



June 15, 2021
Project No. 0346.11.02

Jay Hester
Port of Sunnyside
2640 E Edison Avenue, #1
Sunnyside, Washington 98944

Re: Former Planters Hotel Site, 400 S Sixth Street, Sunnyside, Washington: Supplemental
Subsurface Investigation

Dear Mr. Hester:

At the request of the Port of Sunnyside (the Port), Maul Foster & Alongi, Inc. (MFA), conducted a supplemental subsurface investigation at the former Planters Hotel site located at 400 S Sixth Street in Sunnyside, Washington, (the Property; see Figure 1). This report summarizes previous assessments conducted at the Property and presents the results and conclusions of the supplemental investigation.

The supplemental subsurface investigation was conducted in accordance with the Sampling and Analysis Plan and Quality Assurance Project Plan (MFA, 2021a) that MFA prepared for the Port, as well as the Supplemental Subsurface Investigation and Request for Grant Timeline Extension memorandum (MFA, 2021b).

BACKGROUND

In December 2020, a Phase I environmental site assessment was conducted for the Property, and recognized environmental conditions associated with two former underground storage tanks (USTs) and potential off-site sources of contamination were identified (MFA, 2020).

To address the recognized environmental conditions identified during the Phase I environmental site assessment, a site investigation was completed in April 2021 (MFA, 2021c). The investigation provided information about the chemicals of interest in soil and groundwater at the Property. Chemicals of interest included gasoline-, diesel-, and lube-oil-range total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), and polycyclic aromatic hydrocarbons (PAHs). Eight locations were selected for boring advancements by direct-push drilling methods (see Figure 2). Analytical results from the investigation indicated petroleum impacts at the Property associated with the former USTs. Impacts were primarily gasoline-, diesel-, and lube-oil-range TPH, VOCs, and PAHs detected in soil in boring GP03 at concentrations exceeding Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) cleanup levels (CULs), as well as concentrations of PAHs in soil

exceeding CULs in boring GP02. Detections of diesel- and lube-oil-range TPH and PAHs in groundwater in GP03 also exceeded MTCA CULs.

Additional borings were recommended to further delineate petroleum impacts in soil and groundwater north and east of the former UST excavation on the Property. Therefore, MFA completed a supplemental subsurface investigation, described below.

FIELD ACTIVITIES

Site investigation activities included advancement of two subsurface borings and collection of soil and groundwater samples for chemical analysis. This section presents the scope of work conducted to accomplish these activities.

Preparatory Activities

Site Health and Safety Plan. MFA prepared a site-specific health and safety plan (HASP) for the proposed activities. The HASP was prepared in general accordance with the Occupational Safety and Health Act and the Washington Administrative Rules. A copy of the HASP was maintained on site for use by MFA staff during the field activities.

Underground Utility Location. Prior to beginning the field investigation work, underground utilities were located and marked using the Washington Utility Notification Center. Prior to drilling, a private utility locate was conducted by Geophysical Survey, LLC, on May 18, 2021, to locate potential underground utilities or structures in the vicinity of each proposed boring location. A representative of MFA oversaw the private utility locate activities. Underground utility locates were conducted in accordance with MFA standard operating procedure (SOP) 18 (see Attachment A).

Property Access and Work Notification. MFA notified the Port of the work schedule. Since the work included advancement of a boring in the alleyway adjacent to the east Property boundary, the Port obtained the required permission from the City of Sunnyside and traffic control requirements were implemented prior to commencement of field activities in the alleyway.

Inadvertent Discovery Plan for Cultural Resources. MFA implemented an Inadvertent Discovery Plan (IDP) provided by Ecology that outlined procedures to follow if cultural or archaeological materials were encountered during the investigation. A copy of the IDP is provided in Attachment B. The IDP was reviewed with subcontractors prior to commencement of the field work. No cultural resources or archaeological artifacts were encountered during the investigation.

Soil and Groundwater Sampling

A representative of MFA oversaw the drilling activities to document observations and collect samples for chemical analysis. On May 18, 2021, two borings (GP09 and GP10) were advanced using direct-push drilling methods by Pacific Soil and Water, Inc., of Tualatin, Oregon. The drilling was conducted in accordance with SOP 7 (Attachment A). The boring locations are shown on Figure 2. Boring GP09 was placed north of the former UST excavation and prior boring GP02 to assess the nature and extent of UST-related contamination in soil. GP10 was placed east of the former UST excavation and prior boring GP03 in the adjacent alleyway to assess the nature and extent of UST-related contamination in soil and groundwater. The original intent was to place GP10 closer to former boring GP03, but due to the presence of multiple underground utilities in the western half of the alleyway, GP10 was placed approximately 12 feet east of the excavation, near the east edge of the alleyway.

GP09 was advanced to 15 feet below ground surface (bgs) and GP10 was advanced to 20 feet bgs. Continuous soil cores were retrieved for each boring using a 2-inch-diameter, 5-foot-long soil coring device. Lithologic logging and field screening was conducted on each core segment in accordance with SOP 2 (Attachment A). In general, the subsurface lithology consisted of soft to firm silt, with variable amounts of sand. Groundwater was encountered in both borings at approximately 6.5 to 7 feet bgs. Boring logs are included in Attachment C.

Soil cores were field screened for the presence of VOCs in accordance with SOP 3 (Attachment A), using a photoionization detector and for petroleum hydrocarbons using a sheen test. Visual and olfactory observations were also documented. No olfactory or visual impacts were detected in soils collected from the borings advanced at the Property, and photoionization detector readings ranged from 0 to 0.5 parts per million.

One soil sample was collected from each boring at the soil-water interface as shown on the boring logs. Soil sample depths generally ranged from 6 feet to 6.5 feet bgs. Field sampling data sheets for the soil samples are included in Attachment D. Samples were prepared, handled, and documented in accordance with SOPs 4 and 5 (Attachment A).

One grab groundwater sample was collected from boring GP10. A temporary well, consisting of new polyvinyl chloride factory-slotted screen (15 feet in length) with a polyvinyl chloride riser was installed in the boring to facilitate groundwater sample collection. Prior to sample collection, groundwater was purged from the temporary well using a peristaltic pump.

Visual and olfactory observations were also documented. No olfactory or visual impacts were detected in groundwater collected from the boring. The field sampling data sheet for the groundwater sample is included in Attachment D. Groundwater sampling and water-level measurements from each of the boring were conducted in accordance with SOPs 7, 9, and 13 (Attachment A).

After samples were collected, the boring locations were plotted on the field map by measuring the locations from existing site features (e.g., property corner, edge of alleyway) using a hand tape. The borings were abandoned using bentonite chips hydrated with potable water, and the surface was patched to match the surrounding surface.

Investigation-derived waste consisting of soil cuttings and purge water was containerized and temporarily stored on site pending profiling and removal and disposal.

LABORATORY ANALYSIS

Soil and groundwater samples collected during field activities were submitted to Apex Laboratories, LLC, of Tigard, Oregon, under standard chain-of-custody procedures and were analyzed for the following:

- Gasoline-range TPH by Northwest TPH Method NWTPH-Gx
- Diesel- and lube-oil-range TPH by Northwest TPH Method NWTPH-Dx
- VOCs by U.S. Environmental Protection Agency (EPA) Method 8260D
- 1,2-Dibromomethane and vinyl chloride by EPA Method 8260D selective ion monitoring
- PAHs by EPA Method 8270E selective ion monitoring

Analytical results were reviewed for usability and were qualified consistent with EPA procedures and appropriate laboratory and method-specific guidelines, and a data validation memorandum was prepared to document the review. The laboratory analytical report and the data validation memorandum are provided in Attachments E and F, respectively.

Consistent with Washington Administrative Code 173-340-708(8), mixtures of carcinogenic PAHs (cPAHs) are considered as single hazardous substances when evaluating compliance with CULs such that the toxicity of a particular congener is expressed relative to the most toxic congener (i.e., benzo(a)pyrene). The toxicity of cPAHs as a group was assessed using a toxic equivalency approach. Each congener in the group is assigned a toxic equivalency factor (TEF) describing the toxicity of that congener relative to the toxicity of the reference compound, benzo(a)pyrene. For example, a congener that is equal in toxicity to benzo(a)pyrene would have a TEF of 1.0. Similarly, a congener that is half as toxic as benzo(a)pyrene would have a TEF of 0.5, and so on. Multiplying the concentration of a congener by its TEF produces the concentration of cPAH that is equivalent in toxicity to the congener concentration of concern, known as the toxicity equivalent concentration (TEC). Computing the TEC for each congener (C_i in the equation below) in a sample, followed by summing all TEC values, permits expression

of all congener concentrations in terms of a total cPAH toxicity equivalent (TEQ) (i.e., cPAH TEQ):

$$\text{cPAH TEQ} = \sum_{i=1}^k C_i \times \text{TEF}_i$$

cPAH TEQs were qualified and calculated as follows:

- Congeners qualified as non-detect and flagged with a “U” are used in the TEQ calculation at one-half the associated value.
- Congeners qualified as estimated and flagged with a “J” are used without modification in the TEQ calculation.
- Congeners qualified as non-detect with an estimated limit (i.e., flagged with a “UJ”) are used in the TEQ calculation at one-half the associated value.
- If all congeners in a chemical group are undetected, the group sum is reported as undetected.

Consistent with Ecology Implementation Memorandum No. 4, the diesel- and lube-oil-range TPH results were summed for a total detection value and were calculated as follows (Ecology, 2004):

- Diesel and lube-oil results qualified as non-detect and flagged with a U are used in the total calculation at one-half the associated value.
- Diesel and lube-oil results qualified as estimated and flagged with a J are used in the total calculation without modification.

Consistent with Washington Administrative Code 173-340-900 Table 740-1, the CUL for naphthalenes is based on the total value for naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene. The values for those three compounds are summed to compare to the Method A CUL. If a compound is not detected, one-half the associated value is used.

ANALYTICAL RESULTS

The sections below summarize the soil and groundwater analytical results presented in Tables 1 and 2, respectively. Sample results were screened against MTCA Method A CULs for unrestricted land use. Where MTCA Method A CULs were not available, the results were screened against MTCA Method B CULs for cancer or noncancer, whichever value is lower.

Soil Analytical Results

Gasoline-, diesel-, and lube-oil-range TPH and VOCs were not detected in soil at either boring, and PAHs were not detected in boring GP09. Several PAHs (1-methylnaphthalene, 2-methylnaphthalene, naphthalene, and phenanthrene) were detected in soil at GP10 at concentrations less than the CULs.

Groundwater Analytical Results

Gasoline-, diesel-, and lube-oil-range TPH were not detected in the groundwater sample. Toluene and naphthalene were detected in the sample at concentrations less than MTCA CULs.

CONCLUSIONS AND RECOMMENDATIONS

The results of the initial site investigation (MFA, 2021c) together with this supplemental investigation delineate the nature and extent of UST-related contamination in soil and groundwater.

- The extent of chemicals with CUL exceedances in soil is limited to borings GP02 and GP03. PAHs exceed the CULs at both locations, with gasoline-, diesel-, and lube-oil-range TPH and VOCs also exceeding the CULs at GP03.
- The extent of chemicals with CUL exceedances in groundwater is limited to boring GP03. Diesel- and lube-oil-range TPH and PAHs exceed the CULs at this location.

Under the current site conditions (vacant, unused property), exposure to chemicals with CUL exceedances is unlikely. Soil with CUL exceedances is present at depth and covered with gravel, eliminating the potential for direct contact with contaminated soil. Similarly, there is no potential for direct contact with groundwater and there are no current users of on-site groundwater. The proposed redevelopment of the site would likely maintain the current conditions that prevent direct contact with contaminated soil (i.e., soil with CUL exceedances would be covered by landscaping, sidewalks, parking area, or structures), and future use of on-site groundwater would not be proposed.

Based on the current and likely future use of the Property and very localized extent of CUL exceedances in soil and groundwater, potential options to address the CUL exceedances to obtain site closure are described below.

Institutional Controls and Environmental Covenant

Implement institutional controls and an environmental covenant to maintain current site conditions and uses that prevent direct contact with soil and groundwater. In concept, during future development, the institutional controls would include capping of impacted soils using

buildings, paving, and landscaping. The environmental covenant would be executed to ensure the cap is maintained and to specify that use of on-site groundwater is not allowed.

Soil Excavation and Environmental Covenant

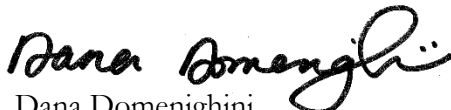
If possible, excavate soils above the water table with CUL exceedances, dispose of soils off-site, and execute an environmental covenant that restricts use of on-site groundwater. This option would require excavation of soil at boring GP03. Because of the close proximity of this boring to the alleyway and underground utilities, excavation at GP03 may not be possible without adversely affecting the structural integrity of the alley and utilities. As such, the institutional controls would be the preferred option over soil excavation.

In addition, the possibility exists that soil with CUL exceedances at GP03 may extend a short distance east into the alleyway (i.e., between boring GP03 and GP10). Excavation of this soil would not be feasible owing to the alley and utilities. As such, even if soils were excavated at GP03, an environmental covenant would likely still be needed to specify maintaining the alleyway as a cap over any underlying soils with CUL exceedances.

These options can all be considered routine measures for addressing low-level impacts present on the Property. They can be conducted either as part of or in advance of redevelopment site preparation work.

Sincerely,

Maul Foster & Alongi, Inc.



Dana Domenighini
Staff Environmental Scientist

David Weatherby, LG
Senior Geologist

06-15-2021

Attachments: Limitations
References
Tables
Figures
A—Standard Operating Procedures
B—Inadvertent Discovery Plan
C—Boring Logs
D—Field Sampling Data Sheets
E—Laboratory Analytical Report
F—Data Validation Memorandum

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

REFERENCES

Ecology. 2004. Implementation memorandum No. 4. (re: determining compliance with Method A cleanup levels for diesel and heavy oil) to file. Prepared by T. Nord, Washington State Department of Ecology. June.

MFA. 2020. Phase I environmental site assessment, 400 S 6th Street, Sunnyside, Washington 98944. Prepared for Port of Sunnyside. Maul Foster & Alongi, Inc., Vancouver, Washington. December 18.

MFA. 2021a. Sampling and analysis plan and quality assurance project plan, 400 S Sixth Street, Sunnyside, Washington. Prepared for Port of Sunnyside. Maul Foster & Alongi, Inc., Portland, Oregon. February 12.

MFA. 2021b. Memorandum (re: supplemental subsurface investigation and request for grant timeline extension) to Washington State Department of Ecology and Port of Sunnyside from D. Weatherby and D. Domenighini, Maul Foster & Alongi, Inc., Portland, Oregon. May 21.

MFA. 2021c. Site investigation report, former Planters Hotel site, 400 S Sixth Street, Sunnyside, Washington. Prepared for Port of Sunnyside. Maul Foster & Alongi, Inc., Portland, Oregon. April 30.

TABLES



Table 1
Soil Analytical Results
Former Planters Hotel Site
Sunnyside, Washington

Location	MTCA A/B ^{(a)(1)}	GP01	GP02	GP03	GP04	GP05	GP06		GP07	GP08	GP09		GP10	
Sample Name		GP01-S-5.5	GP02-S-8	GP03-S-6	GP04-S-8	GP05-S-6	GP06-S-7.5	GP06-S-7.5-DUP	GP07-S-6	GP08-S-6	GP09-S-6.5	GP09-S-6.5-DUP	GP10-S-6	
Collection Date		4/6/2021	4/7/2021	4/7/2021	4/7/2021	4/6/2021	4/6/2021	4/6/2021	4/6/2021	4/6/2021	4/7/2021	5/18/2021	5/18/2021	5/18/2021
Collection Depth (ft bgs)		5.5	8.0	6.0	8.0	6.0	7.5	7.5	6.0	6.0	6.5	6.5	6.0	
TPH (mg/kg)														
Gasoline-Range Hydrocarbons	100 ^(b)	3.5 U	3.33 U	3,130 J	4.06 U	3.14 U	2.83 U	3.94 U	4.26 U	3.41 U	3.71 U	3.74 U	3.45 U	
Diesel-Range Hydrocarbons	2,000	11.8 U	12.3 U	17,900 J	12.2 U	12.4 U	11.3 U	11.4 U	12.5 U	12.3 U	11.9 U	12 U	12.2 U	
Lube-Oil-Range Hydrocarbons	2,000	29.9 J	119	16,000 J	24.5 U	24.8 U	22.6 U	34.2 J	25.1 U	24.6 U	23.8 U	24 U	24.4 U	
Diesel + Lube-Oil-Range Hydrocarbons ^(c)	2,000	35.8 J	125	33,900 J	24.5 U	24.8 U	22.6 U	39.9 J	25.1 U	24.6 U	23.8 U	24 U	24.4 U	
VOCs (mg/kg)														
1,1,1,2-Tetrachloroethane	38	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U	
1,1,1-Trichloroethane	2	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U	
1,1,2,2-Tetrachloroethane	5	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U	
1,1,2-Trichloroethane	18	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U	
1,1-Dichloroethane	180	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U	
1,1-Dichloroethene	4,000	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U	
1,1-Dichloropropene	NV	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U	
1,2,3-Trichlorobenzene	64	0.175 U	0.166 U	2 U	0.203 U	0.157 U	0.142 U	0.197 U	0.213 U	0.171 U	0.185 U	0.187 U	0.172 U	
1,2,3-Trichloropropane	0.0063	0.035 U	0.0333 U	0.802 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U	
1,2,4-Trichlorobenzene	34	0.175 U	0.166 U	2 U	0.203 U	0.157 U	0.142 U	0.197 U	0.213 U	0.171 U	0.185 U	0.187 U	0.172 U	
1,2,4-Trimethylbenzene	800	0.035 U	0.0333 U	46	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U	
1,2-Dibromo-3-chloropropane	1.3	0.175 U	0.166 U	2 U	0.203 U	0.157 U	0.142 U	0.197 U	0.213 U	0.171 U	0.185 U	0.187 U	0.172 U	
1,2-Dibromoethane	0.005	1.4 U	1.33 U	401 U	1.62 U	1.26 U	1.13 U	1.57 U	1.7 U	1.37 U	0.00148 U	0.00149 U	0.00138 U	
1,2-Dichlorobenzene	7,200	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U	
1,2-Dichloroethane	11	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U	
1,2-Dichloropropane	27	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U	
1,3,5-Trimethylbenzene	800	0.035 U	0.0333 U	13	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U	
1,3-Dichlorobenzene	NV	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U	
1,3-Dichloropropane	1,600	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U	
1,4-Dichlorobenzene	190	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U	
2,2-Dichloropropane	NV	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U	
2-Butanone	48,000	0.35 U	0.333 U	4 U	0.406 U	0.314 U	0.283 U	0.394 U	0.426 U	0.341 U	0.371 U	0.374 U	0.345 U	
2-Chlorotoluene	1,600	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U	
2-Hexanone	400	0.35 U	0.333 U	4.01 U	0.406 U	0.314 U	0.283 U	0.394 U	0.426 U	0.341 U	0.371 U	0.374 U	0.345 U	
4-Chlorotoluene	NV	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U	
4-Isopropyltoluene	NV	0.035 U	0.0333 U	2.92 J	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U	
4-Methyl-2-pentanone	6,400	0.35 U	0.333 U	4.01 U	0.406 U	0.314 U	0.283 U	0.394 U	0.426 U	0.341 U	0.371 U	0.374 U	0.345 U	
Acetone	72,000	0.7 U	0.665 U	8.02 U	0.811 U	0.629 U	0.566 U	0.787 U	0.852 U	0.683 U	0.742 U	0.747 U	0.689 U	
Acrylonitrile	1.9	0.07 U	0.0665 U	0.802 U	0.0811 U	0.0629 U	0.0566 U	0.0787 U	0.0852 U	0.0683 U	0.0742 U	0.0747 U	0.0689 U	

