.10
INV 15.21 8N/W
SDAD 6
RIM 18.91
INV 15.20 6S/E
INV 15.20 8S
SDAD 7
RIM 18.77
INV 15.10 4E
SDAD 8
RIM 18.10
INV 15.00 8N/W
SDAD 9
RIM 18.72
INV 15.25 4NW/E
SDAD 10
RIM 18.90
INV 14.90 6S/E
SDAD 12
RIM 16.60
INV 14.88 8SE
SDAD 14
RIM 16.40
INV 11.30 4N
SDDI 4
RIM 15.80
INV 12.00
SDDI 5
RIM 15.80
INV 11.45 8W
INV 11.45 12E
SDMH 3
RIM 16.60
INV 11.20 12NW/SE/S
SDMH 4
RIM 16.25
INV 11.35 12W
INV 10.01 12N/S
SDTD 1
RIM 15.90
INV 15.57
SDTD 2
RIM 16.10
INV 15.77
SDTD 3
RIM 16.44
INV 16.11
SSMH 2
RIM 18.25
INV 15.30 3E
INV 14.50 6N
INV 11.60 6W
INV 15.30 6S
4x6 REDUCER
1&2 C-110 STEPPED FOOTING & PIPE PENETRATION
CONNECT ENTRY CANOPY ROOF DRAIN TO SDAD 7
WATER STUB FOR FUTURE USE
SANITARY SEWER STUB FOR FUTURE USE
DOMESTIC WATER & FIRE SPRINKLER LINE INVERT MAX 1.5' BELOW THE BOTTOM OF ENCLOSURE FOOTING WHERE OCCURS, MAINTAIN MINIMUM OF 30" COVER OVER TOP OF WATER PIPES
2" PVC VENT PIPE FROM SSAD 1
5' SD EASEMENT
ESSMH RIM 15.42 INV 7.42 10"NE INV 7.42 12"SW INV 9.52 8"SE INV 10.12 10"NW
ESSMH RIM 15.35 INV 10.95 12"NE INV 10.95 15"NW INV 12.25 8"SE INV 12.25 8"S
SDCB RIM 14.06 INV 12.06 10"SW
ESSMH RIM 16.35 INV 5.85 8"NE INV 5.85 8"SW INV 9.85 6"NW/O INV 9.85 6"E
ESSMH RIM 16.62 INV 9.12 8"NE INV 9.12 8"SW
ESSMH RIM 15.45 INV 10.35 10"NE INV 10.35 10"SW
SDCB RIM 15.17 INV 9.77 12"NE INV 9.77 12"S
ESSMH RIM 16.24 INV 9.44 12"E INV 9.44 12"S
ESDMH RIM 15.89 INV 8.89 18"E INV 8.89 12"W INV 9.69 12"N INV 9.69 12"S
ESSMH RIM 15.78 INV 10.97 8"N INV 10.97 8"S
ESSMH RIM 15.76 INV 11.56 8"S
12" SD 13' F.S.@S=0.0521
54LF@S=0.0021
12"SD
198LF @ S=0.012
23'LF
6"W
6"FS
3"W
45LF
30LF
6"SD
4"SD
PERF
6"SS
4"SS
8"SS
8"W
12"W
4"W
6"FW
6"G
6"E
6"TELE
6"CABLE
6"RAILROAD TRACKS
6"TS
6"SL
6"WV
6"SW
6"SDD
6"SSD
6"FSS
6"FSD
6"FW
6"FS
6"SSS
6"SSW
6"SSE
6"SSN
6"SSC
6"SSCO
6"SSWYE
6"SSSCO
6"SSSWYE
6"SSDAD
6"SSSDAD
6"SSSSCO
6"SSSSWYE
6"SSSSDAD
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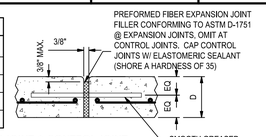


1 6" CONCRETE CURB
NO SCALE



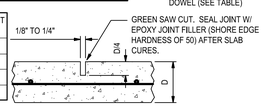
2 6" VERTICAL CURB AND GUTTER
NO SCALE

DOWEL SIZE & SPACING			
SLAB DEPTH	DIAMETER	LENGTH	SPACING
4"	5/8"	12"	24" O.C.
6"	3/4"	18"	18" O.C.
8"	1"	24"	18" O.C.
10"	1"	24"	12" O.C.



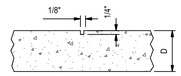
EXPANSION JOINT & CONTROL JOINT

SLAB THICKNESS	W.P.J SPACING (EACH WAY)	CONTROL JOINT SPACING
4"	8' O.C. MAX.	32' O.C. MAX.
6"	12' O.C. MAX.	36' O.C. MAX.
8"	16' O.C. MAX.	40' O.C. MAX.
10"	N/A	40' O.C. MAX.



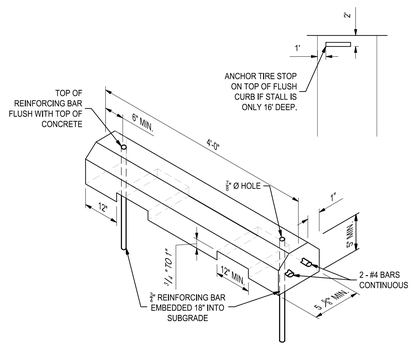
WEAKENED PLANE JOINT

NOTE:
SCORE JOINT SPACING SHALL BE PLACED 5'-0" O.C. UNLESS OTHERWISE NOTED ON PLANS

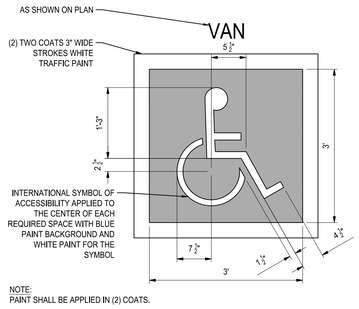


SCORE LINE

3 TYPICAL CONCRETE JOINT DETAILS
NO SCALE

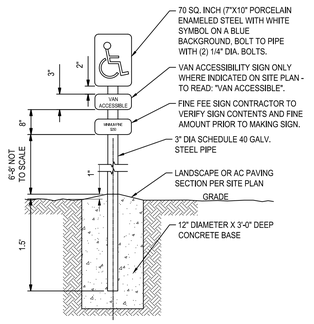


4 4' WHEEL STOP
NOT TO SCALE

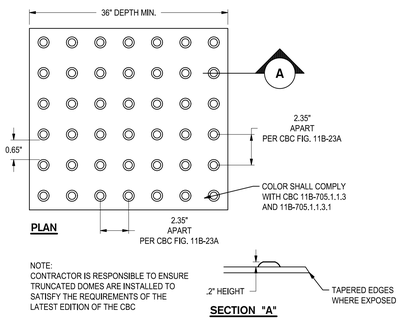


NOTE:
PAINT SHALL BE APPLIED IN (2) COATS.

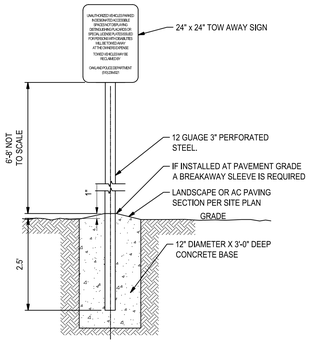
5 ACCESSIBLE STALL INDICATOR
NO SCALE



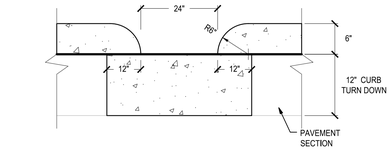
6 ACCESSIBLE PARKING SIGN
NO SCALE

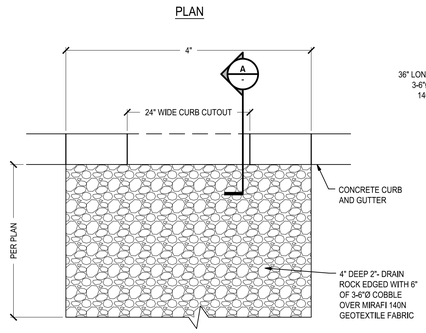


7 TRUNCATED DOMES
NO SCALE

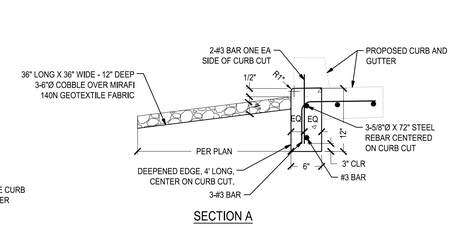


8 TOW AWAY SIGN
NO SCALE

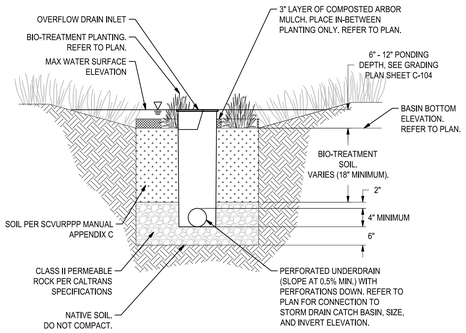




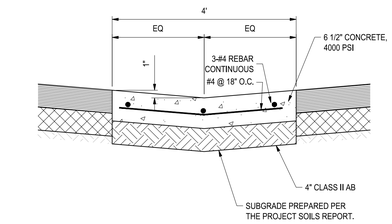
9 CONCRETE CURB OPENING
NO SCALE



SECTION A

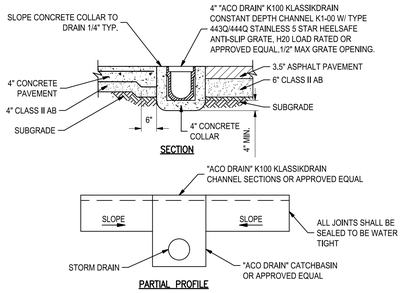


10 BIORETENTION AREA
NO SCALE

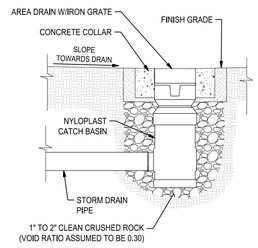


NOTES:
1. CONSTRUCT EXPANSION JOINTS @ 150' C.C. MAXIMUM SPACING.
2. PROVIDE CONTROL JOINTS @ 40' O.C. MAXIMUM SPACING.