Table 1
Soil Analytical Results
Former Planters Hotel Site
Sunnyside, Washington

Location	MTCA A/B ^{(a)(1)}	GP01	GP02	GP03	GP04	GP05	GP06		GP07	GP08	GP09		GP10
Sample Name		GP01-S-5.5	GP02-S-8	GP03-S-6	GP04-S-8	GP05-S-6	GP06-S-7.5	GP06-S-7.5-DUP	GP07-S-6	GP08-S-6	GP09-S-6.5	GP09-S-6.5-DUP	GP10-S-6
Collection Date		4/6/2021	4/7/2021	4/7/2021	4/7/2021	4/6/2021	4/6/2021	4/6/2021	4/6/2021	4/7/2021	5/18/2021	5/18/2021	5/18/2021
Collection Depth (ft bgs)		5.5	8.0	6.0	8.0	6.0	7.5	7.5	6.0	6.0	6.5	6.5	6.0
Benzene	0.03	0.007 U	0.00665 U	0.152 J	0.00811 U	0.00629 U	0.00566 U	0.00787 U	0.00852 U	0.00683 U	0.00742 U	0.00747 U	0.00689 U
Bromobenzene	640	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U
Bromodichloromethane	16	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
Bromoform	130	0.07 U	0.0665 U	0.802 U	0.0811 U	0.0629 U	0.0566 U	0.0787 U	0.0852 U	0.0683 U	0.0742 U	0.0747 U	0.0689 U
Bromomethane	110	0.7 U	0.665 U	8 U	0.811 U	0.629 U	0.566 U	0.787 U	0.852 U	0.683 U	0.742 U	0.747 U	0.689 U
Carbon disulfide	8,000	0.35 U	0.333 U	4 U	0.406 U	0.314 U	0.283 U	0.394 U	0.426 U	0.341 U	0.742 UJ	0.747 UJ	0.689 UJ
Carbon tetrachloride	14	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
Chlorobenzene	1,600	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U
Chlorobromomethane	NV	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
Chloroethane	NV	0.35 U	0.333 U	4 U	0.406 U	0.314 U	0.283 U	0.394 U	0.426 U	0.341 U	0.371 U	0.374 U	0.345 U
Chloroform	32	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
Chloromethane	NV	0.175 U	0.166 U	2 U	0.203 U	0.157 U	0.142 U	0.197 U	0.213 U	0.171 U	0.185 U	0.187 U	0.172 U
cis-1,2-Dichloroethene	160	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U
cis-1,3-Dichloropropene	NV	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
Dibromochloromethane	12	0.07 U	0.0665 U	0.802 U	0.0811 U	0.0629 U	0.0566 U	0.0787 U	0.0852 U	0.0683 U	0.0742 U	0.0747 U	0.0689 U
Dibromomethane	800	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
Dichlorodifluoromethane (Freon 12)	16,000	0.07 U	0.0665 U	2 UJ	0.0811 U	0.0629 U	0.0566 U	0.0787 U	0.0852 U	0.137 UJ	0.0742 U	0.0747 U	0.0689 U
Ethylbenzene	6	0.0175 U	0.0166 U	2	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U
Hexachlorobutadiene	13	0.07 U	0.0665 U	0.802 U	0.0811 U	0.0629 U	0.0566 U	0.0787 U	0.0852 U	0.0683 U	0.0742 U	0.0747 U	0.0689 U
Isopropylbenzene	8,000	0.035 U	0.0333 U	0.734 J	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
m,p-Xylene	NV	0.035 U	0.0333 U	12	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
Methyl tert-butyl ether	0.1	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
Methylene chloride	0.02	0.35 U	0.333 U	4 U	0.406 U	0.314 U	0.283 U	0.394 U	0.426 U	0.341 U	0.371 U	0.374 U	0.345 U
Naphthalene	5	0.07 U	0.0665 U	132	0.0811 U	0.0629 U	0.0566 U	0.0787 U	0.0852 U	0.0683 U	0.0742 U	0.0747 U	0.0689 U
n-Butylbenzene	4,000	0.035 U	0.0333 U	5 J	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
n-Propylbenzene	8,000	0.0175 U	0.0166 U	3	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U
o-Xylene	16,000	0.0175 U	0.0166 U	5	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U
sec-Butylbenzene	8,000	0.035 U	0.0333 U	1	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
Styrene	16,000	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
tert-Butylbenzene	8,000	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
Tetrachloroethene	0.05	0.0175 U	0.0166 U	0.284 J	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U
Toluene	7	0.035 U	0.0333 U	0.969	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
trans-1,2-Dichloroethene	1,600	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U
trans-1,3-Dichloropropene	NV	0.035 U	0.0333 U	0.401 U	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
Trichloroethene	0.03	0.0175 U	0.0166 U	0.2 U	0.0203 U	0.0157 U	0.0142 U	0.0197 U	0.0213 U	0.0171 U	0.0185 U	0.0187 U	0.0172 U
Trichlorofluoromethane (Freon 11)	24,000	0.07 U	0.0665 U	0.802 U	0.0811 U	0.0629 U	0.0566 U	0.0787 U	0.0852 U	0.0683 U	0.0742 U	0.0747 U	0.0689 U

Table 1
Soil Analytical Results
Former Planters Hotel Site
Sunnyside, Washington

Location	MTCA A/B ^{(a)(1)}	GP01	GP02	GP03	GP04	GP05	GP06		GP07	GP08	GP09		GP10
Sample Name		GP01-S-5.5	GP02-S-8	GP03-S-6	GP04-S-8	GP05-S-6	GP06-S-7.5	GP06-S-7.5-DUP	GP07-S-6	GP08-S-6	GP09-S-6.5	GP09-S-6.5-DUP	GP10-S-6
Collection Date		4/6/2021	4/7/2021	4/7/2021	4/7/2021	4/6/2021	4/6/2021	4/6/2021	4/6/2021	4/7/2021	5/18/2021	5/18/2021	5/18/2021
Collection Depth (ft bgs)		5.5	8.0	6.0	8.0	6.0	7.5	7.5	6.0	6.0	6.5	6.5	6.0
Vinyl chloride	0.67	7 U	6.65 U	200 U	8.11 U	6.29 U	5.66 U	7.87 U	8.52 U	6.83 UJ	0.00742 U	0.00747 U	0.00689 U
Xylenes (total) ^(d)	9	70 U	66.5 U	17	0.0406 U	0.0314 U	0.0283 U	0.0394 U	0.0426 U	0.0341 U	0.0371 U	0.0374 U	0.0345 U
PAHs (mg/kg)													
1-Methylnaphthalene	34	0.0135	0.119 U	105	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.0172
2-Methylnaphthalene	320	0.0192	0.119 U	186	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.02
Acenaphthene	4,800	0.00616 U	0.119 U	13.2 U	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
Acenaphthylene	NV	0.00616 U	0.119 U	2.46 U	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
Anthracene	24,000	0.00616 U	0.313	5.86 U	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
Benzo(a)anthracene	NV	0.00677 J	1.24	4.43	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
Benzo(a)pyrene	0.1	0.00659 J	0.963	3.04	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
Benzo(b)fluoranthene	NV	0.00803 J	1.18 J	0.868 J	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
Benzo(ghi)perylene	NV	0.0188	0.551	1.72	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
Benzo(k)fluoranthene	NV	0.00616 U	0.535 J	0.232 U	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
Chrysene	NV	0.00877 J	1.27	5.86	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
Dibenzo(a,h)anthracene	NV	0.00616 U	0.119 U	0.317 J	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
Dibenzofuran	80	0.00616 U	0.119 U	4.56 U	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
Fluoranthene	3,200	0.00616 U	2.20	1.56	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
Fluorene	3,200	0.00616 U	0.119 U	9.43	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
Indeno(1,2,3-cd)pyrene	NV	0.0105 J	0.692	0.584	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
Naphthalene	5	0.0109 J	0.119 U	25.0	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00961 J
Phenanthrene	NV	0.0102 J	1.51	36.9	0.00646 U	0.00599 U	0.00805 J	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00825 J
Pyrene	2,400	0.00616 U	1.60	11.2	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.00625 U
cPAH TEQ ^{(e)(2)}	0.1	0.0098	1.35	3.73	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalenes (total) ^(f)	5	0.0436 J	0.119 U	316	0.00646 U	0.00599 U	0.00573 U	0.00583 U	0.00628 U	0.00618 U	0.00614 U	0.00588 U	0.0468 J

Table 1
Soil Analytical Results
Former Planters Hotel Site
Sunnyside, Washington

NOTES:

Shading (color key below) indicates values that exceed screening criteria; non-detects ("U" or "UJ") were not compared with screening criteria.

MTCA Method A or B

cPAH TEQ = carcinogenic PAH toxicity equivalence.

ft bgs = feet below ground surface.

J = estimated value.

mg/kg = milligrams per kilogram.

MTCA = Motel Toxics Control Act.

ND = non-detect.

NV = no value.

PAH = polycyclic aromatic hydrocarbon.

TPH = total petroleum hydrocarbons.

U = result is non-detect to detection limit.

UJ = result is non-detect with an estimated detection limit.

VOC = volatile organic compound.

^(a)The lower of the Method B cancerous or noncancerous values applied when Method A was not available.

^(b)TPH gasoline-range hydrocarbon with no detectable benzene value.

^(c)Diesel + Lube-Oil-Range Hydrocarbons are the sum of diesel-range hydrocarbon and oil-range hydrocarbon where non-detect results are included at one-half the detection limit; when all results are non-detect, the highest detection limit is used.

^(d)Total xylene is the sum of o-xylene and m,p-xylene where non-detect results are included at one-half the detection limit; when all results are non-detect, the highest detection limit is used.

^(e)cPAH TEQ values are based on toxic equivalence factors.

^(f)Total naphthalene is the sum of 1-methylnaphthalene, 2-methylnaphtalene, and naphthalene where non-detect results are included at one-half the detection limit; when all results are non-detect, the highest detection limit is used.

REFERENCES:

⁽¹⁾Washington State Department of Ecology—Cleanup Levels and Risk Calculation Master Table. February 2021.

⁽²⁾Washington Ecology Evaluating the Human Heath Toxicity of Carcinogenic PAHs Using Toxicity Equivalence Factors. 2015.

Table 2
Groundwater Analytical Results
Former Planters Hotel Site
Sunnyside, Washington

Location	MTCA A/B ^{(a)(1)}	GP01		GP02	GP03	GP04	GP05	GP06	GP07	GP08	GP10	
Sample Name		GP01-GW-15	GP01-GW-15-DUP	GP02-GW-15	GP03-GW-15	GP04-GW-15	GP05-GW-12	GP06-GW-15	GP07-GW-15	GP08-GW-15	GP10-GW-15	GP10-GW-15-DUP
Collection Date		4/6/2021	4/6/2021	4/7/2021	4/7/2021	4/7/2021	4/6/2021	4/6/2021	4/6/2021	4/7/2021	5/18/2021	5/18/2021
Collection Depth (ft bgs)		15	15	15	15	15	12	15	15	15	15	15
TPH (mg/L)												
Gasoline-Range Hydrocarbon	1.0 ^(b)	0.05 U	0.05 U	0.05 U	0.388	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Diesel-Range Hydrocarbons	0.5	0.0408 U	0.0412 U	0.0392 U	1.66	0.0417 U	0.0449 U	0.0396 U	0.0435 U	0.0412 U	0.0392 U	0.0385 U
Lube-Oil-Range Hydrocarbons	0.5	0.232	0.235	0.0786 J	0.935 J	0.0833 U	0.0899 U	0.0792 U	0.0870 U	0.0825 U	0.0784 U	0.0769 U
Diesel + Lube-Oil-Range Hydrocarbons ^(c)	0.5	0.252	0.256	0.0982 J	2.60 J	0.0833 U	0.0899 U	0.0792 U	0.0870 U	0.0825 U	0.0784 U	0.0769 U
VOCs (ug/L)												
1,1,1,2-Tetrachloroethane	1.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	16,000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	0.22	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1,2-Trichloroethane	0.77	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1-Dichloroethane	7.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	400	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloropropene	NV	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	6.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichloropropane	0.00038	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	1.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	80	0.5 U	0.5 U	0.5 U	6.51	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	0.055	5 UJ	5 UJ	5 UJ	2.5 U	5 UJ	2.5 U	2.5 U	5 UJ	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane	0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2-Dichlorobenzene	720	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichloroethane	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	1.2	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3,5-Trimethylbenzene	80	0.5 U	0.5 U	0.5 U	1.93	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	NV	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichloropropane	160	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	8.1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,2-Dichloropropane	NV	1 UJ	1 UJ	1 UJ	0.5 U	1 UJ	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U
2-Butanone	4,800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Chlorotoluene	160	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Hexanone	40	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Chlorotoluene	NV	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Isopropyltoluene	NV	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methyl-2-pentanone	640	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	7,200	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acrylonitrile	0.081	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 2
Groundwater Analytical Results
Former Planters Hotel Site
Sunnyside, Washington

Location	MTCA A/B ^{(a)(1)}	GP01		GP02	GP03	GP04	GP05	GP06	GP07	GP08	GP10	
Sample Name		GP01-GW-15	GP01-GW-15-DUP	GP02-GW-15	GP03-GW-15	GP04-GW-15	GP05-GW-12	GP06-GW-15	GP07-GW-15	GP08-GW-15	GP10-GW-15	GP10-GW-15-DUP
Collection Date		4/6/2021	4/6/2021	4/7/2021	4/7/2021	4/7/2021	4/6/2021	4/6/2021	4/6/2021	4/7/2021	5/18/2021	5/18/2021
Collection Depth (ft bgs)		15	15	15	15	15	12	15	15	15	15	15
Benzene	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromobenzene	64	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Bromodichloromethane	0.71	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	5.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	11	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon disulfide	800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	0.63	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	160	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chlorobromomethane	NV	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	NV	5 U	5 U	5 U	5 UJ	5 U	5 UJ	5 UJ	5 U	5 UJ	5 U	5 U
Chloroform	1.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	NV	2.5 U	2.5 U	2.5 U	5 UJ	2.5 U	5 UJ	5 UJ	2.5 U	5 UJ	2.5 U	2.5 U
cis-1,2-Dichloroethene	16	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	NV	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.52	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	80	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	1,600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	700	0.25 U	0.25 U	0.25 U	0.46 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Hexachlorobutadiene	0.56	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene	800	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	NV	0.5 U	0.5 U	0.5 U	2.37	0.5 U	0.781 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl ether	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Naphthalene	160	2 U	2 U	2 U	32.2 J	2 U	2 U	2 U	2 U	2 U	1 U	1 U
n-Butylbenzene	400	0.5 U	0.5 U	0.5 U	0.595 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Propylbenzene	800	0.25 U	0.25 U	0.25 U	0.365 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
o-Xylene	1,600	0.25 U	0.25 U	0.25 U	1.02	0.25 U	0.265 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
sec-Butylbenzene	800	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Styrene	1,600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	800	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	5	0.5 U	0.5 U	0.4 U	0.2 U	0.4 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U
Toluene	1,000	0.5 U	0.5 U	0.5 U	0.583 J	0.5 U	1.02	0.5 U	0.5 U	0.5 U	0.857 J	0.827 J
trans-1,2-Dichloroethene	160	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	NV	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	2,400	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 2
Groundwater Analytical Results
Former Planters Hotel Site
Sunnyside, Washington

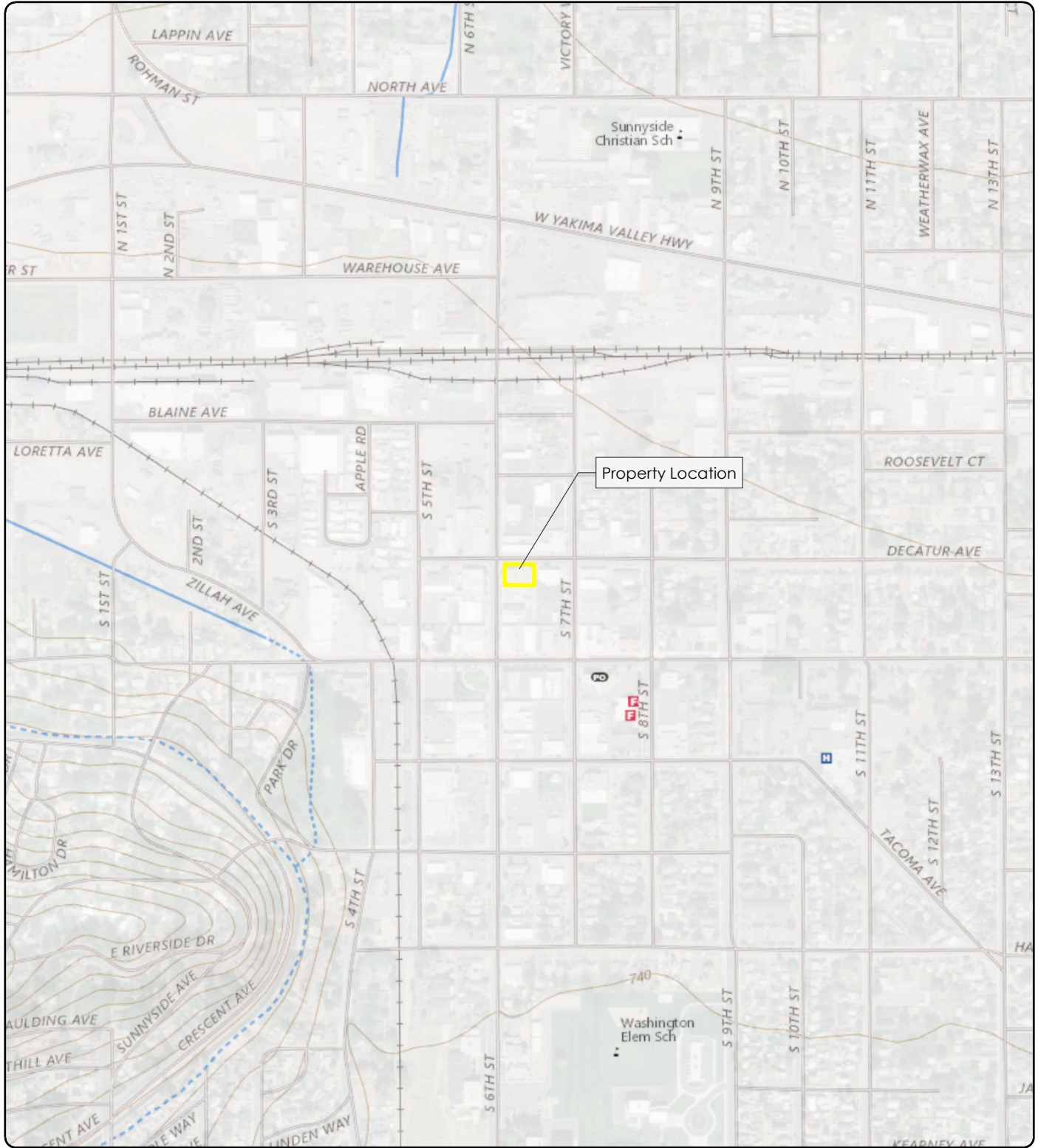
Location	MTCA A/B ^{(a)(1)}	GP01		GP02	GP03	GP04	GP05	GP06	GP07	GP08	GP10	
Sample Name		GP01-GW-15	GP01-GW-15-DUP	GP02-GW-15	GP03-GW-15	GP04-GW-15	GP05-GW-12	GP06-GW-15	GP07-GW-15	GP08-GW-15	GP10-GW-15	GP10-GW-15-DUP
Collection Date		4/6/2021	4/6/2021	4/7/2021	4/7/2021	4/7/2021	4/6/2021	4/6/2021	4/6/2021	4/7/2021	5/18/2021	5/18/2021
Collection Depth (ft bgs)		15	15	15	15	15	12	15	15	15	15	15
Vinyl chloride	0.2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Xylenes (total) ^(d)	1,000	1 U	1 U	1 U	3.39	1 U	1.05 J	1 U	1 U	1 U	0.5 U	0.5 U
PAHs (ug/L)												
1-Methylnaphthalene	1.5	0.0444 U	0.046 U	0.0421 U	42.2	0.0417 U	0.0455 U	0.0426 U	0.0444 U	0.0435 U	0.0374 U	0.0392 U
2-Methylnaphthalene	32	0.0444 U	0.046 U	0.0421 U	56.9	0.0417 U	0.0455 U	0.0426 U	0.0444 U	0.0435 U	0.0374 U	0.0392 U
Acenaphthene	960	0.0222 U	0.023 U	0.0211 U	3.68 U	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
Acenaphthylene	NV	0.0222 U	0.023 U	0.0211 U	0.526 U	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
Anthracene	4,800	0.0222 U	0.023 U	0.0211 U	0.526 U	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
Benzo(a)anthracene	NV	0.0222 U	0.023 U	0.0211 U	0.0532	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
Benzo(a)pyrene	0.1	0.0222 U	0.023 U	0.0211 U	0.0211 U	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
Benzo(b)fluoranthene	NV	0.0222 U	0.023 U	0.0211 U	0.0211 U	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
Benzo(ghi)perylene	NV	0.0222 U	0.023 U	0.0211 U	0.0211 U	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
Benzo(k)fluoranthene	NV	0.0222 U	0.023 U	0.0211 U	0.0211 U	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
Chrysene	NV	0.0222 U	0.023 U	0.0211 U	0.0616	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
Dibenzo(a,h)anthracene	NV	0.0222 U	0.023 U	0.0211 U	0.0211 U	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
Dibenzofuran	16	0.0222 U	0.023 U	0.0211 U	0.948	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
Fluoranthene	640	0.0222 U	0.023 U	0.0211 U	0.0473	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
Fluorene	640	0.0222 U	0.023 U	0.0211 U	2.06	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
Indeno(1,2,3-cd)pyrene	NV	0.0222 U	0.023 U	0.0211 U	0.0211 U	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
Naphthalene	160	0.0444 U	0.0486 J	0.0421 U	13.9	0.0417 U	0.09 J	0.0426 U	0.0546 J	0.0435 U	0.0605 J	0.0575 J
Phenanthrene	NV	0.0222 U	0.023 U	0.0211 U	4.07	0.0208 U	0.0227 U	0.0213 U	0.0253 J	0.0217 U	0.0187 U	0.0196 U
Pyrene	480	0.0222 U	0.023 U	0.0211 U	0.287	0.0208 U	0.0227 U	0.0213 U	0.0222 U	0.0217 U	0.0187 U	0.0196 U
cPAH TEQ ^{(e)(2)}	0.1	ND	ND	ND	0.0207	ND	ND	ND	ND	ND	ND	ND
Naphthalenes (total) ^(f)	160	0.0444 U	0.0946 J	0.0421 U	113	0.0417 U	0.136 J	0.0426 U	0.099 J	0.0435 U	0.0979 J	0.0967 J

Table 2
Groundwater Analytical Results
Former Planters Hotel Site
Sunnyside, Washington

NOTES: Shading (color key below) indicates values that exceed screening criteria; non-detects ("U" or "UJ") were not compared with screening criteria.
MTCA Method A or B
cPAH TEQ = carcinogenic PAH toxicity equivalence.
ft bgs = feet below ground surface.
J = estimated value.
mg/L = milligrams per liter.
MTCA = Motel Toxics Control Act.
ND = non-detect.
NV = no value.
PAH = polycyclic aromatic hydrocarbon.
TPH = total petroleum hydrocarbons.
U = Result is non-detect to detection limit.
ug/L = micrograms per liter.
UJ = result is non-detect with an estimated detection limit.
VOC = volatile organic compound.
^(b) TPH gasoline-range hydrocarbon with no detectable benzene value.
^(c) Diesel + Lube-Oil-Range Hydrocarbons are the sum of diesel-range hydrocarbon and oil-range hydrocarbon where non-detect results are included at one-half the detection limit; when all results are non-detect, the highest detection limit is used.
^(d) Total xylene is the sum of o-xylene and m,p-xylene where non-detect results are included at one-half the detection limit; when all results are non-detect, the highest detection limit is used.
^(e) cPAH TEQ values are based on toxic equivalence factors.
^(f) Total naphthalene is the sum of 1-methylnaphthalene, 2-methylnaphtalene, and naphthalene where non-detect results are included at one-half the detection limit; when all results are non-detect, the highest detection limit is used.
REFERENCES: ⁽¹⁾ Washington State Department of Ecology—Cleanup Levels and Risk Calculation Master Table. February 2021. ⁽²⁾ Washington Ecology Evaluating the Human Heath Toxicity of Carcinogenic PAHs Using Toxicity Equivalence Factors. 2015.

FIGURES





Source:
U.S. Geological Survey (2020) 7.5-minute
topographic quadrangle: Sunnyside.
Township 10 North, Range 22 East, Section 25.
Property boundary obtained from
Yakima County GIS.



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Legend

 Property Boundary

Figure 1
Property Location
Former Planters Hotel Site
400 S Sixth Street
Sunnyside, Washington

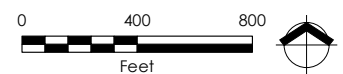




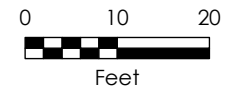
Figure 2 Investigation Locations

Former Planters Hotel Site
400 S Sixth Street
Sunnyside, Washington

Legend

- Boring (April 2021)
- Supplemental Boring (May 2021)
- Soil MTCA CUL Exceedance
- Groundwater MTCA CUL Exceedance
- Former UST Excavation
- Property Boundary
- Tax Lots

NOTES:
CUL = cleanup level.
MTCA = Model Toxics Control Act.



Source:
Aerial photograph obtained from Esri.
Tax lot data obtained from Yakima County GIS.

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ATTACHMENT A

STANDARD OPERATING PROCEDURES



SCOPE AND APPLICATION

This standard operating procedure (SOP) describes the methods for observing and documenting the physical characteristics of unconsolidated geologic materials (soil and sediment) encountered during field investigations. If a Maul Foster & Alongi, Inc. (MFA) project requires hard rock drilling and description of rock core or cuttings, procedures for describing rock should be specified in a project-specific sampling and analysis plan (SAP).

EQUIPMENT AND MATERIALS REQUIRED

The following materials are necessary for this procedure:

- Blank field forms (e.g., boring logs) for documenting observations
- Dry-erase board
- Camera
- Munsell soil color chart (where required)
- MFA field logging checklist

METHODOLOGY

When the project-specific SAP specifies additional or different requirements for lithologic logging, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used. MFA uses a combination of the Unified Soil Classification System (USCS) and the ASTM International method D2487 for describing and classifying soil and sediment by visual and manual examination. Before beginning fieldwork, verify with the project manager the logging standard to be used.

Logging Process:

The objective of lithologic logging is to document the physical characteristics of soil and sediment encountered and the changes in characteristics with depth. Typically, changes with depth will define the strata encountered. Therefore, each stratum encountered should be identified and the following characteristics described in the order given:

- Depth interval of each stratum to the nearest tenth of a foot below ground surface
- USCS classification Group Name and Symbol
- Color, using the Munsell color chart
- Grain-size distribution, as percentages of fines (silt and clay combined), sand, and gravel
- Percentages of larger gravels (cobbles and boulders) if present.
- Consistency when the content of fines is 50 percent or greater
- Density when the combined percentage of sand and gravel is 50 percent or greater
- Sand and gravel grain shapes
- Chemical odors, if noticeable
- Structures, if present (e.g., laminae, pores)
- Presence of organic matter (e.g., roots, leaves, twigs, wood fragments)
- Moisture content as “dry,” “moist,” or “wet”
- If possible, a description of the origin of each stratum (e.g., fill, alluvium)



STANDARD OPERATING PROCEDURE

Field Screening for VOCs in Soil

SOP Number: 3

Date: 3/9/2021

Revision Number: 0.1

SCOPE AND APPLICATION

This standard operating procedure (SOP) describes the use of a photoionization detector (PID) to field screen soil for evidence of organic vapors. The PID measures the organic vapor concentration in parts per million, is not compound-specific.

Never rely on a stand-alone PID reading to identify organic chemical contamination in soil. Always collect multiple PID readings (e.g., at multiple depths along the length of a soil core), since it is the relative difference in concentration between multiple readings (e.g., a sudden increase in concentration at a certain depth interval) that is the typical indicator of contamination. Additionally, PID readings should always be accompanied by observation of the soil samples for other indicators of contamination, such as soil staining or chemical odors, so that these multiple lines of evidence can be used together to identify potential organic chemical contamination in the field.

EQUIPMENT AND MATERIALS REQUIRED

The following materials are necessary for this procedure:

- Personal protective equipment (as specified in the health and safety plan)
- PID with calibration gas
- Ziploc®-type bags
- Field forms or notebook for documenting PID readings

METHODOLOGY

When the project-specific sampling and analysis plan (SAP) specifies additional or different requirements for organic vapor field screening, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used.

The electron volt (eV) rating for the PID lamp (e.g., 9.8, 10.6, 11.7) must be greater than the ionization potential (in eV) of a compound in order for the PID to detect the compound. A lamp of at least 9.8 eV should be used for petroleum hydrocarbons. A lamp of at least 10.6 eV should be used for typical chlorinated alkenes. If the project health and safety plan does not specify the lamp size, verify the compatibility of the lamp size with the anticipated compounds expected to be present in soil prior to the field activities, and confirm with the project manager.

General Procedure:

Calibration:

- The PID should be calibrated daily (or more frequently, as needed).
- Calibrate the PID according to the manufacturer's instructions.
- Document the calibration activities and results in the field notebook.

Measuring organic vapor content:

- Place a representative volume (generally, a "handful") of freshly exposed soil into a Ziploc-type bag.
- Seal the bag and gently knead the bag to loosen the soil.
- Let the bag set for several minutes to allow organic vapors, if present, to volatilize from the soil into the headspace of the bag.

- Partially open the bag so that the tip of the PID intake tube can be inserted into the bag but is not in contact with the soil, then close the bag seal around the intake tube.
- Record the PID measurement and document results in the field notes or boring log.

Static Sheen Test Procedure and Observations:

Sheen Test Procedure:

- Following the PID screen discussed above, add enough water to cover the soil in the container.
- Observe the water for signs of discoloration/sheen and characterize per the table below.

When static sheen testing is required or when making observations of a water surface the following table presents descriptions to be used (consistent with Department of Ecology Guidance)¹.

No Sheen (NS)	No visible sheen on the water surface
Slight Sheen (SS)	Light, colorless, dull sheen; spread is irregular, not rapid. Natural organic oils or iron bacteria in the soil may produce a slight sheen.
Moderate Sheen (MS)	Pronounced sheen over limited area; probably has some color/iridescence; spread is irregular, may be rapid; sheen does not spread over entire water surface.
Heavy Sheen (HS)	Heavy sheen with pronounced color/iridescence; spread is rapid; the entire water surface is covered with sheen.
Biogenic Film (BF)	False positive results may be generated by the presence of decaying organic matter and iron bacteria, which can produce a rainbow-like sheen similar to an oil sheen. These sheens, unlike oil sheens, can typically be broken up creating platy or blocky fragments when agitated or disturbed. Biogenic films can also be foamy.

¹ Department of Ecology. 2016. Guidance for remediation of petroleum contaminated sites. June.



STANDARD OPERATING PROCEDURE

Surface and Subsurface Soil Sampling Using Hand Tools

SOP Number: 4

Date: 3/9/2021

Revision Number: 0.1

SCOPE AND APPLICATION

This standard operating procedure (SOP) describes the use of hand tools for obtaining surface and subsurface soil samples for physical and/or chemical analysis. For other projects where mechanical equipment is used (e.g., drill rig or excavator), it may be possible to obtain the sample manually, for example by grabbing soil directly from a drilled soil core or excavator bucket, thereby precluding the need for hand tools.

EQUIPMENT AND MATERIALS REQUIRED

The following materials are necessary for this procedure:

- Personal protective equipment (as specified in the Health and Safety Plan)
- Tools appropriate for the conditions that may be encountered (e.g., spoon, trowel, shovel, hand auger); tools constructed of stainless steel are preferred.
- Stainless steel bowls
- Tape measure with increments in feet and tenths of a foot.
- Laboratory-supplied sample containers
- Laboratory chain-of-custody form and cooler with ice.
- Equipment decontamination supplies if sampling equipment will be reused between sample locations (see SOP 1 for equipment decontamination procedures).
- Field forms or notebook for documenting the sampling procedures.

METHODOLOGY

When the project-specific sampling and analysis plan (SAP) specifies additional or other requirements for soil sampling, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used.

General Procedure:

- Don gloves as specified in the Health and Safety Plan; replace gloves with new gloves after each sample is collected.
- Clear the ground surface of brush, root mat, grass, leaves, and other debris.
- Use the selected hand tool to remove soil to the targeted sample depth. Use a measuring tape to verify that the sample depth is correct and record the depth in the field notebook or boring log.
- Describe and document the soil lithology in accordance with SOP 2.
- If the sample volume requirement is small (generally one or two 8-ounce jars), the soil can be placed directly into the sample container. This can be done manually; however, if the gloves have become soiled during excavation, don new gloves before collecting the sample.
- If the sample volume requirement is large, or composite sample collection is required, collect the soil and homogenize in a decontaminated stainless-steel bowl or a dedicated Ziploc® bag and then manually transfer the sample to the sample container. If the gloves have become soiled during excavation, don new gloves before collecting the samples.

- Before sample collection, and to the extent possible, remove organic debris, anthropogenic material (e.g., brick, metal, glass), and gravels larger than 4 millimeters, unless a project-specific SAP directs otherwise.
- When sampling for gasoline-range total petroleum hydrocarbons (gasoline) or volatile organic compounds (VOCs), a subsample will be obtained from a discrete portion of the collected sample. To minimize the potential loss of volatiles during sampling, the subsample shall not be composited or homogenized. The sample container for gasoline and/or VOC analysis will be filled first if additional containers are necessary for other analysis. Specific procedures for collecting samples for gasoline and/or VOC analysis using the U.S. Environmental Protection Agency Method 5035 are specified in SOP 5.
- The sampling device and field equipment will be decontaminated between sample locations in accordance with SOP 1. Alternatively, new, disposable equipment can be used to collect each sample to preclude the need for equipment decontamination.

Backfilling Sample Locations:

Backfill in accordance with federal and state regulations (e.g., Oregon bentonite requirements per OAR 690-240-0035). Otherwise, manual excavations can be backfilled with excess soil remaining after sample collection, unless the project-specific SAP requires a different backfill procedure.



STANDARD OPERATING PROCEDURE

EPA Method 5035 Soil Sampling

SOP Number: 5
Date: 3/9/2021
Revision Number: 0.1

SCOPE AND APPLICATION

This standard operating procedure (SOP) describes the methods for obtaining soil samples for chemical analysis for gasoline-range petroleum hydrocarbons (gasoline) and volatile organic compounds (VOCs) by U.S. Environmental Protection Agency Method 5035A.

EQUIPMENT AND MATERIALS REQUIRED

The following materials are necessary for this procedure:

- Sampling equipment (e.g., Terra Core Sampler™ or similar sampler capable of collecting a 5-gram soil sample).
- Laboratory-supplied sample containers:
 - Prew weighed and labeled 40-milliliter volatile organic analysis (VOA) vials, including preservative (typically methanol)
 - Two-ounce jar for percent total solids/moisture (if required, confirm with the laboratory)
- Laboratory chain-of-custody form and cooler with ice.
- Equipment decontamination supplies if sampling equipment will be reused between sample locations (see SOP 1 for equipment decontamination procedures).
- Field forms or notebook for documenting the sampling procedures.

METHODOLOGY

When the site-specific sampling and analysis plan (SAP) specifies additional or different requirements for soil sampling, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used.

Laboratory Analytical Considerations:

- VOCs must be analyzed within 14 days of sample collection.
- Samples must be maintained at less than $4^{\circ}\pm 2^{\circ}\text{C}$.
- Discrete VOC samples may be composited at the laboratory.

General Procedure:

- When using the Terra Core Sampler, seat the plunger in the handle.
- Collect the sample by pushing the sampler into the soil until the soil has filled the sampler.
- Remove the sampler and confirm that the soil in it is flush with the mouth of the sampler.
- Wipe all debris from the outside of the sampler. Remove any excess collected soil that extends beyond the mouth of the sampler.
- Rotate the plunger handle 90 degrees until it is aligned with the slots in the body of the sampler. Place the mouth of the sampler into the sample container and extrude the sample into the sample container by pushing the plunger down. Hold the sample at an angle when extruding to minimize splashing of the preservative.
- Immediately remove any soil or debris from the threads of the vial and place the lid on the vial.

- Gently swirl the vial (do not shake) to allow the preservative to uniformly penetrate and wet the soil.
- Repeat process for each additional sample container.
- If required by the laboratory, fill a 2-ounce container to capacity for percent total solids determination.



STANDARD OPERATING PROCEDURE

Push-Probe Drilling

SOP Number: 7
Date: 3/9/2021
Revision Number: 0.1

SCOPE AND APPLICATION

This standard operating procedure (SOP) describes the use of a push probe (i.e., Geoprobe™) to observe subsurface conditions and collect samples of various environmental media (e.g., soil, sediment, groundwater, soil vapor) for laboratory analysis. Push-probe drilling is generally not suitable for soils with gravel/rock clast larger than about 4 inches in diameter. If gravelly/rocky soils are expected at the project site, consider use of the sonic drilling method described in SOP 8.