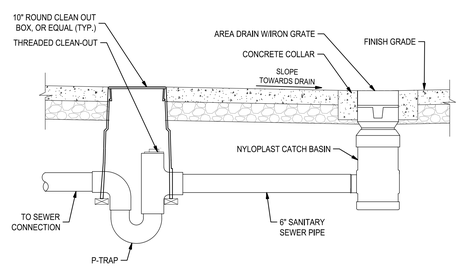
11 CONCRETE VALLEY GUTTER
NO SCALE



12 4" TRENCH DRAIN
NO SCALE



13 AREA DRAIN
NO SCALE



14 SS DRAIN WITH P-TRAP IN A BOX
NO SCALE

SIEGFRIED
CIVIL
STRUCTURAL
LANDSCAPE ARCHITECTURE
SURVEYING
PLANNING
ATHLETIC FACILITY DESIGN
3428 Brookside Road, Stockton, California 95219
209•943•2021 www.siegfriedeng.com Fx: 209•942•0214

NOTE: If this drawing is not 30"x42" it has been revised from its original size and the scales noted on drawing/details are no longer applicable.

NO.	DATE	ISSUE DESCRIPTION
1	03/09/2021	DSA BACK CHECK #2
2	11/10/2021	RFI 004 ELECTRICAL TRENCH
3	12/14/2021	RFI 016 WATER RELOCATION
5	12/21/2021	DSA REVISION #1

S H A H KAWASAKI ARCHITECTS
570 10th Street, Suite 201
Oakland, CA 94607

CENTRAL ADMINISTRATIVE CENTER AT COLE CAMPUS

1011 UNION STREET,
OAKLAND, CA 94607

REGISTERED PROFESSIONAL ENGINEER PAUL V. SCHAEFER No. 62498 Exp. 09/30/23 CIVIL STATE OF CALIFORNIA

DATE SIGNED: 12/21/21

Drawing Title
CONSTRUCTION DETAILS I

Drawing No.
C-107

SKA Project Number: 19718
SEI Project Number: 19150

OUSD Project Number: 19119

4/6/2021 4:33 PM F:\19projects\19150 OUSD Cole Administration Center\Plans and Graphics\Improvement Plans\19150-C-107-CONSTRUCTION DETAILS.dwg

Appendix J

OUSD Central Administrative Center at Cole Campus Project Noise Study

Illingworth & Rodkin, April 7, 2022

COLE CENTRAL ADMINISTRATIVE / EDUCATION CENTER PROJECT

Oakland, California

April 7, 2022

Prepared for:

Scott Gregory
President
Lamphier-Gregory
4100 Redwood Road STE 20A - #601
Oakland, CA 94619

Prepared by:

Steve J. Deines

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality
429 E. Cotati Avenue
Cotati, CA 94931
(707) 794-0400

Project: 19-210

INTRODUCTION

This report assesses potential noise and vibration impacts resulting from the construction and operation of the Oakland Unified School District (OUSD) Central Administrative Center at Cole Campus Project proposed at 1011 Union Street in Oakland, California. The project proposes to demolish the existing Cole Middle School and cafeteria buildings in order to build a two-story, 56,176 square foot administrative office/education building. The new building would include 13 to 14 classrooms, multiple office rooms and meeting rooms, and space for IT Department work including a separate server room.

This report evaluates the project's potential to result in significant impacts with respect to applicable California Environmental Quality Act (CEQA) guidelines. The report is divided into three sections: 1) the Setting Section provides a brief description of the fundamentals of environmental noise, summarizes applicable regulatory criteria, and discusses the results of the ambient noise monitoring survey completed to document existing noise conditions; 2) the General Plan Consistency – Noise and Land use Compatibility section discusses noise and land use compatibility utilizing policies in the City's General Plan; and, 3) the Impacts and Mitigation Measures Section describes the significance criteria used to evaluate project impacts and provides a discussion of each project impact with respect to the significance criteria.

SETTING

Fundamentals of Environmental Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its pitch or its loudness. Pitch is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. Loudness is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A decibel (dB) is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

There are several methods of characterizing sound. The most common in California is the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2. Because sound levels can vary markedly over a short period of time, a

method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called Leq. The most common averaging period is hourly, but Leq can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Community Noise Equivalent Level (CNEL) is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The Day/Night Average Sound Level (DNL or Ldn) is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

Effects of Noise

Sleep and Speech Interference

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for multi-family dwellings are set by the State of California at 45 dBA DNL. Typically, the highest steady traffic noise level during the daytime is about equal to the DNL and nighttime levels are 10 dBA lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses. Typical structural attenuation is 12-17 dBA with open windows. With closed windows in good condition, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer dwelling. Sleep and speech interference is therefore possible when exterior noise levels are about 57-62 dBA DNL with open windows and 65-70 dBA DNL if the windows are closed. Levels of 55-60 dBA are common along collector streets and secondary arterials, while 65-70 dBA is a typical value for a primary/major arterial. Levels of 75-80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need to be able to have their windows closed, those facing major roadways and freeways typically need special glass windows.

Annoyance

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that the causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The DNL as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. When measuring the percentage of the population highly annoyed, the threshold for ground vehicle noise is about 50 dBA DNL. At a DNL of about 60 dBA, approximately 12 percent of the population is highly annoyed. When the DNL increases to 70 dBA, the percentage of the population highly annoyed increases to about 25-30 percent of the population. There is, therefore, an increase of about 2 percent per dBA between a DNL of 60-70 dBA. Between a DNL of 70-80 dBA, each decibel increase increases by about 3 percent the percentage of the population highly annoyed. People appear to respond more adversely to aircraft noise. When the DNL is 60 dBA, approximately 30-35 percent of the population is believed to be highly annoyed. Each decibel increase to 70 dBA adds about 3 percentage points to the number of people highly annoyed. Above 70 dBA, each decibel increase results in about a 4 percent increase in the percentage of the population highly annoyed.

TABLE 1 Definition of Acoustical Terms Used in this Report

Term	Definition
Decibel, dB	A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e. g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period.
L_{max}, L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01}, L_{10}, L_{50}, L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, Harris, 1998.

TABLE 2 Typical Noise Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110 dBA	Rock band
Jet fly-over at 1,000 feet		
	100 dBA	
Gas lawn mower at 3 feet		
	90 dBA	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80 dBA	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70 dBA	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60 dBA	
		Large business office
Quiet urban daytime	50 dBA	Dishwasher in next room
Quiet urban nighttime	40 dBA	Theater, large conference room
Quiet suburban nighttime		
	30 dBA	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20 dBA	
		Broadcast/recording studio
	10 dBA	
	0 dBA	

Source: Technical Noise Supplement (TeNS), California Department of Transportation, September 2013.

Fundamentals of Groundborne Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One method is the Peak Particle Velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. In this report, a PPV descriptor with units of mm/sec or in/sec is used to evaluate construction generated vibration for building damage and human complaints. Table 3 displays the reactions of people and the effects on buildings that continuous or frequent intermittent vibration levels produce. The guidelines in Table 3 represent syntheses of vibration criteria for human response and potential damage to buildings resulting from construction vibration.

Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to cause damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life, are evaluated against different vibration limits. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Structural damage can be classified as cosmetic only, such as paint flaking or minimal extension of cracks in building surfaces; minor, including limited surface cracking; or major, that may threaten the structural integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher. The damage criteria presented in Table 3 include several categories for ancient, fragile, and historic structures, the types of structures most at risk to damage. Most buildings are included within the categories ranging from “Historic and some old buildings” to “Modern industrial/commercial buildings”. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

The annoyance levels shown in Table 3 should be interpreted with care since vibration may be found to be annoying at lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

TABLE 3 Reaction of People and Damage to Buildings from Continuous or Frequent Intermittent Vibration Levels

Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.1	Strongly perceptible	Threshold at which there is a risk of damage to fragile buildings with no risk of damage to most buildings
0.25	Strongly perceptible to severe	Threshold at which there is a risk of damage to historic and some old buildings.
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential structures
0.5	Severe - Vibrations considered unpleasant	Threshold at which there is a risk of damage to new residential and modern commercial/industrial structures

Source: Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020.

Regulatory Background – Noise

Noise-related regulations, plans, and policies established by the State of California and the City of Oakland are applicable in this assessment of the proposed project. These planning documents are implemented during the environmental review process to limit noise exposure at existing and proposed noise-sensitive land uses.

State of California

State CEQA Guidelines. The California Environmental Quality Act (CEQA) contains guidelines to evaluate the significance of effects of environmental noise attributable to a proposed project. Under CEQA, noise impacts would be considered significant if the project would result in:

(a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

(b) Generation of excessive groundborne vibration or groundborne noise levels;

(c) For a project located within the vicinity of a private airstrip or an airport land use plan or where such a plan has not been adopted within two miles of a public airport or public use airport, if the project would expose people residing or working in the project area to excessive noise levels.

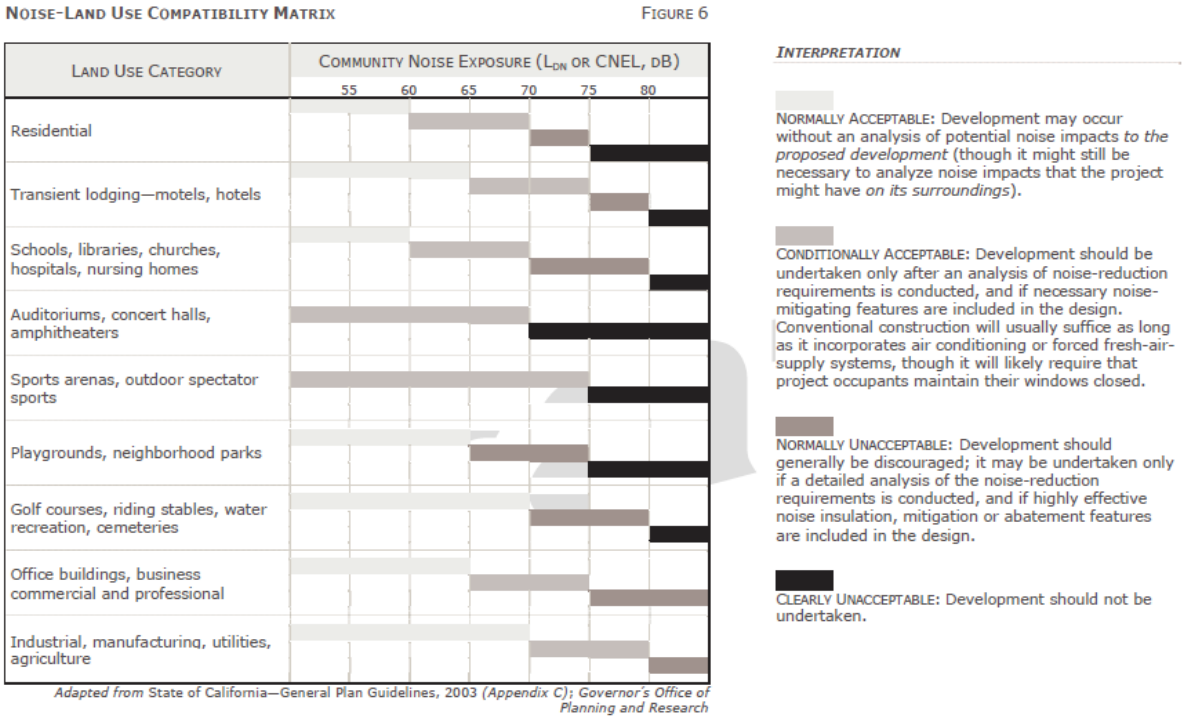
Checklist items (a) and (b) are applicable to the proposed project. The project is not located within the vicinity of a private airstrip or a public airport and would not expose people residing or working in the project area to excessive aircraft noise levels; therefore, item (c) is not carried further in this analysis.