Push-probe drilling can be used for a variety of purposes, including:

- Retrieving cores to document subsurface soil or sediment conditions and to obtain samples for physical and/or chemical evaluation
- Sampling soil vapors, using temporary well points
- Collecting reconnaissance groundwater samples from temporary well screens
- Installing permanent monitoring wells

EQUIPMENT AND MATERIALS REQUIRED

The following equipment and materials are necessary for this procedure:

- Push-probe drill rig and operator provided by a subcontractor to MFA. Ensure that the subcontractor is licensed to perform the drilling work.
- Sampling equipment appropriate for the media to be sampled (e.g., water level meter, pumps, hand tools, and pump tubing).
- Laboratory-supplied sample containers.
- Traffic cones, measuring tape, buckets.
- Department of Transportation (DOT)-approved containers (e.g., 55-gallon drum) for storing excess soil and decontamination water; the drums are typically provided by the drilling subcontractor.
- Boring log form and notebook.
- Equipment decontamination supplies if sampling equipment will be reused between sample locations (see SOP 1 for equipment decontamination procedures).
- Personal protective equipment (as required by the project health and safety plan).

METHODOLOGY

When the project-specific sampling and analysis plan (SAP) provides additional or different requirements for push-probe drilling, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used.

Utility Locate:

- Before beginning the fieldwork, assess the proposed drilling location(s) for the presence of overhead and underground utilities, and adjust the locations, as needed, to avoid identified utilities.
- See SOP 18 for the utility locating procedures.

Push-Probe Drilling Process:

- The push-probe drilling rig is equipped with a soil sampling device that retrieves a continuous soil core. A combination of static force and percussion is used to drive the soil sampler into unconsolidated geologic material. A plastic liner placed inside the sampler contains the soil core and permits its removal from the sampler for examination. The sampler is driven into the subsurface, typically in 4- or 5-foot intervals, depending on the length of the sampling device. When each interval depth is reached, the soil sampler is removed from the ground, and the liner is removed to facilitate soil observation and sampling.
- This process is repeated for each soil sample interval until the targeted boring depth is reached.
- Ensure that the drilling subcontractor decontaminates all subsurface equipment before and after each boring. Document the decontamination procedures in the field notebook. Store decontamination water in DOT-approved containers for later off-site disposal.

Logging and Soil Sampling Process:

- Remove the soil core from the sampler for field screening, description, and sampling.
- Describe the lithology in accordance with SOP 2.
- Confirm the required depth interval(s) for soil sample collection and field screening with the MFA project manager, or conduct the work in accordance with the SAP. The sample interval may require adjustment based on core recovery, soil stratigraphy and characteristics, and evidence of contamination. Confirm any adjustments to the sample intervals with the project manager.
- If the project requires field screening for organic vapor, conduct it in accordance with SOP 3.
- If the project requires laboratory analyses for gasoline-range petroleum hydrocarbons or volatile organic compounds, conduct the sampling in accordance with SOP 5.
- Contain all soil core remaining after sample collection in DOT-approved containers for later off-site disposal. See SOP 1 for drum storage, labeling, and documentation procedures.

Reconnaissance Groundwater Sampling Process:

- Typically, reconnaissance groundwater samples are collected at the first occurrence of groundwater in a boring. Confirm the required depth and procedures for groundwater sample collection with the MFA project manager, or conduct the work in accordance with the SAP. If the project requires use of the low-flow sampling method, refer to SOP 9 for the low-flow sampling procedures.
- Reconnaissance groundwater samples are collected using a decontaminated stainless steel or disposable, temporary polyvinyl chloride well screen placed in the boring. If the soils in the boring are fine-grained and may cause excessive turbidity in groundwater, consider using a filter pack around the screen to reduce turbidity. Alternatively, purging the well screen of groundwater prior to sample collection may also reduce the turbidity. See SOP 9 for purging procedures.
- Purging and sampling will be conducted using a peristaltic pump unless otherwise specified in the SAP. New tubing will be used for each boring. Field parameters (e.g., temperature, conductivity, and pH) will be recorded in accordance with SOP 9 during purging and sampling.

Monitoring Well Installation:

- If the project requires installation of a monitoring well in the boring, refer to SOP 11 for the well installation procedures. Confirm the procedures with the MFA project manager.

Borehole Abandonment Process:

- Abandon each borehole in accordance with local and state regulations/procedures. The abandonment will be performed by the drilling subcontractor.
- The abandonment procedure typically consists of backfilling the boring with granular bentonite and hydrating the bentonite with potable water.
- If the boring was advanced through concrete or asphalt, backfill the boring to about 6 inches below grade to allow for placement of asphalt or concrete in the remaining 6 inches to match the surface conditions.



STANDARD OPERATING PROCEDURE

Low-Flow Groundwater Sampling

SOP Number: 9

Date: 3/9/2021

Revision Number: 0.1

SCOPE AND APPLICATION

This standard operating procedure (SOP) describes use of the low-flow sampling method for collection of reconnaissance groundwater samples from borings and groundwater samples from monitoring wells. The method uses low pumping rates during purging and sample collection to minimize water-level drawdown and hydraulic stress at the well-aquifer interface.

EQUIPMENT AND MATERIALS REQUIRED

The following materials are necessary for this procedure:

- Personal protective equipment (as specified in the health and safety plan)
- Water quality meter (e.g., Oakton, YSI Inc. multiparameter meter)
- Turbidity meter
- Water-level meter
- Peristaltic pump and tubing
- Laboratory-supplied sample containers
- Laboratory chain-of-custody form and cooler with ice
- Filter if dissolved analyses will be performed
- Well construction logs documenting the screen depth and interval for all wells to be sampled
- Equipment decontamination supplies if sampling equipment will be reused between sample locations (see SOP 1 for equipment decontamination procedures)
- 5-gallon buckets with lids
- Department of Transportation-approved storage containers (e.g., drums, totes)
- Groundwater field sampling datasheet and notebook

METHODOLOGY

When the project-specific sampling and analysis plan (SAP) provides additional or different requirements for low-flow groundwater sampling, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used.

General Sampling Procedure:

Water Level Measurement

- Water-level measurement procedures are described in detail in SOP 13.
- Open the well cap to allow the water level to equilibrate (approximately ten minutes).
- Measure the water level in the well, using an electronic water-level meter to the nearest 0.01 foot to determine the depth to groundwater below the top of the well casing.
- If light nonaqueous-phase liquid (LNAPL) is present (typically indicated by a dark, oily sheen on the top of the water level meter), discuss with the MFA project manager how to proceed.

Purging

- If the water level is above the top of the well screen, place the end of the sample tubing in the middle of the well screen interval. If the water level is below the top of the screen, place the end of the sample tubing at the midpoint between the water level and the bottom of the well screen.
- Typical low-flow sampling pumping rates range from 0.1 to 0.5 liters per minute, depending on the hydrogeologic characteristics at the site. The objective of the rate selected is to minimize excessive drawdown (<0.3 feet) of the water level.
- Measure water quality parameters (dissolved oxygen, pH, electrical conductivity, turbidity, and temperature) using a flow-through cell connected to the discharge end of the peristaltic pump tubing. Purging will be considered complete when the water quality parameters stabilize per the following for three consecutive readings taken over 3-minute intervals (consistent with EPA guidance)¹:
 - Dissolved Oxygen** (10% for values greater than 0.5 mg/L, if three Dissolved Oxygen values are less than 0.5 mg/L, consider the values as stabilized),
 - Specific Conductance** (3%),
 - Temperature** (3%),
 - pH** (± 0.1 unit),
 - Oxidation/Reduction Potential** (± 10 millivolts).
- Document the purge procedures, including pumping rates, water quality parameter measurements, and the water level during purging, on the groundwater field sampling datasheet.
- Place purge water in Department of Transportation-approved containers (e.g., 55-gallon drum) stored on site. See SOP 1 for drum storage, labeling, and documentation procedures.

Sample Collection

- Following the purging process, collect groundwater samples in laboratory-supplied containers.
- Confirm the laboratory analytical methods and sample container requirement with the MFA project manager or project chemist. If analysis for gasoline-range petroleum hydrocarbons or volatile organic compounds (VOCs) is proposed, fill the sample containers for gasoline and VOC analysis before filling sample containers for other analytical methods.

Low Yield (Alternate Method)

- If drawdown of the water table cannot be avoided by reducing the pumping rate, and the well goes dry during purging, discontinue pumping and water quality parameter measurements.
- Collect the groundwater sample after the water level above the well bottom recovers to 90 percent of the prepurge water level. For example, if the water level was 10 feet above the well bottom before purging, begin sampling when the water level has recovered to 9 feet or more above the well bottom.
- If the water column volume is insufficient to meet the sample volume requirement, allow the water level to again recover to 90 percent before continuing sampling. Repeat this procedure until all sample containers are filled.

¹ EPA. 2017. Low stress (low flow) purging and sampling procedure for the collection of groundwater samples from monitoring wells. September 19.



STANDARD OPERATING PROCEDURE

Monitoring Well—Water Elevation

SOP Number: 13

Date: 3/9/2021

Revision Number: 0.1

SCOPE AND APPLICATION

This standard operating procedure (SOP) describes the methods for obtaining groundwater level measurements and light nonaqueous-phase liquid (LNAPL) measurements from monitoring wells. Measurement may be collected as an independent event or in conjunction with groundwater sampling or sampling of removed LNAPL.

EQUIPMENT AND MATERIALS REQUIRED

The following materials are necessary for this procedure:

- Personal protective equipment (as specified in the health and safety plan)
- Equipment decontamination supplies if equipment will be reused between well locations (see SOP 1 for equipment decontamination procedures)
- Field notebook
- Water-level meter or oil/water interface probe if water levels and LNAPL levels will be measured
- Bailers or tape/paste to confirm LNAPL detections if required; see SOP 10 for procedures for managing LNAPL when removing LNAPL from a well

METHODOLOGY

When the project-specific sampling and analysis plan (SAP) provides additional or different requirements for water-level and LNAPL measurements, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used.

General Sampling Procedure:

Review well construction details and historical groundwater and LNAPL levels and thicknesses if available.

During groundwater sampling events, measurements should be collected before, during, and after purging and sampling. During purging and low-flow sampling, water-level measurements are conducted to ensure that drawdown is not occurring. Low-flow sampling methods are described in SOP 9. The following procedures should be followed when collecting groundwater-level and LNAPL measurements from wells.

Water Level Measurement

1. Test the water-level meter to ensure proper instrument response. This can be accomplished by immersing the probe tip in a small container of water.
2. Open the well cover and cap and allow the water level to equilibrate with atmospheric pressure for several minutes so that a static water level is attained. Audible air movement into or out of the well upon loosening of the well cap is an indication that the water level is not in equilibrium with atmospheric pressure.
3. Locate the measurement reference point at the top of the well casing. Typically, this is a small notch in the casing or a point marked with a pen. If no measure point is present, measure the water level from the north side of the casing and note the result in the field notebook.
4. Lower the water-level meter probe into the well casing until the probe signal indicates that water has been contacted.

5. Observe the depth-to-water (DTW) reading from the measurement reference point at the top of the well casing to the nearest 0.01 foot. Over the course of about a minute, raise and re-lower the probe and observe the resulting DTW reading. If the reading remains unchanged to within 0.01 foot, this is an indication that the water level has equilibrated with atmospheric pressure; the reading can then be recorded in the field notebook as the static water level reading. If the reading changes, allow more time for the water level to become static.
6. If the work scope or SAP requires measurement of the depth-to-bottom (DTB), lower the probe to the bottom of the well and record the DTB reading from the reference point to the nearest 0.01 foot.
7. Remove the probe and decontaminate the probe and the portion of the probe tape inserted into the well casing.

Water Level and LNAPL Measurement

1. Repeat above steps 1 through 7.
2. Lower the interface probe into the well casing until the probe signal indicates that LNAPL has been contacted. Typically, the interface probe will signal by a repeating beep when LNAPL is present. A steady signal indicates that LNAPL is absent and that the probe is recording the DTW.
3. Observe the LNAPL reading as described in step 5 above until a static reading to the nearest 0.01 foot is achieved, and record the reading in the field notebook.
4. Lower the probe until a steady signal indicates that water has been contacted. Observe the water-level reading as described in step 5 above to confirm a static water level, and record the reading in the field notebook.
5. If LNAPL is detected in a well with no prior history of LNAPL presence, or the LNAPL thickness is greater than in prior observations, verify the presence and thickness using an alternative technique (e.g., bailer, tape, and water/petroleum colorimetric paste). See SOP 10 for procedures for managing LNAPL when removing LNAPL from a well.
6. Remove the interface probe and decontaminate the probe and the portion of the probe tape inserted into the well casing.

STANDARD OPERATING PROCEDURE

Underground Utility Locates

SOP Number: 18
Date: 3/9/2021
Revision Number: 0.1

SCOPE AND APPLICATION

This standard operating procedure (SOP) describes the practices for locating underground utilities. Refer to the MFA health and safety plan (HASP) for additional information regarding communication procedures to be followed when an inadvertent utility strike occurs, as well as regarding methods for mitigating hazards during a utility strike.

EQUIPMENT AND MATERIALS REQUIRED

The following materials are necessary for this procedure:

- Personal protective equipment (as specified in the HASP)
- Marking materials (e.g., marking paint, stakes, flags)
- Field documentation materials

METHODOLOGY

When the project-specific sampling and analysis plan (SAP) specifies additional or different requirements for underground utility locates, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used.

Before Conducting Utility Locates:

- Ensure that the locate will be conducted reasonably soon before the excavation work begins, e.g., within 48 hours. There may be project-specific conditions, e.g., weather and/or ground features that could cause markings to fade, which would require scheduling of the excavation work sooner than 48 hours after the locate.
- Clearly define the boundary of the work and the locations of all proposed excavations. Prepare a map of the project area showing the excavation locations.
- Interview site managers/property owners and obtain plans or drawings, if available, showing on-site utilities.
- For project work that will not take place in the public right-of-way, ensure that the public rights-of-way nearest to the project are identified and communicated during the one-call notification.
- Identify the township and range of the project area. This information can be easily attained by a quick email to MFA's GIS Exchange.
- If feasible, conduct a site visit to identify site conditions that could cause fading or disruption of marking paint. Such conditions could include gravel or ground sensitive to erosion and high traffic.
- Check the weather forecast to assess the potential for snow or rain to make marking utilities difficult or cause the markings to fade.

One-Call Utility Notification:

- If possible, initiate the one-call utility notification at least one week before the proposed work begins.
- Include a map or GPS coordinates when submitting the notification.
- Before conducting any excavation activities, confirm with each public utility that the utility locate has been completed.

- On remote or complicated sites, consider meeting public locators on site.
- Document the one-call ticket number and results in the project files.
- Provide the one-call ticket number to subcontractors who will be doing the excavations.

Private Utility Locate:

- Conduct the private utility locate only after confirmation that the public utility locate has been completed and all public utilities have been marked and the results reviewed by MFA staff who will be overseeing the excavations.
- Meet the private locator on site and participate in the entire private utility locate. Be engaged in the process, ask questions, and take time to walk the site thoroughly with the locator.
- Bring a copy of the one-call utility ticket and results of the one-call utility locator to check against the utility markings on the ground.
- If possible, have a site/property representative knowledgeable of on-site utilities participate in the private utility locate.
- If paint alone may not suffice to ensure clear marking of utilities, add vertical markers such as stakes or flags.
- Visually assess the area of the proposed excavation(s) to identify features potentially indicative of buried utilities. Have the private utility locator examine each feature identified below to assess the presence of buried utilities.
 - Examine adjacent public rights-of-way where public utilities have been marked for evidence of utilities that may extend onto the project site.
 - Identify nearby light poles, telephone poles, electrical utility poles, or other overhead utility poles with wires or conductors that run from the overhead utility, down the pole, and into the ground.
 - Identify the location of gas meters, water meters, or other aboveground junction boxes for evidence of utilities extending from these features into the ground.
 - Examine asphalt and concrete ground surfaces for discontinuities in the surface indicative of utility installations. Discontinuities may include recent patches of asphalt or concrete inlaid within older concrete or asphalt surfaces.
 - Identify manholes and catch basins indicative of buried storm or sanitary sewer pipes. Open manholes to examine the orientation of associated pipes to assess whether the utilities may be present near proposed excavations.
 - Identify tank ports and vent pipes.
 - Identify irrigation systems and associated features such as valve boxes and controllers.
 - Identify any other signs indicating the presence of buried utilities.
 - Be wary of utility marks that suddenly begin or dead end.

Preparing to Perform Subsurface Activities after a Locate:

- Ensure that the markings are still visible when the work begins.
- Adjust locations, as needed, to avoid identified utilities, or use alternative methods such as nonmechanical excavation means (i.e., manual excavation or air-knifing) to a minimum depth of 5 feet.

Table
APWA UNIFORM COLOR CODE

	WHITE—Proposed Excavation
	PINK—Temporary Survey Markings
	RED—Electric Power Lines, Cables, Conduit and Lighting Cables
	YELLOW—Gas, Oil, Steam, Petroleum or Gaseous Materials
	ORANGE—Communication, Alarm or Signal Lines, Cables or Conduit
	BLUE—Potable Water
	PURPLE—Reclaimed Water, Irrigation and Slurry Lines
	GREEN—Sewers and Drain Lines
Source: Uniform Color Codes, ANSI Standard Z535.1. American Public Works Association. Revised 1999.	

ATTACHMENT B

INADVERTENT DISCOVERY PLAN



PLAN AND PROCEDURES FOR THE UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES AND HUMAN SKELETAL REMAINS¹

PROJECT TITLE: Former Planters Hotel, Sunnyside

COUNTY WASHINGTON: Yakima

400 South 6th Street, Sunnyside, WA 98944 Parcel 24511 SE¼ of the NW¼ of
Section 25 Township 10 North, Range 22 East Willamette Principal Meridian
Yakima County, Washington Long, Lat: -120.0128, 46.3249

1. INTRODUCTION

The following Inadvertent Discovery Plan (IDP) outlines procedures to perform in the event of discovering archaeological materials or human remains, in accordance with state and federal laws.

2. RECOGNIZING CULTURAL RESOURCES

A cultural resource discovery could be prehistoric or historic. Examples include:

- a. An accumulation of shell, burned rocks, or other food related materials.
- b. Bones or small pieces of bone.
- c. An area of charcoal or very dark stained soil with artifacts.
- d. Stone tools or waste flakes (i.e. an arrowhead. or stone chips).
- e. Clusters of tin cans or bottles, logging or agricultural equipment that appears to be older than 50 years.
- f. Buried railroad tracks, decking, or other industrial materials.

When in doubt, assume the material is a cultural resource.

3. ON-SITE RESPONSIBILITIES

STEP 1: *Stop Work.* If any employee, contractor or subcontractor believes that he or she has uncovered a cultural resource at any point in the project, all work must stop immediately. Notify the appropriate party(s). Leave the surrounding area untouched, and provide a demarcation adequate to provide the total security, protection, and integrity of the discovery. The discovery location must be secured at all times by a temporary fence or other onsite security.

STEP 2: *Notify Archaeological Monitor or Licensed Archaeologist.* If there is an Archaeological Monitor for the project, notify that person. If there is a monitoring plan in

¹ If you need this document in a format for the visually impaired, call Water Quality Reception at Ecology, (360) 407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

place, the monitor will follow the outlined procedure.