2019 California Green Building Standards Code (Cal Green Code). The State of California established exterior sound transmission control standards for new non-residential buildings as set forth in the 2019 California Green Building Standards Code (Section 5.507.4.1 and 5.507.4.2). Section 5.507 states that either the prescriptive (Section 5.507.4.1) or the performance method (Section 5.507.4.2) shall be used to determine environmental control at indoor areas. The prescriptive method is very conservative and not practical in most cases; however, the performance method can be quantitatively verified using exterior-to-interior calculations. For the purposes of this report, the performance method is utilized to determine consistency with the Cal Green Code. Both of the sections that pertain to this project are as follows:

> **5.507.4.1 Exterior noise transmission, prescriptive method.** Wall and roof-ceiling assemblies making up the building envelope that are exposed to the noise source shall meet a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the building falls within the 65 dBA L_{dn} noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway noise source, as determined by the local general plan noise element.
>
> **5.507.4.2 Performance method.** For buildings located within the 65 dBA L_{dn} noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway noise source, wall and roof-ceiling assemblies making up the building envelope and exposed to the noise source shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level ($L_{eq\ (1\text{-}hr)}$) of 50 dBA in occupied areas during any hour of operation.

The performance method, which establishes the acceptable interior noise level, is the method typically used when applying these standards.

City of Oakland General Plan Noise Element. The Noise-Land Use Compatibility Matrix (Figure 6 of the Noise Element) categorizes noise levels at office buildings of up to 65 dBA L_{dn}/CNEL as "acceptable", from 65 to 75 dBA L_{dn}/CNEL as "conditionally acceptable", and from 75 to 85 dBA L_{dn}/CNEL as "normally unacceptable".



City of Oakland Planning Code. The noise performance standards of the Oakland Planning Code set out to control operational and construction noise levels. These policies were further clarified in the City of Oakland CEQA Thresholds of Significance Guidelines, dated October 17, 2016. The following policies are applicable to the project.

Section 17.120.050 G, Temporary Construction and Demolition Noise: Table Oakland-1, below, specifies the maximum noise level allowable at receiving uses during short and long term construction or demolition projects. The City allows for an exemption if an acoustical analysis is performed that identifies recommend measures to reduce potential impacts.[1]

[1] The acoustical analysis must identify, at a minimum, (a) the types of construction equipment expected to be used and the noise levels typically associated with the construction equipment and (b) the surrounding land uses including any sensitive land uses (e.g., schools and childcare facilities, health care and nursing homes, public open space). If sensitive land uses are present, the acoustical analysis must recommend measures to reduce potential impacts.

TABLE Oakland-1 City of Oakland Construction Noise Standards at Receiving Property Line, dBA[1]		
Receiving Land Use	**Maximum Allowable Noise Level (dBA)**	
	Weekdays 7 a.m.-7 p.m.	**Weekends 9 a.m.-8 p.m.**
Less than 10 days		
Residential	80	65
Commercial, Industrial	85	70
More than 10 Days		
Residential	65	55
Commercial, Industrial	70	60
Notes: 1) If the ambient noise level exceeds these standards, the standard shall be adjusted to equal the ambient noise level.		

Section 8.18.020, Persistent Noises a Nuisance: The persistent maintenance or emission of any noise or sound produced by human, animal or mechanical means, between the hours of nine p.m. and seven a.m., which, by reason of its raucous or nerve-racking nature, shall disturb the peace or comfort, or be injurious to the health of any person shall constitute a nuisance.

Failure to comply with the following provisions shall constitute a nuisance.

A. All construction equipment powered by internal combustion engines shall be properly muffled and maintained.

B. Unnecessary idling of internal combustion engines is prohibited.

C. All stationary noise-generating construction equipment such as tree grinders and air compressors are to be located as far as is practical from existing residences.

D. Quiet construction equipment, particularly air compressors, are to be selected whenever possible.

E. Use of pile drivers and jack hammers shall be prohibited on Sundays and holidays, except for emergencies and as approved in advance by the Building Official.

Section 17.120.050 A-F, Operational Noise: Table Oakland-2, below, specifies the maximum noise level allowable at receiving uses during new project operations.

TABLE Oakland-2 City of Oakland Operational Noise Standards at Receiving Property Line, dBA[1]			
Receiving Land Use	**Cumulative No. of Minutes in 1-Hr Period[2]**	**Maximum Allowable Noise Level (dBA)**	
		Daytime 7 a.m.-10 p.m.	**Nighttime 10 p.m.-7 a.m.**
Residential and Civic[3]	20 (L_{33})	60	45
	10 ($L_{16.7}$)	65	50
	5 ($L_{8.3}$)	70	55
	1 ($L_{1.7}$)	75	60
	0 (L_{max})	80	65
		Anytime	
Commercial	20 (L_{33})	65	
	10 ($L_{16.7}$)	70	
	5 ($L_{8.3}$)	75	
	1 ($L_{1.7}$)	80	
	0 (L_{max})	85	
Manufacturing, Mining, and Quarrying	20 (L_{33})	70	
	10 ($L_{16.7}$)	75	
	5 ($L_{8.3}$)	80	
	1 ($L_{1.7}$)	85	
	0 (L_{max})	90	

Notes: 1) These standards are reduced 5 dBA for simple tone noise, noise consisting primarily of speech or music, or recurring impact noise. If the ambient noise level exceeds these standards, the standard shall be adjusted to equal the ambient noise level.

2) L_x represents the noise level that is exceeded X percent of a given period. L_{max} is the maximum instantaneous noise level.

3) Legal residences, schools and childcare facilities, health care or nursing home, public open space, or similarly sensitive land uses.

Existing Noise Environment

The project site is located west of Union Street, north of 10th Street, east of Poplar Street, and south of Wade Johnson Park. The project site consists of approximately 2.8 acres of land currently occupied by the former Cole Middle School and cafeteria buildings. The surrounding area is predominately residential with multifamily residences to the west and south, an Oakland Housing Authority office to the south, and single-family residences to the east and northeast. The California Cereal Products industrial site to the north serves as the primary source of noise in the site vicinity.

A noise monitoring survey was performed between Wednesday, July 15, 2020 and Friday, July 17, 2020 to quantify and characterize ambient noise levels at the site and in the project vicinity. The monitoring survey included one long-term measurement (LT-1) and one short-term measurement (ST-1). The noise environment results primarily from operations at the California

Cereal Products industrial site located approximately 150 feet north of the nearest project property line. Other secondary sources of noise such as traffic along local roadways and distant highways are insubstantial and dominated by noise from operations at the industrial site. Figure 1 shows the location of noise measurements relative to the project site.

Long-term measurement LT-1 was made at the southwest corner of the site near the intersection of Poplar Street and 10th Street. This location was chosen in order to characterize noise resulting from local traffic and industrial sources in the general site vicinity including at residences to the west. Hourly average noise levels at this location ranged from 54 to 65 dBA L_{eq} during the day and from 50 to 56 dBA L_{eq} at night. The day-night average noise level on Thursday, July 16, 2020 was 62 dBA L_{dn}. The daily trend in noise levels at LT-1 is shown in Figures 2 through 4.

Short-term noise measurement ST-1 was made over a 10-minute period on Wednesday, July 15, 2020 between 8:30 a.m. and 8:40 a.m. ST-1 quantified noise levels near the northwestern corner of the site, across from Wade Johnson Park and approximately 275 feet southwest of the California Cereal Products industrial site. As with the rest of the site vicinity, noise at this location was dominated by industrial activities. Table 4 summarizes the results of measurement ST-1.

TABLE 4 Summary of Short-Term Noise Measurement Data (dBA)

Noise Measurement Location (Date, Time)	L_{max}	$L_{(1)}$	$L_{(10)}$	$L_{(50)}$	$L_{(90)}$	$L_{eq(10\text{-}min)}$	L_{dn}[1]
ST-1: Across Poplar Street Near Northwest Corner of Site, ~275 feet Southwest of California Cereal Products Site (Wednesday, 7/15/2020, 8:30 a.m. – 8:40 a.m.)	67	67	67	66	65	66	71

[1] L_{dn} for short-term measurement ST-1 was calculated through comparison with corresponding long-term measurement LT-1.

FIGURE 1 Noise Measurement Locations

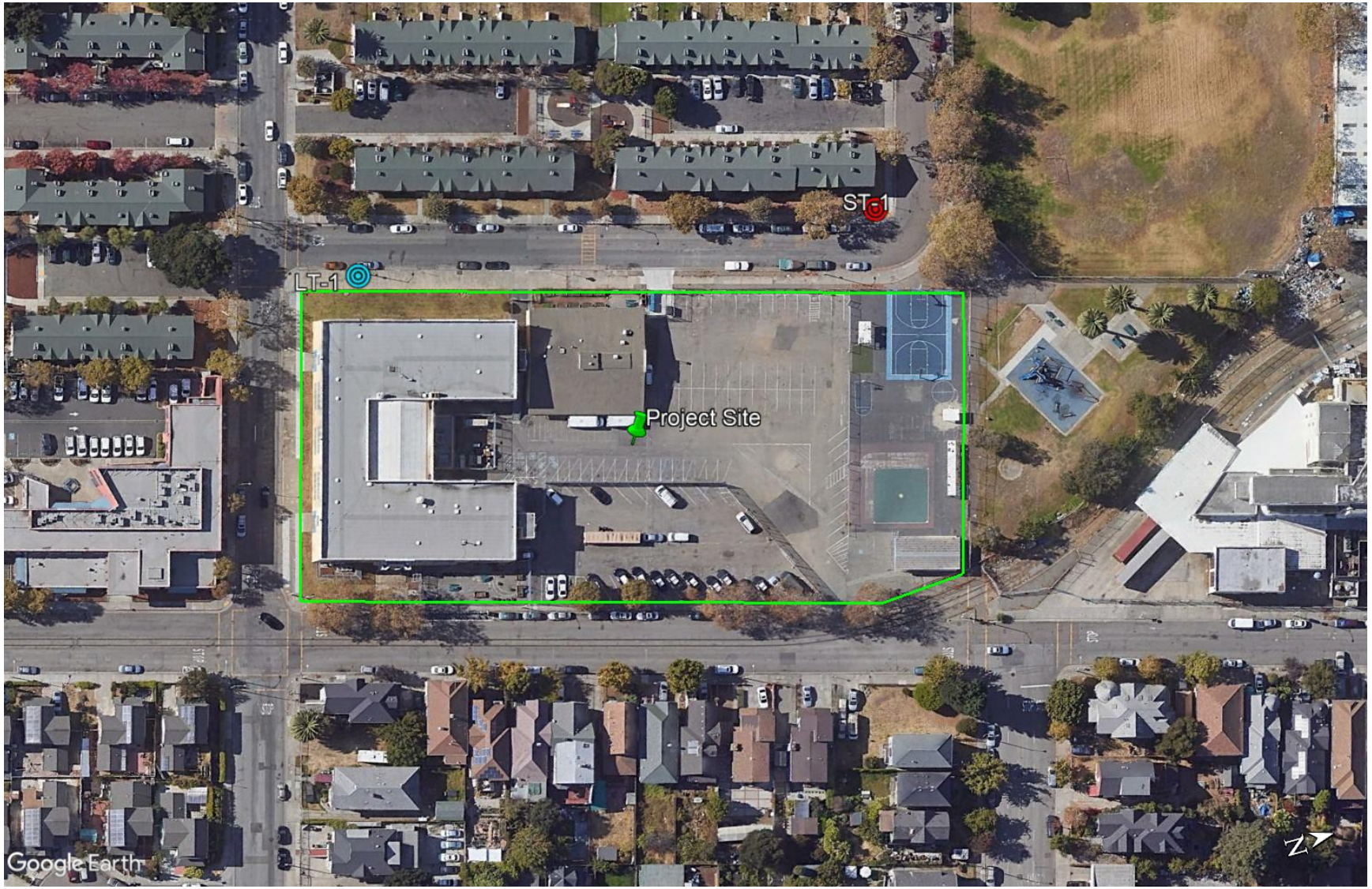


FIGURE 2 Noise Levels at Measurement Site LT-1 on Wednesday, July 15, 2020

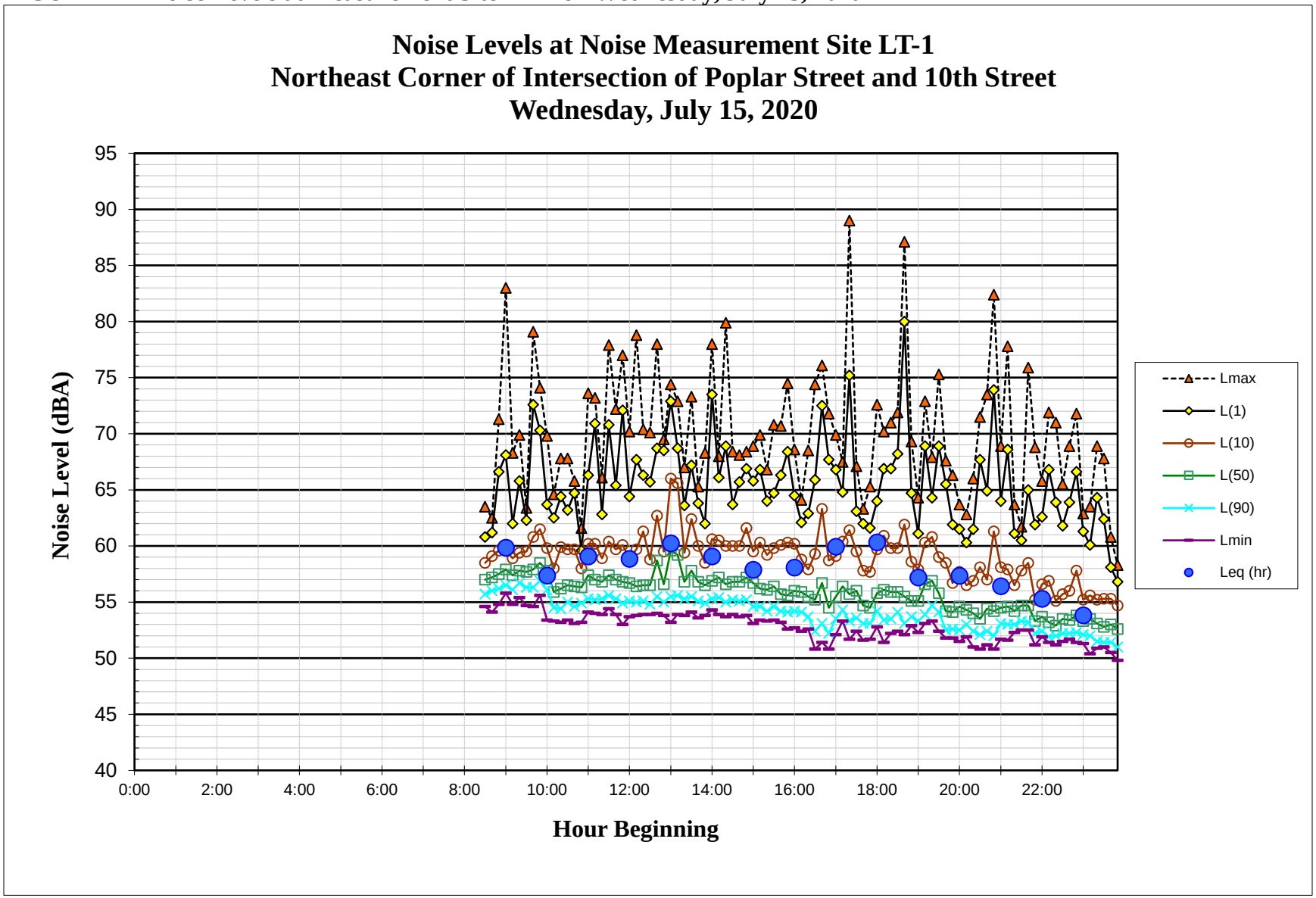


FIGURE 3 Noise Levels at Measurement Site LT-1 on Thursday, July 16, 2020

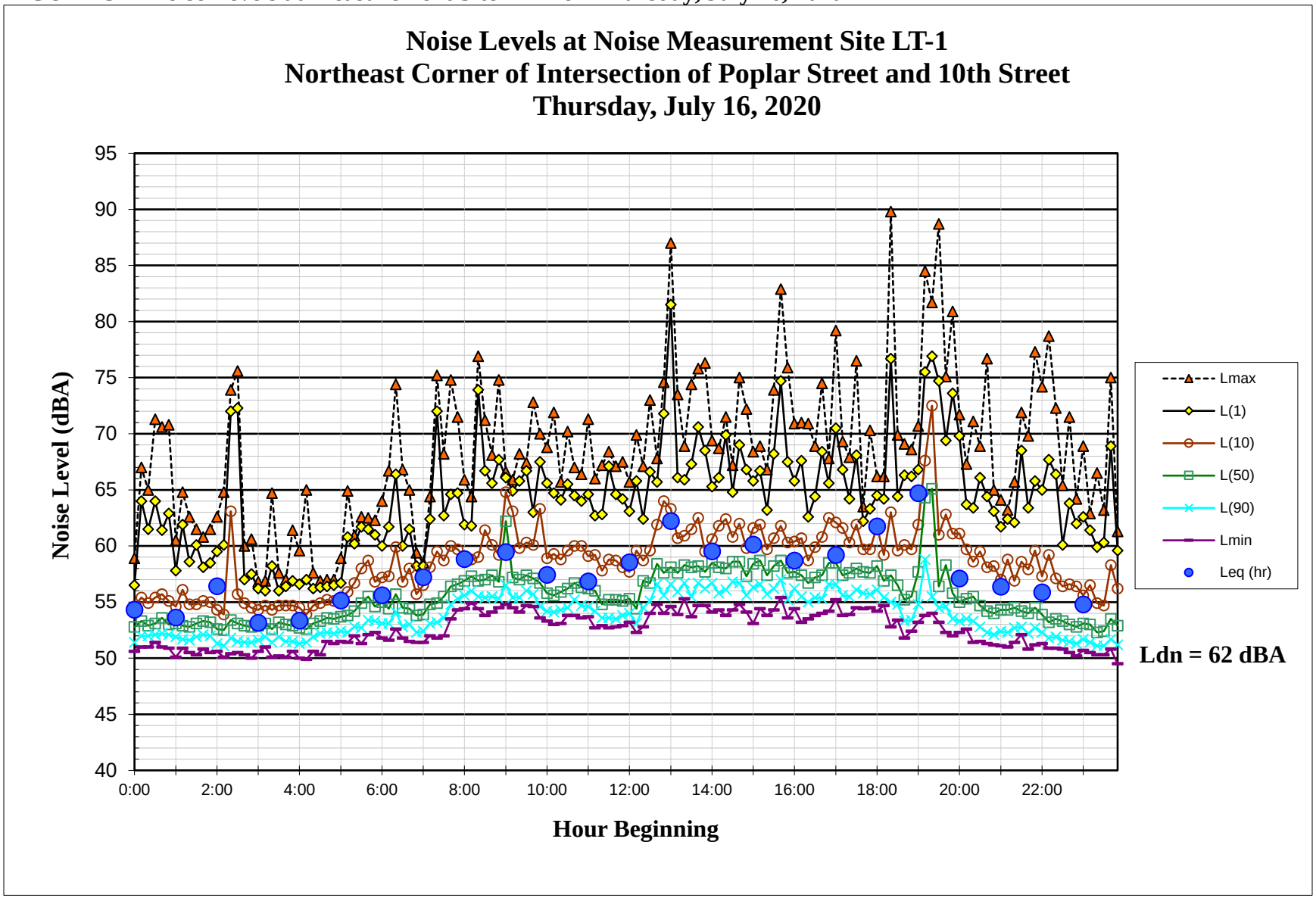
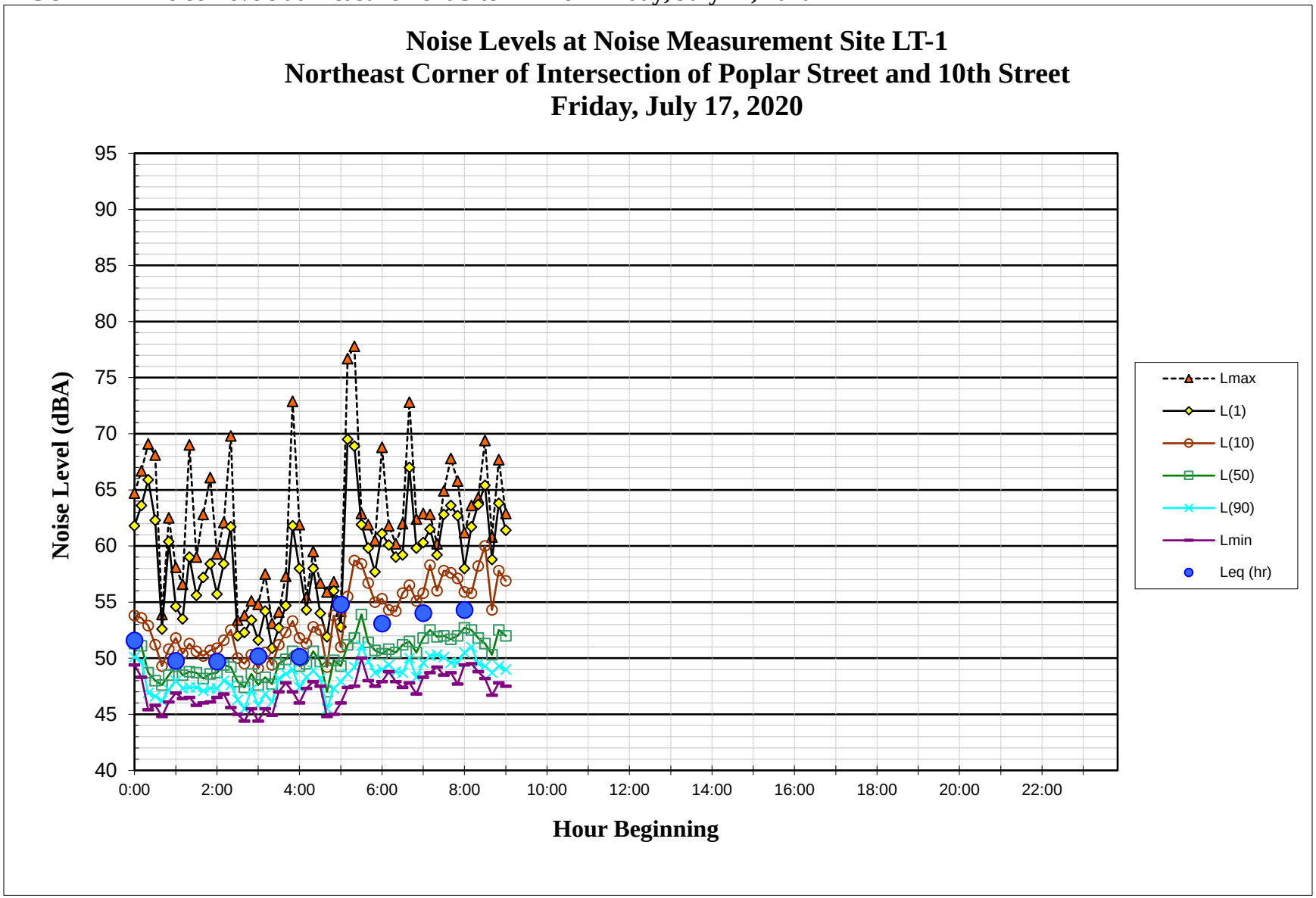