STEP 3: *Notify the Project Manager* of this project and contact the Ecology Staff Project Manager, or other applicable contacts:

Project Manager: Name: Bob Desgrosellier Phone: (509) 728-3455 (cell) Email: Bob.Desgrosellier@yakimawa.gov	Ecology Staff Project Manager Name: Jill Scheffer Phone: 509-571-4162 Email: sche461@ecy.wa.gov
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Assigned Alternates:

Assigned Project Manager Alternate: Name: Phone: Email:	Ecology Cultural Resource Specialist (Alternate): Name: Phone: email:
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The Project Manager or applicable staff will make all calls and necessary notifications.

If human remains are encountered, treat them with dignity and respect at all times.

Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection and to shield them from being photographed. **Do not call 911 or speak with the media. Do not take pictures unless directed to do so by DAHP. See Section 5.**

4. FURTHER CONTACTS AND CONSULTATION

A. Project Manager's Responsibilities:

- *Protect Find*: The Project Manager is responsible for taking appropriate steps to protect the discovery site. All work will stop immediately in a surrounding area adequate to provide for the complete security of location, protection, and integrity of the resource. Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery site. Work in the immediate area will not resume until treatment of the discovery has been completed following provisions for treating archaeological/cultural material as set forth in this document.
- *Direct Construction Elsewhere on-Site*: The Project Manager may direct construction away from cultural resources to work in other areas prior to contacting the concerned parties.
- *Contact Senior Staff*: If the Senior Staff person has not yet been contacted, the Project Manager must do so.

B. Senior Staff Responsibilities:

- *Identify Find*: The Senior Staff (or a delegated Cultural Resource Specialist), will ensure that a qualified professional archaeologist examines the area to determine if there is an archaeological find.

- If it is determined not to be of archaeological, historical, or human remains, work may proceed with no further delay.
 - If it is determined to be an archaeological find, the Senior Staff or Cultural Resource Specialist will continue with all notifications.
 - If the find may be human remains or funerary objects, the Senior Staff or Cultural Resource Specialist will ensure that a qualified physical anthropologist examines the find. **If it is determined to be human remains, the procedure described in Section 5 will be followed.**
- *Notify DAHP:* The Senior Staff (or a delegated Cultural Resource Specialist) will contact the involved federal agencies (if any) and the Washington Department of Archaeology and Historic Preservation (DAHP).
 - *Notify Tribes:* If the discovery may be of interest to Native American Tribes, the DAHP and Ecology Supervisor or Coordinator will coordinate with the interested and/or affected tribes.

General Contacts

Federal Agencies:	State Agencies:
Agency: Name Title Number Email	Agency: Name Title Number Email
Department of Archaeology and Historic Preservation:	
Dr. Allyson Brooks State Historic Preservation Officer 360-586-3066 Assigned Alternate:	Rob Whitlam, Ph.D. Staff Archaeologist 360-586-3050 Assigned Alternate:

The DAHP or appropriate Ecology Staff will contact the interested and affected Tribes for a specific project.

Tribes consulted on this project are:

Tribe: Confederated Tribes and Bands of the Yakama Nation	Tribe: Confederated Tribes and Bands of the Yakama Nation
Name: Johnson Meninick	Name: Noah Oliver
Title: Program Manager, Yakama Nation Cultural Resources Program	Title: Archaeologist
Phone: 509-865-5121 ext. 4737	Phone: 509-865-5121 ext. 4756
Email: Johnson_Meninick@yakama.com	Email: Noah_Oliver@yakama.com

Tribe: Confederated Tribes and Bands of the Yakama Nation	Tribe: Confederated Tribes and Bands of the Yakama Nation
Name: Jessica Lally	Name: Corrine Camuso
Title: Archaeologist (alternate contact)	Title: Archaeologist
Phone: 509-865-5121 ext. 4766	Phone: 509-865-5121 ext. 4776
Email: Jessica_Lally@yakama.com	Email: Corrine_Camuso@yakama.com
Tribe: Confederated Tribes and Bands of the Yakama Nation	Tribe: Confederated Tribes and Bands of the Yakama Nation

Further Activities

- Archaeological discoveries will be documented as described in Section 6.
- Construction in the discovery area may resume as described in Section 7.

5. SPECIAL PROCEDURES FOR THE DISCOVERY OF HUMAN SKELETAL MATERIAL

Any human skeletal remains, regardless of antiquity or ethnic origin, will at all times be treated with dignity and respect. Do not take photographs by any means, unless you are pre-approved to do so.

If the project occurs on federal lands or receives federal funding (e.g., national forest or park, military reservation) the provisions of the Native American Graves Protection and Repatriation Act of 1990 apply, and the responsible federal agency will follow its provisions. Note that state highways that cross federal lands are on an easement and are not owned by the state.

If the project occurs on non-federal lands, the Project Manager will comply with applicable state and federal laws, and the following procedure:

A. In all cases you must notify a law enforcement agency or Medical Examiner/Coroner's Office:

In addition to the actions described in Sections 3 and 4, the Project Manager will immediately notify the local law enforcement agency or medical examiner/coroner's office.

The Medical Examiner/Coroner (with assistance of law enforcement personnel) will determine if the remains are human, whether the discovery site constitutes a crime scene, and will then notify DAHP.

Enter contact information below:

Yakima County non-emergency police - (509) 575-6200

Jim Curtice
Yakima County Coroner
128 N 2nd Street
Yakima, WA 98902

B. Participate in Consultation:

Per RCW 27.44.055, RCW 68.50, and RCW 68.60, DAHP will have jurisdiction over non-forensic human remains. Ecology staff will participate in consultation.

Further Activities:

- Documentation of human skeletal remains and funerary objects will be agreed upon through the consultation process described in RCW 27.44.055, RCW 68.50, and RCW 68.60.
- When consultation and documentation activities are complete, construction in the discovery area may resume as described in Section 7.

6. DOCUMENTATION OF ARCHAEOLOGICAL MATERIALS

Archaeological deposits discovered during construction will be assumed eligible for inclusion in the National Register of Historic Places under Criterion D until a formal Determination of Eligibility is made.

Project staff will ensure the proper documentation and field assessment will be made of any discovered cultural resources in cooperation with all parties: the federal agencies (if any), DAHP, Ecology, affected tribes, and a contracted consultant (if any).

All prehistoric and historic cultural material discovered during project construction will be recorded by a professional archaeologist on a cultural resource site or isolate form using standard and approved techniques. Site overviews, features, and artifacts will be photographed; stratigraphic profiles and soil/sediment descriptions will be prepared for minimal subsurface exposures. Discovery locations will be documented on scaled site plans and site location maps.

Cultural features, horizons and artifacts detected in buried sediments may require further evaluation using hand-dug test units. Units may be dug in controlled fashion to expose features, collect samples from undisturbed contexts, or to interpret complex stratigraphy. A test excavation unit or small trench might also be used to determine if an intact occupation surface is present. Test units will be used only when necessary to gather information on the nature, extent, and integrity of subsurface cultural deposits to evaluate the site's significance. Excavations will be conducted using state-of-the-art techniques for controlling provenience, and the chronology of ownership, custody and location recorded with precision.

Spatial information, depth of excavation levels, natural and cultural stratigraphy, presence or absence of cultural material, and depth to sterile soil, regolith, or bedrock will be recorded for each probe on a standard form. Test excavation units will be recorded on unit-level forms, which include plan maps for each excavated level, and material type, number, and vertical provenience (depth below surface and stratum association where applicable) for all artifacts recovered from the level. A stratigraphic profile will be drawn

for at least one wall of each test excavation unit.

Sediments excavated for purposes of cultural resources investigation will be screened through 1/8-inch mesh, unless soil conditions warrant ¼-inch mesh.

All prehistoric and historic artifacts collected from the surface and from probes and excavation units will be analyzed, catalogued, and temporarily curated. Ultimate disposition of cultural materials will be determined in consultation with the federal agencies (if any), DAHP, Ecology and the affected tribes.

Within 90 days of concluding fieldwork, a technical report describing any and all monitoring and resultant archaeological excavations will be provided to the Project Manager, who will forward the report for review and delivery to Ecology, the federal agencies (if any), DAHP, and the affected tribe(s).

If assessment activity exposes human remains (burials, isolated teeth, or bones), the process described in Section 5 will be followed.

7. PROCEEDING WITH WORK

Work outside the discovery location may continue while documentation and assessment of the cultural resources proceed. A professional archaeologist must determine the boundaries of the discovery location. In consultation with Ecology, DAHP and any affected tribes, the Project Manager will determine the appropriate level of documentation and treatment of the resource. If there is a federal nexus, Section 106 consultation and associated federal laws will make the final determinations about treatment and documentation.

Work may continue at the discovery location only after the process outlined in this plan is followed and the Project Manager, DAHP, any affected tribes, Ecology (and the federal agencies, if any) determine that compliance with state and federal law is complete.

8. RECIPIENT/PROJECT PARTNER RESPONSIBILITY

The Project Recipient/Project Partner is responsible for developing an IDP. The IDP must be immediately available onsite, be implemented to address any discovery, and be available by request by any party. The Project Manager and staff will review the IDP during a project kickoff or pre-construction meeting.

We recommend that you print images in color for accuracy.

Implement the IDP / UDP if ...

You see chipped stone artifacts.



- Glass-like material
- Angular
- “Unusual” material for area
- “Unusual” shape
- Regularity of flaking
- Variability of size



Implement the IDP / UDP if ...

You see ground or pecked stone artifacts.



- Striations or scratching
- Unusual or unnatural shapes
- Unusual stone
- Etching
- Perforations
- Pecking
- Regularity in modifications
- Variability of size, function, and complexity

Implement the IDP / UDP if ...

You see bone or shell artifacts.



- Often smooth
- Unusual shape
- Carved
- Often pointed if used as a tool
- Often wedge shaped like a “shoehorn”



Implement the IDP / UDP if ...

You see bone or shell artifacts.



- Often smooth
- Unusual shape
- Perforated
- Variability of size



Implement the IDP / UDP if ...

You see fiber or wood artifacts.



- Wet environments needed for preservation
- Variability of size, function, and complexity
- Rare



Implement the IDP / UDP if ...

You see historic period artifacts.



Implement the IDP / UDP if ...

You see strange, different or interesting looking dirt, rocks, or



- Human activities leave traces in the ground that may or may not have artifacts associated with them
- “Unusual” accumulations of rock (especially fire-cracked rock)
- “Unusual” shaped accumulations of rock (e.g., similar to a fire ring)
- Charcoal or charcoal-stained soils
- Oxidized or burnt-looking soils
- Accumulations of shell
- Accumulations of bones or artifacts
- Look for the “unusual” or out of place (e.g., rock piles or accumulations in areas with few rock)

Implement the IDP / UDP if ...

You see strange, different or interesting looking dirt, rocks, or



- “Unusual” accumulations of rock (especially fire-cracked rock)
- “Unusual” shaped accumulations of rock (e.g., similar to a fire ring)
- Look for the “unusual” or out of place (e.g., rock piles or accumulations in areas with few rock)

Implement the IDP / UDP if ...

You see strange, different or interesting looking dirt, rocks, or



Layers of shell
midden

Historic Debris

- Often have a layered or “layer cake” appearance
- Often associated with black or blackish soil
- Often have very crushed and compacted shells



Implement the IDP / UDP if ...

You see historic foundations or buried structures.



ATTACHMENT C

BORING LOGS





MAUL FOSTER ALONGI

Geologic Borehole LogProject Number
0346.11.02Boring Number
GP09Sheet
1 of 1Project Name **Former Planters Hotel Supplemental Subsurface Investigation**Project Location **400 S Sixth Street, Sunnyside, Washington**

Surface Elevation (feet)

Start/End Date **5/18/2021 to 5/18/2021**

Northing

Driller/Equipment **Pacific Soil and Water, Inc./Geoprobe**

Easting

Geologist/Engineer **D. Domenighini**

Total Depth of Borehole

15.0-feetSample Method **Macro-Core**

Outer Hole Diam

2.25-inch

Depth (feet, BGS)	Water Levels	Percent Recovery	Sample Data		Lithologic Column	Soil Description
			Sample ID	PID (ppm)		
1						0 to 3.5 feet: SILT with SAND (ML); brown; 80% fines, low plasticity; 20% sand, fine; soft; no odor; no sheen; moist.
2				0.5		
3		70		0.0		
4						3.5 to 5.0 feet: No recovery.
5						5.0 to 9.0 feet: SILT (ML); brown; 90% fines, low plasticity; 10% sand, fine; firm; no odor; no sheen; moist.
6						
7	▽		GP09-S-6.5	0.2		
8		80				@ 7.0 feet: Becomes wet.
9				0.0		9.0 to 10.0 feet: No recovery.
10						
11						
12						10.0 to 14.5 feet: SILT (ML); brown; 90% fines, low plasticity; 10% sand, fine; soft; no odor; no sheen; wet.
13		90		0.0		
14				0.0		
15						14.5 to 15.0 feet: No recovery.

Total Depth = 15.0 feet bgs

NOTES:

1) bgs = below ground surface. 2) PID = photoionization detector. 3) ppm = parts per million.

Borehole Completion Details

0 to 15.0 feet bgs: 2.25-inch borehole.

Borehole Abandonment Details

0 to 15.0 feet bgs: Bentonite chips hydrated with potable water.

▽ Water level at 7.0 feet bgs at time of drilling.

MFA BOREHOLE WIRECON SCREEN W:\GINT\GINT\PROJECTS\0346.11\GP09-GP10.GPJ 6/15/21



MAUL FOSTER ALONGI

Geologic Borehole LogProject Number
0346.11.02Boring Number
GP10Sheet
1 of 1Project Name **Former Planters Hotel Supplemental Subsurface Investigation**Project Location **400 S Sixth Street, Sunnyside, Washington**

Surface Elevation (feet)

Start/End Date **5/18/2021 to 5/18/2021**

Northing

Driller/Equipment **Pacific Soil and Water, Inc./Geoprobe**

Easting

Geologist/Engineer **D. Domenighini**

Total Depth of Borehole

20.0-feetSample Method **Macro-Core**

Outer Hole Diam

2.25-inch

Depth (feet, BGS)	Water Levels	Percent Recovery	Screen Int.	Sample Data Sample ID	PID (ppm)	Lithologic Column	Soil Description
1							0 to 1.0 feet: CONCRETE; dry.
2					0.0		1.0 to 2.5 feet: SILT with SAND (ML); brown; 80% fines, low plasticity; 20% sand, fine; soft; no odor; no sheen; moist.
3		50					2.5 to 5.0 feet: No recovery.
4							
5					0.1		5.0 to 8.5 feet: SILT (ML); brown; 90% fines, medium plasticity; 10% sand, fine; firm; no odor; no sheen; moist.
6	▽			GP10-S-6	0.0		@ 6.5 feet: Becomes wet.
7							
8		70			0.0		8.5 to 10.0 feet: No recovery.
9							
10					0.0		10.0 to 14.0 feet: SILT (ML); brown; 90% fines, low plasticity; 10% sand, fine; soft; no odor; no sheen; wet.
11	▼				0.0		
12							
13		80			0.0		14.0 to 15.0 feet: No recovery.
14							
15				GP10-GW-15			15.0 to 20.0 feet: SILT (ML); brown; 90% fines, low plasticity; 10% fines; soft; no odor; no sheen; wet.
16					0.0		
17							
18		100			0.0		
19							
20							

Total Depth = 20.0 feet bgs

NOTES:

1) bgs = below ground surface. 2) PID = photoionization detector. 3) ppm = parts per million.

Borehole Completion Details

0 to 20.0 feet bgs: 2.25-inch borehole.

Reconnaissance Well Completion Details

Temporary polyvinyl chloride screen from 5.0 to 20.0 feet bgs, indicated by dashed graphic in the screen interval column.

Borehole Abandonment Details

0 to 20.0 feet bgs: Bentonite chips hydrated with potable water. Surface finished with concrete.

▽ Water level at 6.5 feet bgs at time of drilling. ▼ Water level measurement at 10.55 feet bgs, measured after temporary well installation.

MFA BOREHOLE WIRECON SCREEN W:\GINT\GINT\PROJECTS\0346.11\GP09-GP10.GPJ 6/15/21

ATTACHMENT D

FIELD SAMPLING DATA SHEETS



Maul Foster & Alongi, Inc.

109 East 13th Street, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-

Soil Field Sampling Data Sheet

Client Name	Port of Sunnyside	Sample Location	GP09				
Project Number	0346.11.02	Sampler	D. Domenighini				
Project Name	Former Planter's Hotel	Sampling Date	5/18/2021				
Sampling Event	May 2021-Supplemental Investigation	Sample Name	GP09-S-6.5				
Sub Area		Sample Depth	6.5				
FSDS QA:	R. Paul; 6/14/2021	Easting		Northing		TOC	

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(7) Grab	Soil	Discrete	0.2	01:10:00 PM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	2
					Total Containers	3

Sample Description:

SILT (ML); brown; 90% fines, low plasticity, firm; 10% sand, fine; no odor; no sheen; moist.

General Sampling Comments

Grab sample collected from 6.0 to 7.0 feet below ground surface.
Field duplicate sample GP09-S-6.5-DUP also collected.

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelby Tube, (7) Grab, (8) Other (Specify)

Maul Foster & Alongi, Inc.

109 East 13th Street, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-

Soil Field Sampling Data Sheet

Client Name	Port of Sunnyside	Sample Location	GP10				
Project Number	0346.11.02	Sampler	D. Domenighini				
Project Name	Former Planter's Hotel	Sampling Date	5/18/2021				
Sampling Event	May 2021-Supplemental Investigation	Sample Name	GP10-S-6				
Sub Area		Sample Depth	6				
FSDS QA:	R. Paul; 6/14/2021	Easting		Northing		TOC	

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(7) Grab	Soil	Discrete	0.0	11:15:00 AM	2 oz. soil	
					4 oz. soil	
					8 oz. soil	1
					Other	2
					Total Containers	3

Sample Description:

SILT (ML); brown; 90% fines, low plasticity, soft; 10% sand, fine; no odor; no sheen; moist.

General Sampling Comments

Grab sample collected from 5.5 to 6.5 feet below ground surface.

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelby Tube, (7) Grab, (8) Other (Specify)

Maul Foster & Alongi, Inc.

109 East 13th Street, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1

Water Field Sampling Data Sheet

Client Name	Port of Sunnyside	Sample Location	GP10				
Project #	0346.11.02	Sampler	D. Domenighini				
Project Name	Former Planter's Hotel	Sampling Date	5/18/2021				
Sampling Event	May 2021-Supplemental Investigation	Sample Name	GP10-GW-15				
Sub Area		Sample Depth	15				
FSDS QA:	R. Paul; 6/14/2021	Easting		Northing		TOC	

Hydrology/Level Measurements

Date	Time	DT-Bottom	DT-Product	DT-Water	(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
					DTP-DTW	DTB-DTW	Pore Volume
5/18/2021	11:40	20		10.55		9.45	1.54

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pH	Temp (C)	E Cond (uS/cm)	DO (mg/L)	ORP	Turbidity
(2) Peristaltic Pump									
Final Field Parameters	12:03:00 PM			8.80	17.5	662.7			5.72

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Clear; no sheen; no odor.

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	12:05:00 PM	VOA-Glass	5	No
			Amber Glass	4	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	9	

General Sampling Comments

Began purging at 11:50 A.M.
Reconnaissance groundwater sample. Field duplicate GP10-GW-15-DUP collected. Screen set from 5.0 to 20.0 feet below ground surface.