FIGURE 4 Noise Levels at Measurement Site LT-1 on Friday, July 17, 2020



GENERAL PLAN CONSISTENCY ANALYSIS

The impacts of site constraints such as exposure to excessive levels of noise and vibration are not considered under CEQA. This section addresses Noise and Land Use Compatibility for consistency with the policies set forth in the Oakland General Plan and California Green Building Standards Code.

Noise and Land Use Compatibility

The applicable State of California and City of Oakland General Plan policies were presented in detail in the Regulatory Background section and are summarized below:

- The City of Oakland General Plan specifies exterior noise level standards for office uses. An exterior noise level of 65 dBA L_{dn} is considered 'normally acceptable' and an exterior noise level of 75 dBA L_{dn} is considered 'conditionally acceptable.'

- The Cal Green Code establishes a maximum interior noise limit of 50 dBA $L_{eq\ (1\text{-}hr)}$ for occupied areas of non-residential buildings during any hour of operation.

Future Exterior Noise Environment

The future exterior noise environment at the project site would continue to result primarily from operations at the California Cereal Products industrial site. This analysis assumes that noise resulting from activity at the industrial site will continue in the future and not substantially change from existing, measured levels.

Based on measurement data, noise levels throughout the site would be dependent on distance from the industrial site to the north. Noise levels would range from 62 dBA L_{dn} along the southern property line and increase to about 74 dBA L_{dn} along the northern property line. This falls within the 'conditionally acceptable' range of noise levels specified for office land uses in the City of Oakland General Plan.

Project plans indicate a small playground space would be constructed at the northeastern corner of the site. This space would be located next to the southern end of the existing Wade Johnson Playground. Given the proximity of the California Cereal Products industrial site and its size, mitigating noise at the project site, in particular at the northern end where the playground would be located, is not practical. To adequately shield the playground space from industrial noise such that the day-night noise level would not exceed the 'normally acceptable' criterion of 65 dBA L_{dn}, the playground would have to be substantially if not fully enclosed. Revising the site plan to relocate the playground to the southern end of the site along 10th Street would have the potential to reduce the noise level to below the 65 dBA L_{dn} criterion. However, this would potentially diminish the function of the playground by no longer being adjacent to the Wade Johnson Playground and may therefore also be considered impractical. No exterior noise mitigation is recommended.

Future Interior Noise Environment

The Cal Green Code requires that interior noise levels attributable to exterior sources not exceed 50 dBA $L_{eq\ (1\text{-}hr)}$ in occupied areas of non-residential uses during any hour of operation. Based on the results of the noise monitoring survey, peak-hour noise levels would be about 3 dBA higher than day-night average levels and would range between 65 dBA $L_{eq\ (1\text{-}hr)}$ at the southern end of the site to 77 dBA $L_{eq\ (1\text{-}hr)}$ at the northern end of the site. The greatest noise exposure would occur along the northern façades of the administration building and multi-purpose room.

Floorplans for the first and second floors dated June 8, 2020 and February 19, 2021, respectively, indicate that rooms along the northern façades of the proposed building would include noise-sensitive uses such as offices, conferences rooms, and classrooms. As peak-hour noise levels along the northern façades are expected to reach up to 77 dBA $L_{eq\ (1\text{-}hr)}$, a minimum exterior-to-interior noise reduction of 27 dBA would be required to ensure compatibility with the Cal Green Code standard of 50 dBA $L_{eq\ (1\text{-}hr)}$.

Standard office construction with windows in the closed position typically provides for a noise reduction of about 25 dBA, with noise-rated construction materials being required to achieve a greater reduction. Preliminary calculations were made based on building elevations dated January 24, 2020. Rooms near the center of the northern façade would feature large windows resulting in a window-to-wall ratio of up to 48%. Considering this, and metal panel exterior wall construction, windows with a minimum Sound Transmission Class (STC) rating of 30 would be required along the northern façade of the administrative building in order to provide the noise reduction necessary to meet the Cal Green Code standard of 50 dBA $L_{eq\ (1\text{-}hr)}$. Due to shielding provided by the proposed building and attenuation resulting from an increased distance from the California Cereal Products industrial site, noise levels along eastern, western, and southern façades of project buildings are not expected to exceed 75 dBA $L_{eq\ (1\text{-}hr)}$, and therefore standard construction with windows in the closed position would be sufficient. Forced-air mechanical ventilation would be required to allow occupants to keep windows closed to control noise.

Recommended Conditions of Approval:

- Provide all occupied areas of the proposed building with a forced-air mechanical ventilation system to allow for windows to be closed to control noise at the occupant's discretion.

- Special building techniques (e.g., sound-rated windows and building façade treatments) are required to maintain interior noise levels at or below acceptable levels. These treatments would include, but are not limited to, sound-rated windows and doors, sound-rated wall construction, acoustical caulking, and protected ventilation openings. Preliminary calculations indicate that rooms located along the northern façade of the proposed building would require windows with a minimum STC rating of 30 to ensure that the 50 dBA $L_{eq\ (1\text{-}hr)}$ Cal Green Code standard is met.

IMPACTS AND MITIGATION MEASURES

Significance Criteria

The following criteria were used to evaluate the significance of environmental noise resulting from the project:

1. **Temporary or Permanent Noise Increases in Excess of Established Standards:** A significant impact would be identified in the following cases:

    a. Operational Noise in Excess of Standards. A significant impact would be identified if project operations were to exceed the noise level standards specified in Table Oakland-2.

    b. Permanent Noise Increase. A significant permanent noise increase would occur if a) the noise level increase is 5 dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn}, or b) the noise level increase is 3 dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater.

    c. Temporary Noise Increase. Construction noise impacts would be considered significant if project construction were to exceed the City of Oakland's Construction (or Demolition) Noise Performance Standards for activities that occur for more than 10 days (70 dBA at commercial uses and 65 dBA at residential uses during weekday daytime hours).

2. **Generation of Excessive Groundborne Vibration:** A significant impact would be identified if the construction of the project would expose persons to excessive vibration levels. Groundborne vibration levels exceeding 0.3 in/sec PPV would have the potential to result in cosmetic damage to buildings.

Impact 1: **Temporary or Permanent Noise Increases in Excess of Established Standards.** The proposed project would not generate operational noise levels in excess of the standards established in the City's General Plan or Municipal Code at nearby sensitive receptors. With the implementation of Oakland's standard controls and recognizing that noise generated by construction activities would occur over a temporary period, the temporary increase in ambient noise levels occurring during construction would also be in compliance with the City's Code. **This is a less-than-significant impact**.

a. Permanent Noise from On-Site Operations

Operational noise sources proposed with the Project include mechanical equipment, parking, and testing of an emergency backup generator. Table Oakland-2 of the City of Oakland Planning Code establishes maximum allowable noise levels for daytime and nighttime hours at residential, civic, and commercial receiving land uses.

Mechanical Equipment

Heating, ventilation, and air conditioning (HVAC) equipment for the project would include a variable refrigerant flow (VRF) system of outdoor heat pumps and interior fan coil units. Information regarding the number, size, model, and location of HVAC equipment was not available at the time of this study. Typical VRF heat pumps for office buildings of this size would generate noise levels around 58 to 68 dBA at a distance of 3 feet. Noise from mechanical equipment would typically drop off at a rate of about 6 dBA per doubling of distance. Outdoor heat pumps are usually located on building rooftops. For rooftop equipment, shielding from the rooftop and screens would be anticipated to provide 10 to 15 dBA of additional reduction, assuming the screen/rooftop would be constructed without any gaps or cracks. Any barriers should have a minimum surface weight of 3 pounds per square foot (such as 1-inch-thick wood, ½-inch laminated glass, masonry block, concrete, or one-inch metal).