ATTACHMENT E

LABORATORY ANALYTICAL REPORT





ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Wednesday, June 2, 2021

David Weatherby
Maul Foster & Alongi, INC.
3140 NE Broadway Street
Portland, OR 97232

RE: A1E0781 - Former Planter's Hotel Site - 0346.11.02

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A1E0781, which was received by the laboratory on 5/18/2021 at 5:35:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler#1 5.3 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.



Apex Laboratories

Philip Nerenberg, Lab Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street
Portland, OR 97232

Project: **Former Planter's Hotel Site**

Project Number: **0346.11.02**

Project Manager: **David Weatherby**

Report ID:

A1E0781 - 06 02 21 1049

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GP09-S-6.5	A1E0781-01	Soil	05/18/21 13:10	05/18/21 17:35
GP09-S-6.5-DUP	A1E0781-02	Soil	05/18/21 13:10	05/18/21 17:35
GP10-S-6	A1E0781-03	Soil	05/18/21 11:15	05/18/21 17:35
GP10-GW-15	A1E0781-04	Water	05/18/21 12:05	05/18/21 17:35
GP10-GW-15-DUP	A1E0781-05	Water	05/18/21 12:05	05/18/21 17:35
051821TB	A1E0781-06	Water	05/18/21 00:00	05/18/21 17:35

Apex Laboratories

Philip Nerenberg, Lab Director

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**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Maul Foster & Alongi, INC.**3140 NE Broadway Street
Portland, OR 97232Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049****ANALYTICAL SAMPLE RESULTS****Diesel and/or Oil Hydrocarbons by NWTPH-Dx**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP09-S-6.5 (A1E0781-01RE1)				Matrix: Soil		Batch: 1050798		
Diesel	ND	11.9	25.0	mg/kg dry	1	05/24/21 07:19	NWTPH-Dx	
Oil	ND	23.8	50.0	mg/kg dry	1	05/24/21 07:19	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 86 %		Limits: 50-150 %	1	05/24/21 07:19	NWTPH-Dx	
GP09-S-6.5-DUP (A1E0781-02)				Matrix: Soil		Batch: 1050857		
Diesel	ND	12.0	25.0	mg/kg dry	1	05/24/21 23:37	NWTPH-Dx	
Oil	ND	24.0	50.0	mg/kg dry	1	05/24/21 23:37	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 66 %		Limits: 50-150 %	1	05/24/21 23:37	NWTPH-Dx	
GP10-S-6 (A1E0781-03)				Matrix: Soil		Batch: 1050857		
Diesel	ND	12.2	25.0	mg/kg dry	1	05/25/21 00:18	NWTPH-Dx	
Oil	ND	24.4	50.0	mg/kg dry	1	05/25/21 00:18	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 79 %		Limits: 50-150 %	1	05/25/21 00:18	NWTPH-Dx	
GP10-GW-15 (A1E0781-04)				Matrix: Water		Batch: 1050859		
Diesel	ND	0.0392	0.0784	mg/L	1	05/25/21 01:57	NWTPH-Dx LL	
Oil	ND	0.0784	0.157	mg/L	1	05/25/21 01:57	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		Recovery: 82 %		Limits: 50-150 %	1	05/25/21 01:57	NWTPH-Dx LL	
GP10-GW-15-DUP (A1E0781-05)				Matrix: Water		Batch: 1050859		
Diesel	ND	0.0385	0.0769	mg/L	1	05/25/21 02:18	NWTPH-Dx LL	
Oil	ND	0.0769	0.154	mg/L	1	05/25/21 02:18	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		Recovery: 80 %		Limits: 50-150 %	1	05/25/21 02:18	NWTPH-Dx LL	

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062Maul Foster & Alongi, INC.3140 NE Broadway Street
Portland, OR 97232Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP09-S-6.5 (A1E0781-01)		Matrix: Soil			Batch: 1050785			
Gasoline Range Organics	ND	3.71	7.42	mg/kg dry	50	05/21/21 17:40	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 96 %	Limits: 50-150 %	1	05/21/21 17:40	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		92 %	50-150 %	1	05/21/21 17:40	NWTPH-Gx (MS)		
GP09-S-6.5-DUP (A1E0781-02)		Matrix: Soil			Batch: 1050785			
Gasoline Range Organics	ND	3.74	7.47	mg/kg dry	50	05/21/21 18:07	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 99 %	Limits: 50-150 %	1	05/21/21 18:07	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		92 %	50-150 %	1	05/21/21 18:07	NWTPH-Gx (MS)		
GP10-S-6 (A1E0781-03)		Matrix: Soil			Batch: 1050785			
Gasoline Range Organics	ND	3.45	6.89	mg/kg dry	50	05/21/21 18:34	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 99 %	Limits: 50-150 %	1	05/21/21 18:34	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		93 %	50-150 %	1	05/21/21 18:34	NWTPH-Gx (MS)		
GP10-GW-15 (A1E0781-04)		Matrix: Water			Batch: 1050920			
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	05/25/21 18:12	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 97 %	Limits: 50-150 %	1	05/25/21 18:12	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		118 %	50-150 %	1	05/25/21 18:12	NWTPH-Gx (MS)		
GP10-GW-15-DUP (A1E0781-05)		Matrix: Water			Batch: 1050920			
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	05/25/21 18:39	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 98 %	Limits: 50-150 %	1	05/25/21 18:39	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		118 %	50-150 %	1	05/25/21 18:39	NWTPH-Gx (MS)		

Apex Laboratories

Philip Nerenberg, Lab Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP09-S-6.5 (A1E0781-01)				Matrix: Soil		Batch: 1050785		
Acetone	ND	742	1480	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Acrylonitrile	ND	74.2	148	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Benzene	ND	7.42	14.8	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Bromobenzene	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Bromochloromethane	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Bromodichloromethane	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Bromoform	ND	74.2	148	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Bromomethane	ND	742	742	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
2-Butanone (MEK)	ND	371	742	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
n-Butylbenzene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
sec-Butylbenzene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
tert-Butylbenzene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Carbon disulfide	ND	742	742	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Carbon tetrachloride	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Chlorobenzene	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Chloroethane	ND	371	742	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Chloroform	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Chloromethane	ND	185	371	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
2-Chlorotoluene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
4-Chlorotoluene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Dibromochloromethane	ND	74.2	148	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	185	371	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Dibromomethane	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,2-Dichlorobenzene	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,3-Dichlorobenzene	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,4-Dichlorobenzene	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Dichlorodifluoromethane	ND	74.2	148	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,1-Dichloroethane	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,1-Dichloroethene	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
cis-1,2-Dichloroethene	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
trans-1,2-Dichloroethene	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,2-Dichloropropane	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP09-S-6.5 (A1E0781-01)				Matrix: Soil		Batch: 1050785		
1,3-Dichloropropane	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
2,2-Dichloropropane	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,1-Dichloropropene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
cis-1,3-Dichloropropene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
trans-1,3-Dichloropropene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Ethylbenzene	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Hexachlorobutadiene	ND	74.2	148	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
2-Hexanone	ND	371	742	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Isopropylbenzene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
4-Isopropyltoluene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Methylene chloride	ND	371	742	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	371	742	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Naphthalene	ND	74.2	148	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
n-Propylbenzene	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Styrene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Tetrachloroethene (PCE)	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Toluene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,2,3-Trichlorobenzene	ND	185	371	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,2,4-Trichlorobenzene	ND	185	371	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,1,1-Trichloroethane	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,1,2-Trichloroethane	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Trichloroethene (TCE)	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
Trichlorofluoromethane	ND	74.2	148	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,2,3-Trichloropropane	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,2,4-Trimethylbenzene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
1,3,5-Trimethylbenzene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
m,p-Xylene	ND	37.1	74.2	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
o-Xylene	ND	18.5	37.1	ug/kg dry	50	05/21/21 17:40	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 106 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>05/21/21 17:40</i>	<i>5035A/8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>	<i>1</i>	<i>05/21/21 17:40</i>	<i>5035A/8260D</i>	

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP09-S-6.5 (A1E0781-01)				Matrix: Soil		Batch: 1050785		
<i>Surrogate: 4-Bromofluorobenzene (Surr)</i>		<i>Recovery: 105 %</i>	<i>Limits: 79-120 %</i>	<i>1</i>	<i>05/21/21 17:40</i>	<i>5035A/8260D</i>		
GP09-S-6.5-DUP (A1E0781-02)				Matrix: Soil		Batch: 1050785		
Acetone	ND	747	1490	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Acrylonitrile	ND	74.7	149	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Benzene	ND	7.47	14.9	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Bromobenzene	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Bromochloromethane	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Bromodichloromethane	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Bromoform	ND	74.7	149	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Bromomethane	ND	747	747	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
2-Butanone (MEK)	ND	374	747	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
n-Butylbenzene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
sec-Butylbenzene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
tert-Butylbenzene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Carbon disulfide	ND	747	747	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Carbon tetrachloride	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Chlorobenzene	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Chloroethane	ND	374	747	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Chloroform	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Chloromethane	ND	187	374	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
2-Chlorotoluene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
4-Chlorotoluene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Dibromochloromethane	ND	74.7	149	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	187	374	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Dibromomethane	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,2-Dichlorobenzene	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,3-Dichlorobenzene	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,4-Dichlorobenzene	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Dichlorodifluoromethane	ND	74.7	149	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,1-Dichloroethane	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,1-Dichloroethene	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
cis-1,2-Dichloroethene	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP09-S-6.5-DUP (A1E0781-02)				Matrix: Soil		Batch: 1050785		
trans-1,2-Dichloroethene	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,2-Dichloropropane	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,3-Dichloropropane	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
2,2-Dichloropropane	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,1-Dichloropropene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
cis-1,3-Dichloropropene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
trans-1,3-Dichloropropene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Ethylbenzene	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Hexachlorobutadiene	ND	74.7	149	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
2-Hexanone	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Isopropylbenzene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
4-Isopropyltoluene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Methylene chloride	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
4-Methyl-2-pentanone (MIBK)	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Naphthalene	ND	74.7	149	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
n-Propylbenzene	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Styrene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Tetrachloroethene (PCE)	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Toluene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,2,3-Trichlorobenzene	ND	187	374	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,2,4-Trichlorobenzene	ND	187	374	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,1,1-Trichloroethane	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,1,2-Trichloroethane	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Trichloroethene (TCE)	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
Trichlorofluoromethane	ND	74.7	149	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,2,3-Trichloropropane	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,2,4-Trimethylbenzene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
1,3,5-Trimethylbenzene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
m,p-Xylene	ND	37.4	74.7	ug/kg dry	50	05/21/21 18:07	5035A/8260D	
o-Xylene	ND	18.7	37.4	ug/kg dry	50	05/21/21 18:07	5035A/8260D	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP09-S-6.5-DUP (A1E0781-02)				Matrix: Soil		Batch: 1050785		
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 105 %	Limits: 80-120 %	1	05/21/21 18:07	5035A/8260D		
Toluene-d8 (Surr)		97 %	80-120 %	1	05/21/21 18:07	5035A/8260D		
4-Bromofluorobenzene (Surr)		105 %	79-120 %	1	05/21/21 18:07	5035A/8260D		
GP10-S-6 (A1E0781-03)				Matrix: Soil		Batch: 1050785		
Acetone	ND	689	1380	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Acrylonitrile	ND	68.9	138	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Benzene	ND	6.89	13.8	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Bromobenzene	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Bromochloromethane	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Bromodichloromethane	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Bromoform	ND	68.9	138	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Bromomethane	ND	689	689	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
2-Butanone (MEK)	ND	345	689	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
n-Butylbenzene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
sec-Butylbenzene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
tert-Butylbenzene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Carbon disulfide	ND	689	689	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Carbon tetrachloride	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Chlorobenzene	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Chloroethane	ND	345	689	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Chloroform	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Chloromethane	ND	172	345	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
2-Chlorotoluene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
4-Chlorotoluene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Dibromochloromethane	ND	68.9	138	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	172	345	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Dibromomethane	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,2-Dichlorobenzene	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,3-Dichlorobenzene	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,4-Dichlorobenzene	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Dichlorodifluoromethane	ND	68.9	138	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,1-Dichloroethane	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

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ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP10-S-6 (A1E0781-03)				Matrix: Soil		Batch: 1050785		
1,1-Dichloroethene	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
cis-1,2-Dichloroethene	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
trans-1,2-Dichloroethene	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,2-Dichloropropane	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,3-Dichloropropane	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
2,2-Dichloropropane	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,1-Dichloropropene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
cis-1,3-Dichloropropene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
trans-1,3-Dichloropropene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Ethylbenzene	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Hexachlorobutadiene	ND	68.9	138	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
2-Hexanone	ND	345	689	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Isopropylbenzene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
4-Isopropyltoluene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Methylene chloride	ND	345	689	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
4-Methyl-2-pentanone (MIBK)	ND	345	689	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Naphthalene	ND	68.9	138	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
n-Propylbenzene	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Styrene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Tetrachloroethene (PCE)	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Toluene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,2,3-Trichlorobenzene	ND	172	345	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,2,4-Trichlorobenzene	ND	172	345	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,1,1-Trichloroethane	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,1,2-Trichloroethane	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Trichloroethene (TCE)	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
Trichlorofluoromethane	ND	68.9	138	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,2,3-Trichloropropane	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,2,4-Trimethylbenzene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
1,3,5-Trimethylbenzene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062Maul Foster & Alongi, INC.3140 NE Broadway Street
Portland, OR 97232Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP10-S-6 (A1E0781-03)		Matrix: Soil			Batch: 1050785			
m,p-Xylene	ND	34.5	68.9	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
o-Xylene	ND	17.2	34.5	ug/kg dry	50	05/21/21 18:34	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 106 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>05/21/21 18:34</i>	<i>5035A/8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>96 %</i>		<i>80-120 %</i>	<i>1</i>	<i>05/21/21 18:34</i>	<i>5035A/8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>104 %</i>		<i>79-120 %</i>	<i>1</i>	<i>05/21/21 18:34</i>	<i>5035A/8260D</i>	
GP10-GW-15 (A1E0781-04)		Matrix: Water			Batch: 1050920			
Acetone	ND	10.0	20.0	ug/L	1	05/25/21 18:12	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	05/25/21 18:12	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	05/25/21 18:12	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	05/25/21 18:12	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	05/25/21 18:12	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	05/25/21 18:12	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	05/25/21 18:12	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	05/25/21 18:12	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	05/25/21 18:12	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	05/25/21 18:12	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	05/25/21 18:12	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	05/25/21 18:12	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	05/25/21 18:12	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	05/25/21 18:12	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP10-GW-15 (A1E0781-04)		Matrix: Water			Batch: 1050920			
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	05/25/21 18:12	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	05/25/21 18:12	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	05/25/21 18:12	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	05/25/21 18:12	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	05/25/21 18:12	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	05/25/21 18:12	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	05/25/21 18:12	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	05/25/21 18:12	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	05/25/21 18:12	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	05/25/21 18:12	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	05/25/21 18:12	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	05/25/21 18:12	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	05/25/21 18:12	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	05/25/21 18:12	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	05/25/21 18:12	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	05/25/21 18:12	EPA 8260D	
Toluene	0.857	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	J
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	05/25/21 18:12	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	05/25/21 18:12	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	05/25/21 18:12	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	05/25/21 18:12	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	05/25/21 18:12	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	05/25/21 18:12	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP10-GW-15 (A1E0781-04)		Matrix: Water			Batch: 1050920			
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	05/25/21 18:12	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	05/25/21 18:12	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 108 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>05/25/21 18:12</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>104 %</i>		<i>80-120 %</i>	<i>1</i>	<i>05/25/21 18:12</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>95 %</i>		<i>80-120 %</i>	<i>1</i>	<i>05/25/21 18:12</i>	<i>EPA 8260D</i>	
GP10-GW-15-DUP (A1E0781-05)		Matrix: Water			Batch: 1050920			
Acetone	ND	10.0	20.0	ug/L	1	05/25/21 18:39	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	05/25/21 18:39	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	05/25/21 18:39	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	05/25/21 18:39	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	05/25/21 18:39	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	05/25/21 18:39	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	05/25/21 18:39	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	05/25/21 18:39	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	05/25/21 18:39	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	05/25/21 18:39	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	05/25/21 18:39	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	05/25/21 18:39	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	05/25/21 18:39	EPA 8260D	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062Maul Foster & Alongi, INC.3140 NE Broadway Street
Portland, OR 97232Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP10-GW-15-DUP (A1E0781-05)				Matrix: Water		Batch: 1050920		
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	05/25/21 18:39	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	05/25/21 18:39	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	05/25/21 18:39	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	05/25/21 18:39	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	05/25/21 18:39	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	05/25/21 18:39	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	05/25/21 18:39	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	05/25/21 18:39	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	05/25/21 18:39	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	05/25/21 18:39	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	05/25/21 18:39	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	05/25/21 18:39	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	05/25/21 18:39	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	05/25/21 18:39	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	05/25/21 18:39	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	05/25/21 18:39	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	05/25/21 18:39	EPA 8260D	
Toluene	0.827	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	J
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	05/25/21 18:39	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	05/25/21 18:39	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	05/25/21 18:39	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	05/25/21 18:39	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	05/25/21 18:39	EPA 8260D	

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP10-GW-15-DUP (A1E0781-05)		Matrix: Water			Batch: 1050920			
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	05/25/21 18:39	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	05/25/21 18:39	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	05/25/21 18:39	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	105 %	<i>Limits:</i>	80-120 %	1	05/25/21 18:39	EPA 8260D
<i>Toluene-d8 (Surr)</i>			104 %		80-120 %	1	05/25/21 18:39	EPA 8260D
<i>4-Bromofluorobenzene (Surr)</i>			96 %		80-120 %	1	05/25/21 18:39	EPA 8260D
051821TB (A1E0781-06)		Matrix: Water			Batch: 1050920			
Acetone	ND	10.0	20.0	ug/L	1	05/25/21 16:24	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	05/25/21 16:24	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	05/25/21 16:24	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	05/25/21 16:24	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	05/25/21 16:24	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	05/25/21 16:24	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	05/25/21 16:24	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	05/25/21 16:24	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	05/25/21 16:24	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	05/25/21 16:24	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	05/25/21 16:24	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	05/25/21 16:24	EPA 8260D	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
051821TB (A1E0781-06)				Matrix: Water		Batch: 1050920		
Dibromomethane	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	05/25/21 16:24	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	05/25/21 16:24	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	05/25/21 16:24	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	05/25/21 16:24	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	05/25/21 16:24	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	05/25/21 16:24	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	05/25/21 16:24	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	05/25/21 16:24	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	05/25/21 16:24	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	05/25/21 16:24	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	05/25/21 16:24	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	05/25/21 16:24	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	05/25/21 16:24	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	05/25/21 16:24	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	05/25/21 16:24	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	05/25/21 16:24	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	05/25/21 16:24	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	05/25/21 16:24	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	05/25/21 16:24	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	05/25/21 16:24	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	05/25/21 16:24	EPA 8260D	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062Maul Foster & Alongi, INC.3140 NE Broadway Street
Portland, OR 97232Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
051821TB (A1E0781-06)		Matrix: Water			Batch: 1050920			
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	05/25/21 16:24	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	05/25/21 16:24	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	05/25/21 16:24	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	05/25/21 16:24	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	05/25/21 16:24	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	05/25/21 16:24	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	05/25/21 16:24	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 106 %		Limits: 80-120 %	1	05/25/21 16:24	EPA 8260D	
Toluene-d8 (Surr)		105 %		80-120 %	1	05/25/21 16:24	EPA 8260D	
4-Bromofluorobenzene (Surr)		95 %		80-120 %	1	05/25/21 16:24	EPA 8260D	