Property lines of residential and civic land uses nearest to potential locations for HVAC equipment are located at residences approximately 65 feet to the west, residences approximately 70 feet to the east, and the Wade Johnson Playground approximately 20 feet to the north. One commercial use, the Oakland Housing Authority office building, is located approximately 250 feet to the south. The most restrictive standard for operational noise set in Table Oakland-2 of the City of Oakland Planning Code limits operational noise sources at receiving residential and civic land uses to 60 dBA L_{33} during daytime hours and 45 dBA L_{33} during nighttime hours. The L_{33} metric represents a noise level that is exceeded for one third (20 minutes) of any given hour. As noise from HVAC equipment is fairly stable when operating, the average noise levels for VRF heat pumps described above can be applied to the Table Oakland-2 standards.

Without considering shielding and attenuation from rooftops and parapet walls, noise from VRF heat pumps would not be expected to exceed 45 dBA beyond a distance of 46 feet from the equipment, or to exceed 60 dBA beyond a distance of 11 feet from the equipment. VRF equipment would not exceed daytime noise limits at any surrounding land uses. Under worst-case placement conditions, nighttime operation of VRF equipment could potentially exceed the 45 dBA L_{33} limit at the Wade Johnson Playground. However, the City of Oakland Parks and Recreation Advisory Commission has established park hours at the Wade Johnson Playground to be from dawn to dusk, and therefore the park would not be used during nighttime hours. This is a **less-than-significant** impact.

Generator Testing

A data center used by OUSD would be relocated from the existing Cole Middle School building to the new administration building. Continuous operation of data centers is ensured through use of emergency backup generators. The project proposes to include a 150 kW Cummins QSB7-G5 diesel backup generator at the southwestern corner of the site. The generator would be housed in a level 2 sound enclosure and surrounded by a 12-inch thick, 15-foot high CMU wall. Generator operations during emergency situations would be exempt from City regulations. However, testing of generators is typically considered an operational noise source and Table Oakland-2 limits would apply.

Sound data for the generator was made available and analyzed. When equipped with the level 2 sound enclosure, testing of the generator at full capacity would result in a noise level of 73 dBA at a distance of 23 feet. Noise resulting from generator testing was modeled in SoundPLAN, a three-dimensional noise modeling software that considers site geometry, the characteristics of the noise sources, and shielding from structures and barriers. Based on noise modeling results, the 15-foot CMU wall surrounding the generator is anticipated to provide a noise reduction of about 17 dBA, resulting in a noise level during testing at full capacity of 56 dBA at a distance of 23 feet. The nearest noise-sensitive land uses to the generator are residences to the west and south, with property lines located approximately 75 feet from the center of the generator enclosure. At this distance, noise from generator testing is anticipated to reach approximately 47 dBA. Generator testing is typically only conducted during daytime hours and for a period of 15 minutes to two hours. With the level 2 sound enclosure and 15-foot CMU wall surrounding the generator, noise from generator testing would not exceed any daytime noise limits set in Table Oakland-2 of the City of Oakland Planning Code. This is a **less-than-significant** impact.

Parking Lot

Parking for the project would be provided in two separate parking lots; a 63-space lot at the southern portion of the site and a 30-space lot on the westerly portion of the site. The parking lots would be located approximately 70 feet from the property lines of the nearest noise-sensitive land uses including residences to the east and west and the Oakland Housing Authority office building to the south.

Noise sources associated with the use of the parking lots include vehicular circulation, engines, car alarms, squealing tires, door slams, and human voices. The sound of engines starting, doors slam closing, and people talking in the parking lot typically reach maximum levels of 50 to 60 dBA L_{max} at a distance of 50 feet. Parking lot noise would generate maximum noise levels in the range of 47 to 57 dBA L_{max} at a distance of 70 feet, not taking shielding from terrain into account. The hourly average noise level resulting from all these noise-generating activities in a small parking lot would be anticipated to reach 40 dBA L_{eq} at a distance of 50 feet from the parking area.

Maximum noise levels generated in the parking lot would be lower in level than existing maximum noise levels generated by the California Cereal Products industrial site and would be below the daytime threshold established by the City of Oakland. This is a **less-than-significant** impact.

Mitigation Measure 1a: None required.

b. Permanent Noise Increases from Project Traffic

Trip generation numbers for an earlier iteration of project design which occupied the same footprint were provided by Fehr & Peers. Daily operations at the site for this version would result in a peak hour generation of 73 trips. District board meetings would bring in greater traffic, resulting in 190 trips entering and leaving the site for maximum attendance meetings. For the current version of the project, it is anticipated that there will be approximately 70 total OUSD staff employees working on a typical day. Adult and Career Education programs to be held at within

the Education Center floor of the building are assumed to offer classes on its current schedule, with certain classes offered between 9:00 to 12:00 a.m., certain classes offered between 1:00 and 4:00 p.m., and other classes offered between 6:00 and 8:30 p.m. It is also assumed that a total of approximately 100 students and faculty would attend the morning class schedule, approximately 100 students and faculty would attend the afternoon class schedule, and as many as 175 students and faculty would attend the evening class schedule.

Traffic noise increases resulting from daily operations and board meetings were modeled in the Federal Highway Administration's Traffic Noise Model 2.5. Based on traffic noise modeling using peak hour trip generation numbers provided for the previous iteration of the project design, the project would generate a traffic noise level of 48 dBA L_{eq} at 50 feet during peak-hour daily operations and a traffic noise level of 52 dBA L_{eq} at 50 feet during maximum attendance board meetings. An additional worst-case scenario was considered wherein a trip would be generated for each of the 70 employees working on a typical day and for each of the 175 students attending an evening class session. In this scenario, the project would generate a traffic noise level of 53 dBA L_{eq} at 50 feet.

Traffic resulting from daily operations would not measurably increase noise levels in the site vicinity. Noise resulting from traffic generated by maximum attendance board meetings would have the potential to increase noise by about 2 dBA when occurring during the quietest measured existing ambient hour. The imagined worst-case scenario of 245 total trips occurring resulting from departure of all evening students and employees would have the potential to increase noise by about 3 dBA when occurring during the quietest measured existing ambient hour. Hourly trip generation resulting from typical daily project operations would not significantly increase noise levels above that of the existing ambient noise environment, which ranged from 54 to 65 dBA L_{eq} during the measurement survey. As board meetings would happen occasionally and with different levels of attendance, board meetings would not contribute significantly to the existing ambient noise environment in the site vicinity. Additionally, noise levels in the vicinity of the site are dominated by California Cereal Products industrial noise and small increases in roadway traffic would not be noticeable above the dominant industrial noise source. Typical project traffic would result in noise increases below 3 dBA and noise from the California Cereal Products would continue to dominate the noise environment in the vicinity of the site. This is a **less-than-significant** impact.

Mitigation Measure 1b: None required.

c. Temporary Noise Increases from Project Construction

Table Oakland-1 of the City of Oakland Planning Code regulates hours of construction and noise from construction activity. Construction activities are limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 8:00 p.m. on weekends. Daytime construction noise levels for project lasting more than 10 days are limited to a maximum of 65 dBA at receiving property lines of residences and 70 dBA at receiving property lines of commercial and industrial uses, except for areas where the existing ambient noise level exceeds these limits and the limit is then set to the ambient level. Based on noise measurement data, existing ambient noise levels

exceed 65 dBA at some residences to the west, east, and northeast of the site. Section 8.18.020 of the Planning Code includes provisions to mitigate noise from construction activities.

The first phase of construction would include demolition of the existing cafeteria building, removal of the existing single-story freestanding modular building, and removal of all existing building foundations on the northerly portion of the site. All existing concrete, pavement and asphalt, existing on-site utility infrastructure and fencing on the northerly portion of the site would be removed and disposed of, and this portion of the site would be graded to accommodate a new building. After this preparatory phase is complete, construction of the new, two-story Cole Administrative Center/Education building would begin. After construction of the building shell is complete, the existing Cole Middle School building on the southerly portion of the site would be demolished, and the remaining area of the site would be graded to accommodate new parking. The final phase of construction would include landscaping and hardscape improvements.

During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary by stage and vary within stages, based on the amount of equipment in operation and the location at which the equipment is operating. Typical construction noise levels at a distance of 50 feet are shown in Tables 5 and 6. Table 5 shows the average noise level ranges by construction phase, and Table 6 shows the maximum noise level ranges for different construction equipment.

Project construction is expected to last for a period exceeding one year. Construction would take place Monday through Friday during the hours of 7:00 a.m. to 7:00 p.m., consistent with the Planning Code. Specific information on numbers of and types of construction equipment to be used per phase was not available. Pile driving is not proposed as a method of construction.

Using typical construction noise levels for office buildings as shown in Table 5, noise from construction may reach 75 to 89 dBA L_{eq} at a distance of 50 feet. Residential property lines nearest the site are located about 170 feet east and west of the approximate center of construction. At this distance, construction noise levels may reach 64 to 78 dBA L_{eq} during busy periods of construction when multiple pieces of equipment are in operation. This would result in an increase of 6 to 20 dBA over the existing daytime ambient noise level of 58 to 69 dBA L_{eq} at these residences. The nearest nonresidential property lines are located at the Wade Johnson Playground, about 250 feet north of the approximate center of construction, and at the Oakland Housing Authority building, about 300 feet south of the approximate center of construction. Noise levels during busy periods of construction with multiple pieces of equipment in operation may reach 61 to 75 dBA L_{eq} at the Wade Johnson Playground and 59 to 73 dBA L_{eq} at the Oakland Housing Authority building. This would result in an increase of up to 10 dBA over the existing daytime ambient noise level of 64 to 75 dBA L_{eq} at Wade Johnson Park, and an increase of 6 to 20 dBA L_{eq} over the existing daytime ambient noise level of 53 to 64 at the Oakland Housing Authority Building. The use of noise control would be anticipated to reduce construction noise levels by 5 to 10 dBA.

TABLE 5 Typical Ranges of Construction Noise Levels at 50 Feet, L_{eq} (dBA)

	Domestic Housing		Office Building, Hotel, Hospital, School, Public Works		Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station		Public Works Roads & Highways, Sewers, and Trenches	
	I	**II**	**I**	**II**	**I**	**II**	**I**	**II**
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84

I - All pertinent equipment present at site.
II - Minimum required equipment present at site.