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Portland, OR 97232Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP09-S-6.5 (A1E0781-01)				Matrix: Soil		Batch: 1051002		
1,2-Dibromoethane (EDB)	ND	1.48	2.97	ug/kg dry	100	05/27/21 14:25	5035A/8260D SIM	
Vinyl chloride	ND	7.42	14.8	ug/kg dry	100	05/27/21 14:25	5035A/8260D SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>101 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>05/27/21 14:25</i>	<i>5035A/8260D SIM</i>
<i>Toluene-d8 (Surr)</i>			<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>05/27/21 14:25</i>	<i>5035A/8260D SIM</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>101 %</i>		<i>79-120 %</i>	<i>1</i>	<i>05/27/21 14:25</i>	<i>5035A/8260D SIM</i>
GP09-S-6.5-DUP (A1E0781-02)				Matrix: Soil		Batch: 1051002		
1,2-Dibromoethane (EDB)	ND	1.49	2.99	ug/kg dry	100	05/27/21 14:52	5035A/8260D SIM	
Vinyl chloride	ND	7.47	14.9	ug/kg dry	100	05/27/21 14:52	5035A/8260D SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>101 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>05/27/21 14:52</i>	<i>5035A/8260D SIM</i>
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>05/27/21 14:52</i>	<i>5035A/8260D SIM</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>101 %</i>		<i>79-120 %</i>	<i>1</i>	<i>05/27/21 14:52</i>	<i>5035A/8260D SIM</i>
GP10-S-6 (A1E0781-03)				Matrix: Soil		Batch: 1051002		
1,2-Dibromoethane (EDB)	ND	1.38	2.76	ug/kg dry	100	05/27/21 15:18	5035A/8260D SIM	
Vinyl chloride	ND	6.89	13.8	ug/kg dry	100	05/27/21 15:18	5035A/8260D SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>101 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>05/27/21 15:18</i>	<i>5035A/8260D SIM</i>
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>05/27/21 15:18</i>	<i>5035A/8260D SIM</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>101 %</i>		<i>79-120 %</i>	<i>1</i>	<i>05/27/21 15:18</i>	<i>5035A/8260D SIM</i>
GP10-GW-15 (A1E0781-04)				Matrix: Water		Batch: 1051068		
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	05/28/21 16:54	EPA 8260D SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	05/28/21 16:54	EPA 8260D SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>99 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>05/28/21 16:54</i>	<i>EPA 8260D SIM</i>
<i>Toluene-d8 (Surr)</i>			<i>96 %</i>		<i>80-120 %</i>	<i>1</i>	<i>05/28/21 16:54</i>	<i>EPA 8260D SIM</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>05/28/21 16:54</i>	<i>EPA 8260D SIM</i>
GP10-GW-15-DUP (A1E0781-05)				Matrix: Water		Batch: 1051068		
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	05/28/21 17:21	EPA 8260D SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	05/28/21 17:21	EPA 8260D SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>99 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>05/28/21 17:21</i>	<i>EPA 8260D SIM</i>

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street
Portland, OR 97232

Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP10-GW-15-DUP (A1E0781-05)				Matrix: Water		Batch: 1051068		
Surrogate: Toluene-d8 (Surr)		Recovery:	96 %	Limits:	80-120 %	1	05/28/21 17:21	EPA 8260D SIM
4-Bromofluorobenzene (Surr)			99 %		80-120 %	1	05/28/21 17:21	EPA 8260D SIM

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503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP09-S-6.5 (A1E0781-01)				Matrix: Soil		Batch: 1050892		
Acenaphthene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Acenaphthylene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Anthracene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Benz(a)anthracene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Benzo(a)pyrene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Chrysene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Fluoranthene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Fluorene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
1-Methylnaphthalene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
2-Methylnaphthalene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Naphthalene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Phenanthrene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Pyrene	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
Dibenzofuran	ND	6.14	12.3	ug/kg dry	1	05/26/21 09:24	EPA 8270E SIM	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery: 70 %</i>		<i>Limits: 44-120 %</i>	<i>1</i>	<i>05/26/21 09:24</i>	<i>EPA 8270E SIM</i>	
<i>p-Terphenyl-d14 (Surr)</i>		<i>70 %</i>		<i>54-127 %</i>	<i>1</i>	<i>05/26/21 09:24</i>	<i>EPA 8270E SIM</i>	

GP09-S-6.5-DUP (A1E0781-02)				Matrix: Soil		Batch: 1050943		
Acenaphthene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Acenaphthylene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Anthracene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Benz(a)anthracene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Benzo(a)pyrene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Chrysene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP09-S-6.5-DUP (A1E0781-02)		Matrix: Soil			Batch: 1050943			
Fluoranthene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Fluorene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
1-Methylnaphthalene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
2-Methylnaphthalene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Naphthalene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Phenanthrene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Pyrene	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Dibenzofuran	ND	5.88	11.8	ug/kg dry	1	05/26/21 18:15	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 93 %		Limits: 44-120 %	1	05/26/21 18:15	EPA 8270E SIM	
p-Terphenyl-d14 (Surr)		105 %		54-127 %	1	05/26/21 18:15	EPA 8270E SIM	
GP10-S-6 (A1E0781-03)		Matrix: Soil			Batch: 1050943			
Acenaphthene	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Acenaphthylene	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Anthracene	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Benz(a)anthracene	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Benzo(a)pyrene	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Chrysene	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Fluoranthene	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Fluorene	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
1-Methylnaphthalene	17.2	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
2-Methylnaphthalene	20.0	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Naphthalene	9.61	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	J
Phenanthrene	8.25	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	J
Pyrene	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Dibenzofuran	ND	6.25	12.5	ug/kg dry	1	05/26/21 19:06	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 83 %		Limits: 44-120 %	1	05/26/21 19:06	EPA 8270E SIM	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP10-S-6 (A1E0781-03)				Matrix: Soil		Batch: 1050943		
<i>Surrogate: p-Terphenyl-d14 (Surr)</i>		<i>Recovery: 86 %</i>	<i>Limits: 54-127 %</i>	<i>1</i>	<i>05/26/21 19:06</i>	<i>EPA 8270E SIM</i>		
GP10-GW-15 (A1E0781-04)				Matrix: Water		Batch: 1050845		
Acenaphthene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Acenaphthylene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Anthracene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Benz(a)anthracene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Benzo(a)pyrene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Chrysene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Fluoranthene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Fluorene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
1-Methylnaphthalene	ND	0.0374	0.0748	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0374	0.0748	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Naphthalene	0.0605	0.0374	0.0748	ug/L	1	05/24/21 19:44	EPA 8270E SIM	J
Phenanthrene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Pyrene	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
Dibenzofuran	ND	0.0187	0.0374	ug/L	1	05/24/21 19:44	EPA 8270E SIM	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery: 52 %</i>	<i>Limits: 44-120 %</i>	<i>1</i>	<i>05/24/21 19:44</i>	<i>EPA 8270E SIM</i>		
<i>p-Terphenyl-d14 (Surr)</i>		<i>97 %</i>	<i>50-134 %</i>	<i>1</i>	<i>05/24/21 19:44</i>	<i>EPA 8270E SIM</i>		
GP10-GW-15-DUP (A1E0781-05)				Matrix: Water		Batch: 1050845		
Acenaphthene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Acenaphthylene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Anthracene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Benz(a)anthracene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Benzo(a)pyrene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062Maul Foster & Alongi, INC.3140 NE Broadway Street
Portland, OR 97232Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP10-GW-15-DUP (A1E0781-05)		Matrix: Water			Batch: 1050845			
Chrysene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Fluoranthene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Fluorene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
1-Methylnaphthalene	ND	0.0392	0.0784	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0392	0.0784	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Naphthalene	0.0575	0.0392	0.0784	ug/L	1	05/24/21 20:10	EPA 8270E SIM	J
Phenanthrene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Pyrene	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Dibenzofuran	ND	0.0196	0.0392	ug/L	1	05/24/21 20:10	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 48 %		Limits: 44-120 %	1	05/24/21 20:10	EPA 8270E SIM	
p-Terphenyl-d14 (Surr)		90 %		50-134 %	1	05/24/21 20:10	EPA 8270E SIM	

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**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Maul Foster & Alongi, INC.**3140 NE Broadway Street
Portland, OR 97232Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049****ANALYTICAL SAMPLE RESULTS****Percent Dry Weight**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
GP09-S-6.5 (A1E0781-01)				Matrix: Soil		Batch: 1050718		
% Solids	80.9	1.00	1.00	%	1	05/21/21 08:51	EPA 8000D	
GP09-S-6.5-DUP (A1E0781-02)				Matrix: Soil		Batch: 1050718		
% Solids	81.9	1.00	1.00	%	1	05/21/21 08:51	EPA 8000D	
GP10-S-6 (A1E0781-03)				Matrix: Soil		Batch: 1050718		
% Solids	78.3	1.00	1.00	%	1	05/21/21 08:51	EPA 8000D	

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3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050798 - EPA 3546 (Fuels)						Soil						
Blank (1050798-BLK1)			Prepared: 05/21/21 12:53 Analyzed: 05/22/21 00:01									
NWTPH-Dx												
Diesel	ND	9.09	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	18.2	50.0	mg/kg wet	1	---	---	---	---	---	---	
Mineral Oil	ND	18.2	36.4	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 84 %		Limits: 50-150 %		Dilution: 1x						
LCS (1050798-BS1)			Prepared: 05/21/21 12:53 Analyzed: 05/22/21 00:23									
NWTPH-Dx												
Diesel	107	10.0	20.0	mg/kg wet	1	125	---	85	73-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 84 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (1050798-DUP1)			Prepared: 05/21/21 12:53 Analyzed: 05/22/21 01:06						H-06			
QC Source Sample: Non-SDG (A1E0661-06)												
Diesel	258	11.2	25.0	mg/kg dry	1	---	270	---	---	5	30%	
Oil	ND	22.4	50.0	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 71 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (1050798-DUP3)			Prepared: 05/21/21 12:53 Analyzed: 05/24/21 09:21									
QC Source Sample: Non-SDG (A1E0751-04RE1)												
Diesel	22500	521	1040	mg/kg dry	40	---	24800	---	---	10	30%	
Oil	ND	1040	2080	mg/kg dry	40	---	ND	---	---	---	30%	
Mineral Oil	ND	1040	2080	mg/kg dry	40	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: %		Limits: 50-150 %		Dilution: 40x						S-01
Batch 1050857 - EPA 3546 (Fuels)						Soil						
Blank (1050857-BLK1)			Prepared: 05/24/21 12:29 Analyzed: 05/24/21 22:56									
NWTPH-Dx												
Diesel	ND	9.09	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	18.2	50.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 90 %		Limits: 50-150 %		Dilution: 1x						
LCS (1050857-BS1)			Prepared: 05/24/21 12:29 Analyzed: 05/24/21 23:17									

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Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050857 - EPA 3546 (Fuels)						Soil						
LCS (1050857-BS1)			Prepared: 05/24/21 12:29 Analyzed: 05/24/21 23:17									
NWTPH-Dx												
Diesel	124	10.0	25.0	mg/kg wet	1	125	---	99	73-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 93 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (1050857-DUP1)			Prepared: 05/24/21 12:29 Analyzed: 05/24/21 23:58									
QC Source Sample: GP09-S-6.5-DUP (A1E0781-02)												
Diesel	ND	12.1	25.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	24.3	50.0	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 70 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (1050857-DUP2)			Prepared: 05/24/21 12:29 Analyzed: 05/25/21 03:03									
QC Source Sample: Non-SDG (A1E0873-01)												
Diesel	ND	10.3	25.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	20.6	50.0	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 83 %		Limits: 50-150 %		Dilution: 1x						

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3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050859 - EPA 3510C (Fuels/Acid Ext.)						Water						
Blank (1050859-BLK1)			Prepared: 05/24/21 12:38 Analyzed: 05/25/21 00:55									
NWTPH-Dx LL												
Diesel	ND	0.0364	0.0727	mg/L	1	---	---	---	---	---	---	
Oil	ND	0.0727	0.145	mg/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 86 %		Limits: 50-150 %		Dilution: 1x						
LCS (1050859-BS1)			Prepared: 05/24/21 12:38 Analyzed: 05/25/21 01:16									
NWTPH-Dx LL												
Diesel	0.429	0.0400	0.0800	mg/L	1	0.500	---	86	59-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 84 %		Limits: 50-150 %		Dilution: 1x						
LCS Dup (1050859-BSD1)			Prepared: 05/24/21 12:38 Analyzed: 05/25/21 01:36									
NWTPH-Dx LL												
Diesel	0.404	0.0400	0.0800	mg/L	1	0.500	---	81	59-115%	6	30%	
Surr: o-Terphenyl (Surr)		Recovery: 89 %		Limits: 50-150 %		Dilution: 1x						

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503-718-2323
ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street
Portland, OR 97232

Project: **Former Planter's Hotel Site**

Project Number: **0346.11.02**

Project Manager: **David Weatherby**

Report ID:

A1E0781 - 06 02 21 1049

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050785 - EPA 5035A						Soil						
Blank (1050785-BLK1)			Prepared: 05/21/21 09:00 Analyzed: 05/21/21 12:20									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1.67	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		92 %		50-150 %		"						
LCS (1050785-BS2)			Prepared: 05/21/21 09:00 Analyzed: 05/21/21 11:53									
NWTPH-Gx (MS)												
Gasoline Range Organics	20.3	2.50	5.00	mg/kg wet	50	25.0	---	81	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		92 %		50-150 %		"						
Duplicate (1050785-DUP1)			Prepared: 05/13/21 08:00 Analyzed: 05/21/21 15:25									
QC Source Sample: Non-SDG (A1E0562-01)												
Gasoline Range Organics	ND	2.89	5.79	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 97 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		91 %		50-150 %		"						
Duplicate (1050785-DUP2)			Prepared: 05/19/21 09:40 Analyzed: 05/21/21 20:49									
QC Source Sample: Non-SDG (A1E0844-01)												
Gasoline Range Organics	ND	4.66	4.66	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 100 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		95 %		50-150 %		"						

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ANALYTICAL REPORT

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050920 - EPA 5030B						Water						
Blank (1050920-BLK1)			Prepared: 05/25/21 13:00 Analyzed: 05/25/21 15:58									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		113 %		50-150 %		"						
LCS (1050920-BS2)			Prepared: 05/25/21 13:00 Analyzed: 05/25/21 15:31									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	0.560	0.0500	0.100	mg/L	1	0.500	---	112	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		108 %		50-150 %		"						
Duplicate (1050920-DUP1)			Prepared: 05/25/21 15:22 Analyzed: 05/25/21 17:18									
<u>QC Source Sample: Non-SDG (A1E0935-01)</u>												
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 97 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		117 %		50-150 %		"						

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050785 - EPA 5035A						Soil						
Blank (1050785-BLK1)			Prepared: 05/21/21 09:00 Analyzed: 05/21/21 12:20									
<u>5035A/8260D</u>												
Acetone	ND	333	667	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	3.33	6.67	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	333	333	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	333	333	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Maul Foster & Alongi, INC.**3140 NE Broadway Street
Portland, OR 97232Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050785 - EPA 5035A						Soil						
Blank (1050785-BLK1)						Prepared: 05/21/21 09:00 Analyzed: 05/21/21 12:20						
1,2-Dichloropropane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	173	167	333	ug/kg wet	50	---	---	---	---	---	---	B-02, J
4-Methyl-2-pentanone (MiBK)	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 105 % Limits: 80-120 % Dilution: 1x												

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050785 - EPA 5035A						Soil						
Blank (1050785-BLK1)			Prepared: 05/21/21 09:00		Analyzed: 05/21/21 12:20							
Surr: Toluene-d8 (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		103 %		79-120 %		"						
LCS (1050785-BS1)			Prepared: 05/21/21 09:00		Analyzed: 05/21/21 11:26							
5035A/8260D												
Acetone	1750	500	1000	ug/kg wet	50	2000	---	87	80-120%	---	---	
Acrylonitrile	1030	50.0	100	ug/kg wet	50	1000	---	103	80-120%	---	---	
Benzene	1030	5.00	10.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Bromobenzene	991	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
Bromochloromethane	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Bromodichloromethane	1000	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Bromoform	1350	50.0	100	ug/kg wet	50	1000	---	135	80-120%	---	---	Q-56
Bromomethane	939	500	500	ug/kg wet	50	1000	---	94	80-120%	---	---	
2-Butanone (MEK)	1890	250	500	ug/kg wet	50	2000	---	95	80-120%	---	---	
n-Butylbenzene	907	25.0	50.0	ug/kg wet	50	1000	---	91	80-120%	---	---	
sec-Butylbenzene	954	25.0	50.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
tert-Butylbenzene	878	25.0	50.0	ug/kg wet	50	1000	---	88	80-120%	---	---	
Carbon disulfide	790	500	500	ug/kg wet	50	1000	---	79	80-120%	---	---	Q-55
Carbon tetrachloride	1490	25.0	50.0	ug/kg wet	50	1000	---	149	80-120%	---	---	Q-56
Chlorobenzene	1010	12.5	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Chloroethane	828	250	500	ug/kg wet	50	1000	---	83	80-120%	---	---	
Chloroform	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Chloromethane	1080	125	250	ug/kg wet	50	1000	---	108	80-120%	---	---	
2-Chlorotoluene	1050	25.0	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
4-Chlorotoluene	956	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Dibromochloromethane	1120	50.0	100	ug/kg wet	50	1000	---	112	80-120%	---	---	
1,2-Dibromo-3-chloropropane	920	125	250	ug/kg wet	50	1000	---	92	80-120%	---	---	
1,2-Dibromoethane (EDB)	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Dibromomethane	1000	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,2-Dichlorobenzene	986	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,3-Dichlorobenzene	1040	12.5	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
1,4-Dichlorobenzene	941	12.5	25.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Dichlorodifluoromethane	1130	50.0	100	ug/kg wet	50	1000	---	113	80-120%	---	---	
1,1-Dichloroethane	1050	12.5	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	