Source: U.S.E.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

TABLE 6 Construction Equipment 50-foot Noise Emission Limits

Equipment Category	L_{max} Level (dBA)[1,2]	Impact/Continuous
Arc Welder	73	Continuous
Auger Drill Rig	85	Continuous
Backhoe	80	Continuous
Bar Bender	80	Continuous
Boring Jack Power Unit	80	Continuous
Chain Saw	85	Continuous
Compressor[3]	70	Continuous
Compressor (other)	80	Continuous
Concrete Mixer	85	Continuous
Concrete Pump	82	Continuous
Concrete Saw	90	Continuous
Concrete Vibrator	80	Continuous
Crane	85	Continuous
Dozer	85	Continuous
Excavator	85	Continuous
Front End Loader	80	Continuous
Generator	82	Continuous
Generator (25 KVA or less)	70	Continuous
Gradall	85	Continuous
Grader	85	Continuous
Grinder Saw	85	Continuous

Equipment Category	L_{max} Level (dBA)[1,2]	Impact/Continuous
Horizontal Boring Hydro Jack	80	Continuous
Hydra Break Ram	90	Impact
Impact Pile Driver	105	Impact
Insitu Soil Sampling Rig	84	Continuous
Jackhammer	85	Impact
Mounted Impact Hammer (hoe ram)	90	Impact
Paver	85	Continuous
Pneumatic Tools	85	Continuous
Pumps	77	Continuous
Rock Drill	85	Continuous
Scraper	85	Continuous
Slurry Trenching Machine	82	Continuous
Soil Mix Drill Rig	80	Continuous
Street Sweeper	80	Continuous
Tractor	84	Continuous
Truck (dump, delivery)	84	Continuous
Vacuum Excavator Truck (vac-truck)	85	Continuous
Vibratory Compactor	80	Continuous
Vibratory Pile Driver	95	Continuous
All other equipment with engines larger than 5 HP	85	Continuous

Notes:

[1] Measured at 50 feet from the construction equipment, with a "slow" (1 sec.) time constant.

[2] Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.

[3] Portable Air Compressor rated at 75 cfm or greater and that operates at greater than 50 psi.

Source: Mitigation of Nighttime Construction Noise, Vibrations and Other Nuisances, National Cooperative Highway Research Program, 1999.

The City of Oakland allows for an exemption if an acoustical analysis is performed that identifies measures to reduce potential impacts. The following standard controls, consistent with the Oakland Municipal Code, are assumed to be included in the project:

- Limit all exterior construction activities to within the hours of 7:00 am and 7:00 pm on Weekdays, with no construction occurring on Sundays or federal holidays. Use of the concrete saw shall be limited to the hours between 8:00 am and 4:00 pm on weekdays. Interior construction would also be allowed from 9:00 am and 5:00 pm on Saturdays.

- Work with adjoining properties to determine the best days and times to conduct heavy construction located within 50 feet of shared property lines.

- Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds), wherever feasible.

- Impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with

compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.

- Use temporary power poles instead of generators where feasible.

- Locate stationary noise sources as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.

- Stage large equipment, compressors, or generators at least 25 feet from the site perimeters when work is not being done near these uses.

- The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.

- Construction activities should be conducted in a manner that minimizes the noise impact at the adjacent property boundaries wherever possible. Construction equipment shall be positioned as far from noise sensitive receptors as possible.

- Prohibit unnecessary idling of internal combustion engines.

- Erect temporary plywood noise barriers around the construction site when construction is located adjacent to property lines shared with residential uses.

- Utilize noise control blankets on the building structures as the buildings are erected.

- Conduct a preconstruction meeting with the City of Oakland and Contractor to identify potential sources of noise and how to mitigate them.

- Notify property owners and occupants located within 300 feet of construction activities at least 14 calendar days prior to commencement of construction.

- Designate an on-site construction complaint and enforcement manager for the project.

- Post a large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures and phone numbers for the complaint manager and City Code Enforcement unit.

- Maintain a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request.

- Construction noise monitoring should be undertaken if reliable noise complaints are received during demolition, excavation, and/or construction activities. Noise levels should be monitored representative of ground level outdoor use areas and/or the worst-case ground level façade window exposure at the location from which the noise complaints originated by a qualified acoustical professional. Integrated average (L_{eq}) noise level measurements on an hourly basis should be made of activities representative of those that generated the complaint. If the measured noise levels during this test are found to exceed the City's construction noise performance standards, an acoustical professional should be retained to specify additional noise attenuation measures to reduce noise levels to City Standards. These measures may include operational considerations, the use of additional ground level noise barriers or noise control blanketing of the building structure.

Implementation of the above standard controls would reduce construction noise levels emanating from the site, limit construction hours, and minimize disruption and annoyance. With the implementation of these controls and recognizing that noise generated by construction activities would occur over a temporary period, the temporary increase in ambient noise levels would be **less-than-significant**.

Mitigation Measure 1c: **None required**.

Impact 2: **Exposure to Excessive Groundborne Vibration.** Construction-related vibration would not be excessive at nearby residential land uses or existing school buildings. **This is a less-than-significant impact.**

The construction of the project may generate perceptible vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams, etc.) are used in areas adjacent to developed properties. Construction activities would include demolition of existing structures, parking lot renovation, and construction of the office building and multi-purpose building.

The City of Oakland does not establish a vibration limit for construction. The California Department of Transportation recommends a vibration limit of 0.3 in/sec PPV for buildings that are found to be structurally sound and designed to modern engineering standards and a vibration limit of 0.25 in/sec PPV for historic and some old buildings (see Table 3). The nearest historic building to the site is the Herbert Hoover House located approximately 1,000 feet to the east at 1079 12th Street. Groundborne vibration levels exceeding 0.3 in/sec PPV at surrounding structures of modern construction and/or vibration levels exceeding 0.25 in/sec PPV at the Herbert Hoover House would have the potential to result in a significant vibration impact.

Project construction activities, such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity of the work area. Table 7 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet and calculated vibration levels at distances representative of nearby structures. Pile driving would not be used as a method of construction for the project.

TABLE 7 Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft. (in/sec)	PPV at 55 ft. (in/sec)	PPV at 75 ft. (in/sec)	PPV at 1,000 ft. (in/sec)
Clam shovel drop		0.202	0.085	0.060	0.003
Hydromill (slurry wall)	in soil	0.008	0.003	0.002	0.000
	in rock	0.017	0.007	0.005	0.000
Vibratory Roller		0.210	0.088	0.063	0.004
Hoe Ram		0.089	0.037	0.027	0.002
Large bulldozer		0.089	0.037	0.027	0.002
Caisson drilling		0.089	0.037	0.027	0.002
Loaded trucks		0.076	0.032	0.023	0.001
Jackhammer		0.035	0.015	0.010	0.001
Small bulldozer		0.003	0.001	0.001	0.000

Source: Transit Noise and Vibration Impact Assessment, United States Department of Transportation, Office of Planning and Environment, Federal Transit Administration, September 2018 as modified by Illingworth & Rodkin, Inc., April 2022.

Vibration levels would vary depending on soil conditions, construction methods, and equipment used. Residences are located as close as about 55 feet from the eastern property line of the site and 75 feet from the western and southern property lines of the site. At these distances, vibration levels resulting from heavy equipment use (e.g., vibratory rollers, clam shovel drops) would be expected to be about 0.060 to 0.088 in/sec PPV, which would be well below the 0.3 in/sec PPV limit recommended by the California Department of Transportation. Vibration levels at the Herbert Hoover House are not expected to exceed 0.004 in/sec PPV and would also not exceed any recommended limits. This is a **less-than-significant impact**.

Mitigation Measure 2: None Required

Appendix K

Cole Administrative Center/Education Project – Transportation Assessment

Fehr & Peers, April 25, 2022

FEHR PEERS

DRAFT MEMORANDUM

Date: April 25, 2022

To: Scott Gregory, Lamphier-Gregory

From: Sam Tabibnia, Fehr & Peers

Subject: The Cole Administrative Center/Education Project – Transportation Assessment

OK19-0343

This memorandum presents the transportation impact review conducted by Fehr & Peers for the proposed Oakland Unified School District (OUSD) Cole Administrative Center/Education Project in Oakland.

Based on our analysis:

- At full occupancy, the Project would generate approximately 710 daily, 94 AM peak hour, and 133 PM peak hour new automobile trips on a typical weekday.
- The off-street parking provided by the Project would be adequate to meet the parking demand generated by the site employees and students during both daytime and nighttime on a typical weekday.
- The Project would not cause a significant impact on transportation and circulation under CEQA, including a less-than-significant impact on vehicle miles traveled (VMT).

The remainder of this memorandum presents a brief description of the Project, summarizes the trip and parking generation for the Project, and evaluates the impacts of the Project on transportation and circulation under CEQA.

1. Project Description

The Project site is located at 1011 Union Street on the northwest corner of the 10th Street/Union Street intersection in Oakland. The Project site was formerly occupied by the Cole Elementary

School which is no longer in use. Although the site is currently used by several OUSD uses, this analysis conservatively assumes that the site is currently vacant.

The Project would demolish the existing uses and the site and construct a two-level building providing about 56,200 square feet of space, which is expected to accommodate the following:

- ***Adult and Career Education Program*** - The 28,800 square feet of space on the first level of the building would accommodate the OUSD Adult and Career Education programs, which would primarily relocate from their current location at McClymonds High School in West Oakland. It is expected that the Adult and Career Education program would continue to offer programs on most weekdays from 9:00 AM to noon (morning), from 1:00 to 4:00 PM (afternoon), and from 6:00 to 8:30 PM (evening). It is estimated that up to about 100 students and faculty will attend the morning classes, up to about 100 students and faculty will attend the afternoon classes, and up to about 175 students and faculty will attend the evening classes.
- ***Administrative Offices*** – The 27,400 square feet of space on the second level of the building would accommodate the OUSD Administrative Offices which would primarily relocate from its current location in downtown Oakland. Although about 157 OUSD administrative staff would be assigned to the Cole Building, it is expected that about 70 staff would be at the Cole Building on a typical weekday based on the following assumptions provided by the OUSD:
    - About 50 percent of the assigned employees (78 employees) would permanently work from home and are expected to be at the Cole Building once per week, resulting in about 15 work-from-home employees at the site on a typical weekday.
    - About 30 percent of the assigned employees (47 employees) would work a hybrid schedule and are expected to be at the Cole Building half of the time. Thus, about half (24 employees) of the hybrid employees would be at the site on a typical weekday.
    - About 20 percent of the assigned employees (31 employees) would work at the Cole Building every day.

The Project would provide 93 parking spaces in two surface parking lots. A 63-space parking lot on the south end of the Project site accessed through one full-access driveway on 10th Street, and a 30-space parking lot along the east side of the Project site accessed through two one-way driveways on Union Street.

2. Trip Generation

Trip generation is the process of estimating the number of motor vehicles that would likely access the Project on a typical day. **Table 1** summarizes the trip generation for the Project. Overall, the Project is estimated to generate about 710 daily, and 94 AM and 133 PM peak hour trips on a typical weekday. The trip generation for both Project components on a typical weekday are described below.

- ***Adult and Career Education Program*** – Since applicable published data for this type of use is not available, the trip generation is estimated based on the expected number of students and faculty at the site with full occupancy of the site as described above.
- ***Administrative Office Uses*** - Trip generation data published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual* (11th Edition) for School District Office is used to estimate the trip generation for the administrivia office uses.

TABLE 1
PROJECT AUTOMOBILE TRIP GENERATION SUMMARY

Land Use	Size	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
			In	Out	Total	In	Out	Total
Adult and Career Education Program[1]	375 students and faculty	940	100	10	110	175	18	193
Administrative Office[2]	27,400 square feet	400	50	16	66	10	47	57
	Subtotal	*1,340*	*150*	*26*	*176*	*185*	*65*	*250*
	Non-Auto Reduction[3]	*-630*	*-70*	-12	-82	-87	-30	-117
Adjusted Total Automobile Trips		**710**	**80**	**14**	**94**	**98**	**35**	**133**

Notes:
1. Based on the following assumptions:
   Daily: assume 2.5 trips per person per day
   AM Peak Hour: all morning class attendees arrive and about 10 percent leave during the AM peak hour
   PM Peak Hour: all evening class attendees arrive and about 10 percent leave during the PM peak hour
2. ITE *Trip Generation (11th Edition)* land use category 538 (School District Office, General Urban/Suburban):
   Daily: T = 14.72 * X -6.60
   AM Peak Hour: T = 2.50 * X – 2.81 (76% in, 24% out)
   PM Peak Hour: T = 2.19 * X – 2.81 (17% in, 83% out)
3. Reduction of 46.9% assumed, based on City of Oakland *TIRG*, based on Census data for an urban environment within 0.5 miles of a BART station.

Source: Fehr & Peers, 2022.

The estimated trip generation for the Adult and Career Education Program assumes that all students and faculty would drive to and from the site. In addition, the ITE data is primarily based on data collected at single-use suburban sites where the automobile is often the only travel mode. However, the Project site is located near local and regional transit service in an area where many trips are walk, bike, or transit trips. Since the Project is about 0.5 miles from the West Oakland BART Station, this analysis reduces the trip generation by 47 percent to account for the non-vehicular trips. This adjustment is consistent with the City of Oakland's *Transportation Impact Review Guidelines* (TIRG, April 2017) and is based on US Census commute data for Alameda County from the 2014 5-Year Estimates of the American Community Survey (ACS), which shows that the non-automobile mode share for urban areas within 0.5 miles of a BART Station is about 47 percent.

3. Parking Demand

Table 2 summarizes the estimated parking demand for the Project site on a typical weekday based on the maximum occupancy of the site as described in the Project Description section of this memorandum and the number of people expected to drive to and from the site as described in the Trip Generation section of this memorandum. It is estimated that the 93 off-street parking spaces provided by the Project would meet the parking demand generated by the Project employees and students during both daytime and nighttime on a typical weekday. It is expected that the site visitors would use on-street parking on the adjacent streets because the Project parking lots would be at or near capacity when the site is fully occupied.

TABLE 2
PROJECT AUTOMOBILE PARKING DEMAND SUMMARY

Use	Daytime		Nighttime	
	Population[1]	**Parking Demand[2]**	**Population[1]**	**Parking Demand[2]**
Adult and Career Education Program	100	53	175	93
Administrative Office	70	37	0	0
Total	***170***	***90***	***175***	***93***
Parking Supply		93		93
Parking Surplus		**+3**		**0**

Notes:
1. Population estimates provided by OUSD

2. Assuming that 53 percent of the population would drive to the site, consistent with the City of Oakland *TIRG*, using Census data for an urban environment within 0.5 miles of a BART station

Source: Fehr & Peers, 2022.

4. CEQA Analysis – Transportation and Circulation

Since OUSD does not have its own thresholds of significance, this document relies on the following City of Oakland's thresholds of significance to determine if the Project would have a significant impact on the environment:

A. Conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths (except for automobile level of service or other measures of vehicle delay)
B. Cause substantial additional VMT per capita, per service population, or other appropriate efficiency measure
C. Substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new roadways to the network

Each of the above thresholds are discussed below.

Conflicts with Plans, Ordinances, or Policies Relating to Safety, or Performance of the Circulation System (Criterion A)

The Project would not cause a significant impact by conflicting with adopted plans, ordinances or policies addressing the safety and performance of the circulation system, including transit, roadways, bicycle lanes and pedestrian paths. Various City of Oakland's plans and policies, such as the City's General Plan, the Equitable Climate Action Plan, and the Public Transit and Alternative Mode and Complete Streets policies, state a strong preference for encouraging the use of non-automobile transportation modes such as transit, bicycling and walking. The Project would encourage the use of non-automobile transportation modes by locating in a medium-density, walkable urban environment and within 0.5 miles of both local and regional transit. It is expected that more than half of the Administrative Office employees at the Project site would work remotely on typical weekdays, further reducing the automobile trips generated by the Project.

The Project would not make any modifications to the existing pedestrian or bicycle facilities in the surrounding areas, including the existing BayWheels bike-share station located on Union Street

along the Project frontage just north of 10th Street. Although neither the 2017 City of Oakland Pedestrian Master Plan (*Oakland Walks!*) or the 2019 Oakland Bike Plan (*Let's Bike Oakland*) identify any future facilities along the streets adjacent to the Project, the Project would not adversely affect installation of any planned facilities because it would not make any major modifications to the public right-of-way or include features that would adversely affect installation of potential facilities in the future. The Project would provide long-term bicycle parking for Project employees within the Project building and short-term bicycle parking for students and visitors in the form of bike racks in the Project parking lot.

Project construction activities could potentially temporarily disrupt transportation, bicycle, and/or pedestrian movement, as well as reduce parking availability in the Project area. The Project will prepare and implement a Traffic Control Plan prior to start of construction, which will be approved by the City of Oakland. The Traffic Control Plan will ensure that the Project construction activities would not excessively disrupt motor vehicle, bicycle, and/or pedestrian circulation.

The Project is consistent with applicable plans, ordinances, and policies, and would not cause a significant impact by conflicting with adopted plans, ordinances, or policies addressing the safety and performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths (except for automobile level of service or other measures of vehicle delay). For these reasons, the Project would not conflict with adopted plans, ordinances, or policies resulting in a less-than-significant impact.

Cause Substantial Additional Vehicle Miles Traveled (Criterion B)

According to the City of Oakland TIRG, the following are thresholds of significance related to substantial additional VMT:

- For residential projects, a project would cause substantial additional VMT if it exceeds existing regional household VMT per capita minus 15-percent.
- For office projects, a project would cause substantial additional VMT if it exceeds the existing regional VMT per worker minus 15-percent.
- For retail projects, a project would cause substantial additional VMT if it results in a net increase in total VMT

Consistent with the State Office of Planning and Research's (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018), City of Oakland uses screening criteria that can be used to quickly identify projects that can be expected to cause a less-than-significant impact on VMT without conducting a detailed study. The City of Oakland TIRG includes several screening

criteria. The criterion applicable to the Project is Criterion #2, Low-VMT Area, which states that VMT impacts would be less-than-significant for a project if the following screening criterion is met:

- Low-VMT Areas: The project meets map-based screening criteria by being located in an area that exhibits below-threshold VMT, or 15 percent or more below the regional average.

The City of Oakland uses the Metropolitan Transportation Commission (MTC) Travel Model to apply the Low-VMT Areas criterion. The MTC Travel Model is a model that assigns all predicted trips within, across, or to/from the nine-county San Francisco Bay Area region onto the roadway network and the transit system by mode (single-driver and carpool vehicle, biking, walking, or transit) and transit carrier (bus, rail) for a particular scenario. The MTC Travel Model estimates VMT per resident and VMT per worker for transportation analysis zones (TAZs) throughout the Model area. TAZs are geographic areas that vary in size from a few city blocks in dense downtown areas to larger geographic areas in lower-density areas.

Since the City of Oakland TIRG recommends treating educational land uses (K-12 schools and post-secondary institutions) as office uses for VMT screening and analysis, the VMT per worker, as estimated by the MTC Model, is applicable to both Project components (the Adult and Career Education Program and the Administrative Office).

Table 3 shows the estimated VMT per worker for TAZ 985, the TAZ in which the Project is located, as well as the applicable VMT thresholds of 15 percent below the regional average. The average daily VMT per worker in the Project TAZ (TAZ 985) is 17.8 miles. The regional average daily VMT per worker is 21.8 miles, and the threshold (15 percent below the regional average) is 18.5 miles. The average daily VMT per worker in the Project TAZ is more than 15 percent below the regional average, satisfying the Low-VMT Areas criterion.

In addition, the Adult and Career Education Program component of the Project, which would be relocated from its current location at McClymonds High School, would continue to primarily serve West Oakland and the surrounding areas. Since OUSD operates similar Adult and Career Education Programs at other sites throughout the City of Oakland, the Project is considered local-serving.

Since the Project would satisfy the City of Oakland's Low-VMT Areas criterion and the Adult and Career Education Program component of the Project is considered local-serving, the Project is presumed to have a less-than-significant impact on VMT.

TABLE 3
PROJECT VMT SUMMARY

Geographic Area	Total VMT per Worker (2020)[1]
Project TAZ (TAZ 985)	17.8
Bay Area Region Average	21.8
Bay Area Region Average minus 15% (i.e., threshold of significance)	18.5
Significant Impact?	***No***

Notes:
1. MTC Model results at www.arcgis.com/apps/webappviewer/index.html?id=98463b4f73ca43c5944a5c30648fd689, accessed in March 2022.

Source: Fehr & Peers, 2022.

Substantially Induce Additional Automobile Travel by Increasing Physical Roadway Capacity in Congested Areas or by Adding New Roadways to the Network (Criterion C)

The Project would not modify the roadway network surrounding the Project site. Therefore, the Project would not substantially induce additional automobile travel by increasing the physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) and would not add new roadways to the network and would have a less-than-significant impact on inducing additional automobile traffic.

Please contact Sam Tabibnia (s.tabibnia@fehrandpeers.com or 510-835-1943) with questions or comments.