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ANALYTICAL REPORT

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3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050785 - EPA 5035A						Soil						
LCS (1050785-BS1)						Prepared: 05/21/21 09:00 Analyzed: 05/21/21 11:26						
1,2-Dichloroethane (EDC)	1000	12.5	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,1-Dichloroethene	952	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
cis-1,2-Dichloroethene	1010	12.5	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
trans-1,2-Dichloroethene	984	12.5	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,2-Dichloropropane	1050	12.5	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,3-Dichloropropane	996	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
2,2-Dichloropropane	1240	25.0	50.0	ug/kg wet	50	1000	---	124	80-120%	---	---	Q-56
1,1-Dichloropropene	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
cis-1,3-Dichloropropene	976	25.0	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
trans-1,3-Dichloropropene	942	25.0	50.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Ethylbenzene	945	12.5	25.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Hexachlorobutadiene	947	50.0	100	ug/kg wet	50	1000	---	95	80-120%	---	---	
2-Hexanone	1750	250	500	ug/kg wet	50	2000	---	88	80-120%	---	---	
Isopropylbenzene	928	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
4-Isopropyltoluene	938	25.0	50.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Methylene chloride	1130	250	500	ug/kg wet	50	1000	---	113	80-120%	---	---	B-02
4-Methyl-2-pentanone (MiBK)	1800	250	500	ug/kg wet	50	2000	---	90	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1050	25.0	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Naphthalene	930	50.0	100	ug/kg wet	50	1000	---	93	80-120%	---	---	
n-Propylbenzene	971	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Styrene	928	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1340	12.5	25.0	ug/kg wet	50	1000	---	134	80-120%	---	---	Q-56
1,1,2,2-Tetrachloroethane	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Tetrachloroethene (PCE)	1040	12.5	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
Toluene	951	25.0	50.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
1,2,3-Trichlorobenzene	1030	125	250	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,2,4-Trichlorobenzene	941	125	250	ug/kg wet	50	1000	---	94	80-120%	---	---	
1,1,1-Trichloroethane	1110	12.5	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
1,1,2-Trichloroethane	1020	12.5	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Trichloroethene (TCE)	1060	12.5	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Trichlorofluoromethane	922	50.0	100	ug/kg wet	50	1000	---	92	80-120%	---	---	
1,2,3-Trichloropropane	1030	25.0	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,2,4-Trimethylbenzene	962	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
1,3,5-Trimethylbenzene	971	25.0	50.0	ug/kg wet	50	1000	---	97	80-120%	---	---	

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

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Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050785 - EPA 5035A						Soil						
LCS (1050785-BS1)			Prepared: 05/21/21 09:00		Analyzed: 05/21/21 11:26							
Vinyl chloride	1010	12.5	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
m,p-Xylene	1900	25.0	50.0	ug/kg wet	50	2000	---	95	80-120%	---	---	
o-Xylene	932	12.5	25.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		98 %		79-120 %		"						

Duplicate (1050785-DUP1)

Prepared: 05/13/21 08:00 Analyzed: 05/21/21 15:25

QC Source Sample: Non-SDG (A1E0562-01)

Acetone	ND	579	1160	ug/kg dry	50	---	ND	---	---	---	30%
Acrylonitrile	ND	57.9	116	ug/kg dry	50	---	ND	---	---	---	30%
Benzene	ND	5.79	11.6	ug/kg dry	50	---	ND	---	---	---	30%
Bromobenzene	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%
Bromochloromethane	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%
Bromodichloromethane	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%
Bromoform	ND	57.9	116	ug/kg dry	50	---	ND	---	---	---	30%
Bromomethane	ND	579	579	ug/kg dry	50	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	289	579	ug/kg dry	50	---	ND	---	---	---	30%
n-Butylbenzene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%
sec-Butylbenzene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%
tert-Butylbenzene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%
Carbon disulfide	ND	579	579	ug/kg dry	50	---	ND	---	---	---	30%
Carbon tetrachloride	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%
Chlorobenzene	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%
Chloroethane	ND	289	579	ug/kg dry	50	---	ND	---	---	---	30%
Chloroform	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%
Chloromethane	ND	145	289	ug/kg dry	50	---	ND	---	---	---	30%
2-Chlorotoluene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%
4-Chlorotoluene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%
Dibromochloromethane	ND	57.9	116	ug/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	145	289	ug/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%
Dibromomethane	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%
1,2-Dichlorobenzene	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%

Apex Laboratories

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050785 - EPA 5035A						Soil						
Duplicate (1050785-DUP1)			Prepared: 05/13/21 08:00 Analyzed: 05/21/21 15:25									
QC Source Sample: Non-SDG (A1E0562-01)												
1,3-Dichlorobenzene	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	57.9	116	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	57.9	116	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	289	579	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	289	579	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	289	579	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	57.9	116	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	145	289	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	145	289	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050785 - EPA 5035A						Soil						
Duplicate (1050785-DUP1)			Prepared: 05/13/21 08:00		Analyzed: 05/21/21 15:25							
QC Source Sample: Non-SDG (A1E0562-01)												
Trichloroethene (TCE)	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	57.9	116	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	28.9	57.9	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	14.5	28.9	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		103 %		79-120 %		"						

Duplicate (1050785-DUP2) Prepared: 05/19/21 09:40 Analyzed: 05/21/21 20:49

QC Source Sample: Non-SDG (A1E0844-01)												
Acetone	ND	466	933	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	46.6	93.3	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	4.66	9.33	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	46.6	93.3	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	466	466	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	233	466	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	466	466	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	233	466	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	117	233	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	

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Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050785 - EPA 5035A						Soil						
Duplicate (1050785-DUP2)			Prepared: 05/19/21 09:40 Analyzed: 05/21/21 20:49									
QC Source Sample: Non-SDG (A1E0844-01)												
4-Chlorotoluene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	46.6	93.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	117	233	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	46.6	93.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	46.6	93.3	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	233	466	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	233	466	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	233	466	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	46.6	93.3	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	

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Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050785 - EPA 5035A						Soil						
Duplicate (1050785-DUP2)			Prepared: 05/19/21 09:40		Analyzed: 05/21/21 20:49							
QC Source Sample: Non-SDG (A1E0844-01)												
Tetrachloroethene (PCE)	1080	11.7	23.3	ug/kg dry	50	---	45.4	---	---	184	30%	Q-04
Toluene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	117	233	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	117	233	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	55.6	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	Q-04
Trichlorofluoromethane	ND	46.6	93.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	23.3	46.6	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	11.7	23.3	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 107 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		97 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		105 %		79-120 %		"						

Matrix Spike (1050785-MS1)

Prepared: 05/20/21 12:20 Analyzed: 05/22/21 00:25

QC Source Sample: Non-SDG (A1E0848-06)**5035A/8260D**

Acetone	24700	6980	14000	ug/kg dry	500	27900	ND	88	36-164%	---	---	
Acrylonitrile	16500	698	1400	ug/kg dry	500	14000	ND	100	65-134%	---	---	
Benzene	19400	69.8	140	ug/kg dry	500	14000	5370	100	77-121%	---	---	
Bromobenzene	13300	174	349	ug/kg dry	500	14000	ND	95	78-121%	---	---	
Bromochloromethane	14100	349	698	ug/kg dry	500	14000	ND	101	78-125%	---	---	
Bromodichloromethane	13600	349	698	ug/kg dry	500	14000	ND	98	75-127%	---	---	
Bromoform	17600	698	1400	ug/kg dry	500	14000	ND	126	67-132%	---	---	Q-54c
Bromomethane	13700	6980	6980	ug/kg dry	500	14000	ND	98	53-143%	---	---	
2-Butanone (MEK)	27200	3490	6980	ug/kg dry	500	27900	ND	98	51-148%	---	---	
n-Butylbenzene	14000	349	698	ug/kg dry	500	14000	785	95	70-128%	---	---	
sec-Butylbenzene	13200	349	698	ug/kg dry	500	14000	ND	94	73-126%	---	---	
tert-Butylbenzene	11800	349	698	ug/kg dry	500	14000	ND	85	73-125%	---	---	

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050785 - EPA 5035A						Soil						
Matrix Spike (1050785-MS1)			Prepared: 05/20/21 12:20		Analyzed: 05/22/21 00:25							
QC Source Sample: Non-SDG (A1E0848-06)												
Carbon disulfide	10300	6980	6980	ug/kg dry	500	14000	ND	74	63-132%	---	---	Q-54k
Carbon tetrachloride	18800	349	698	ug/kg dry	500	14000	ND	134	70-135%	---	---	Q-54g
Chlorobenzene	13300	174	349	ug/kg dry	500	14000	ND	96	79-120%	---	---	
Chloroethane	11100	3490	6980	ug/kg dry	500	14000	ND	80	59-139%	---	---	
Chloroform	13600	349	698	ug/kg dry	500	14000	ND	98	78-123%	---	---	
Chloromethane	14900	1740	3490	ug/kg dry	500	14000	ND	106	50-136%	---	---	
2-Chlorotoluene	14400	349	698	ug/kg dry	500	14000	ND	103	75-122%	---	---	
4-Chlorotoluene	12800	349	698	ug/kg dry	500	14000	ND	92	72-124%	---	---	
Dibromochloromethane	14700	698	1400	ug/kg dry	500	14000	ND	105	74-126%	---	---	
1,2-Dibromo-3-chloropropane	12300	1740	3490	ug/kg dry	500	14000	ND	88	61-132%	---	---	
1,2-Dibromoethane (EDB)	12900	349	698	ug/kg dry	500	14000	ND	93	78-122%	---	---	
Dibromomethane	13700	349	698	ug/kg dry	500	14000	ND	98	78-125%	---	---	
1,2-Dichlorobenzene	13500	174	349	ug/kg dry	500	14000	ND	97	78-121%	---	---	
1,3-Dichlorobenzene	13900	174	349	ug/kg dry	500	14000	ND	99	77-121%	---	---	
1,4-Dichlorobenzene	12700	174	349	ug/kg dry	500	14000	ND	91	75-120%	---	---	
Dichlorodifluoromethane	14500	698	1400	ug/kg dry	500	14000	ND	104	29-149%	---	---	
1,1-Dichloroethane	14100	174	349	ug/kg dry	500	14000	ND	101	76-125%	---	---	
1,2-Dichloroethane (EDC)	13300	174	349	ug/kg dry	500	14000	ND	96	73-128%	---	---	
1,1-Dichloroethene	12500	174	349	ug/kg dry	500	14000	ND	90	70-131%	---	---	
cis-1,2-Dichloroethene	13600	174	349	ug/kg dry	500	14000	ND	97	77-123%	---	---	
trans-1,2-Dichloroethene	13000	174	349	ug/kg dry	500	14000	ND	93	74-125%	---	---	
1,2-Dichloropropane	14100	174	349	ug/kg dry	500	14000	ND	101	76-123%	---	---	
1,3-Dichloropropane	13200	349	698	ug/kg dry	500	14000	ND	95	77-121%	---	---	
2,2-Dichloropropane	13700	349	698	ug/kg dry	500	14000	ND	98	67-133%	---	---	Q-54h
1,1-Dichloropropene	13400	349	698	ug/kg dry	500	14000	ND	96	76-125%	---	---	
cis-1,3-Dichloropropene	11800	349	698	ug/kg dry	500	14000	ND	84	74-126%	---	---	
trans-1,3-Dichloropropene	11700	349	698	ug/kg dry	500	14000	ND	84	71-130%	---	---	
Ethylbenzene	19300	174	349	ug/kg dry	500	14000	6290	93	76-122%	---	---	
Hexachlorobutadiene	12700	698	1400	ug/kg dry	500	14000	ND	91	61-135%	---	---	
2-Hexanone	22600	3490	6980	ug/kg dry	500	27900	ND	81	53-145%	---	---	
Isopropylbenzene	12900	349	698	ug/kg dry	500	14000	393	89	68-134%	---	---	
4-Isopropyltoluene	13000	349	698	ug/kg dry	500	14000	ND	93	73-127%	---	---	
Methylene chloride	16100	3490	6980	ug/kg dry	500	14000	ND	89	70-128%	---	---	B-02

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Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050785 - EPA 5035A							Soil					
Matrix Spike (1050785-MS1)			Prepared: 05/20/21 12:20		Analyzed: 05/22/21 00:25							
QC Source Sample: Non-SDG (A1E0848-06)												
4-Methyl-2-pentanone (MiBK)	23600	3490	6980	ug/kg dry	500	27900	ND	84	65-135%	---	---	Q-54b
Methyl tert-butyl ether (MTBE)	14200	349	698	ug/kg dry	500	14000	ND	102	73-125%	---	---	
Naphthalene	14500	698	1400	ug/kg dry	500	14000	1620	93	62-129%	---	---	
n-Propylbenzene	15700	174	349	ug/kg dry	500	14000	2230	97	73-125%	---	---	
Styrene	12200	349	698	ug/kg dry	500	14000	ND	88	76-124%	---	---	
1,1,1,2-Tetrachloroethane	17600	174	349	ug/kg dry	500	14000	ND	126	78-125%	---	---	
1,1,2,2-Tetrachloroethane	13900	349	698	ug/kg dry	500	14000	ND	99	70-124%	---	---	
Tetrachloroethene (PCE)	13200	174	349	ug/kg dry	500	14000	ND	94	73-128%	---	---	
Toluene	38900	349	698	ug/kg dry	500	14000	26300	90	77-121%	---	---	
1,2,3-Trichlorobenzene	12900	1740	3490	ug/kg dry	500	14000	ND	93	66-130%	---	---	
1,2,4-Trichlorobenzene	12500	1740	3490	ug/kg dry	500	14000	ND	90	67-129%	---	---	
1,1,1-Trichloroethane	14500	174	349	ug/kg dry	500	14000	ND	104	73-130%	---	---	
1,1,2-Trichloroethane	13800	174	349	ug/kg dry	500	14000	ND	99	78-121%	---	---	
Trichloroethene (TCE)	14200	174	349	ug/kg dry	500	14000	ND	102	77-123%	---	---	
Trichlorofluoromethane	12500	698	1400	ug/kg dry	500	14000	ND	90	62-140%	---	---	
1,2,3-Trichloropropane	13500	349	698	ug/kg dry	500	14000	ND	97	73-125%	---	---	
1,2,4-Trimethylbenzene	29100	349	698	ug/kg dry	500	14000	14400	106	75-123%	---	---	
1,3,5-Trimethylbenzene	18000	349	698	ug/kg dry	500	14000	4310	98	73-124%	---	---	
Vinyl chloride	13400	174	349	ug/kg dry	500	14000	ND	96	56-135%	---	---	
m,p-Xylene	55300	349	698	ug/kg dry	500	27900	27300	100	77-124%	---	---	
o-Xylene	23900	174	349	ug/kg dry	500	14000	10300	98	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 104 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		79-120 %		"						

Apex Laboratories

Philip Nerenberg, Lab Director

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**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Maul Foster & Alongi, INC.**3140 NE Broadway Street
Portland, OR 97232Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050920 - EPA 5030B						Water						
Blank (1050920-BLK1)			Prepared: 05/25/21 13:00		Analyzed: 05/25/21 15:58							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050920 - EPA 5030B						Water						
Blank (1050920-BLK1)						Prepared: 05/25/21 13:00 Analyzed: 05/25/21 15:58						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 103 % Limits: 80-120 % Dilution: 1x												

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

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503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050920 - EPA 5030B						Water						
Blank (1050920-BLK1)			Prepared: 05/25/21 13:00		Analyzed: 05/25/21 15:58							
Surr: Toluene-d8 (Surr)		Recovery: 105 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"						
LCS (1050920-BS1)			Prepared: 05/25/21 13:00		Analyzed: 05/25/21 15:00							
EPA 8260D												
Acetone	38.0	10.0	20.0	ug/L	1	40.0	---	95	80-120%	---	---	
Acrylonitrile	20.7	1.00	2.00	ug/L	1	20.0	---	103	80-120%	---	---	
Benzene	21.2	0.100	0.200	ug/L	1	20.0	---	106	80-120%	---	---	
Bromobenzene	20.2	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Bromochloromethane	22.5	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
Bromodichloromethane	23.2	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
Bromoform	19.5	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
Bromomethane	25.4	5.00	5.00	ug/L	1	20.0	---	127	80-120%	---	---	Q-56
2-Butanone (MEK)	38.4	5.00	10.0	ug/L	1	40.0	---	96	80-120%	---	---	
n-Butylbenzene	22.8	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
sec-Butylbenzene	21.8	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
tert-Butylbenzene	20.7	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Carbon disulfide	20.6	5.00	10.0	ug/L	1	20.0	---	103	80-120%	---	---	
Carbon tetrachloride	21.3	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
Chlorobenzene	21.9	0.250	0.500	ug/L	1	20.0	---	109	80-120%	---	---	
Chloroethane	54.3	5.00	5.00	ug/L	1	20.0	---	272	80-120%	---	---	Q-56
Chloroform	23.4	0.500	1.00	ug/L	1	20.0	---	117	80-120%	---	---	
Chloromethane	29.7	2.50	5.00	ug/L	1	20.0	---	149	80-120%	---	---	Q-56
2-Chlorotoluene	21.1	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
4-Chlorotoluene	22.0	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
Dibromochloromethane	21.1	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
1,2-Dibromo-3-chloropropane	17.5	2.50	5.00	ug/L	1	20.0	---	87	80-120%	---	---	
1,2-Dibromoethane (EDB)	21.8	0.250	0.500	ug/L	1	20.0	---	109	80-120%	---	---	
Dibromomethane	22.7	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
1,2-Dichlorobenzene	20.6	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
1,3-Dichlorobenzene	20.9	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
1,4-Dichlorobenzene	21.0	0.250	0.500	ug/L	1	20.0	---	105	80-120%	---	---	
Dichlorodifluoromethane	46.1	0.500	1.00	ug/L	1	20.0	---	231	80-120%	---	---	Q-56
1,1-Dichloroethane	22.6	0.200	0.400	ug/L	1	20.0	---	113	80-120%	---	---	

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050920 - EPA 5030B						Water						
LCS (1050920-BS1)			Prepared: 05/25/21 13:00		Analyzed: 05/25/21 15:00							
1,2-Dichloroethane (EDC)	23.6	0.200	0.400	ug/L	1	20.0	---	118	80-120%	---	---	
1,1-Dichloroethene	23.0	0.200	0.400	ug/L	1	20.0	---	115	80-120%	---	---	
cis-1,2-Dichloroethene	22.7	0.200	0.400	ug/L	1	20.0	---	114	80-120%	---	---	
trans-1,2-Dichloroethene	22.7	0.200	0.400	ug/L	1	20.0	---	114	80-120%	---	---	
1,2-Dichloropropane	23.2	0.250	0.500	ug/L	1	20.0	---	116	80-120%	---	---	
1,3-Dichloropropane	22.0	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
2,2-Dichloropropane	19.1	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
1,1-Dichloropropene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
cis-1,3-Dichloropropene	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
trans-1,3-Dichloropropene	20.9	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
Ethylbenzene	21.7	0.250	0.500	ug/L	1	20.0	---	109	80-120%	---	---	
Hexachlorobutadiene	17.9	2.50	5.00	ug/L	1	20.0	---	90	80-120%	---	---	
2-Hexanone	36.8	5.00	10.0	ug/L	1	40.0	---	92	80-120%	---	---	
Isopropylbenzene	21.1	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
4-Isopropyltoluene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
Methylene chloride	21.3	5.00	10.0	ug/L	1	20.0	---	107	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	39.0	5.00	10.0	ug/L	1	40.0	---	98	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	18.4	0.500	1.00	ug/L	1	20.0	---	92	80-120%	---	---	
Naphthalene	18.3	1.00	2.00	ug/L	1	20.0	---	92	80-120%	---	---	
n-Propylbenzene	22.6	0.250	0.500	ug/L	1	20.0	---	113	80-120%	---	---	
Styrene	22.2	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
1,1,1,2-Tetrachloroethane	21.2	0.200	0.400	ug/L	1	20.0	---	106	80-120%	---	---	
1,1,2,2-Tetrachloroethane	22.3	0.250	0.500	ug/L	1	20.0	---	111	80-120%	---	---	
Tetrachloroethene (PCE)	19.8	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
Toluene	21.5	0.250	0.500	ug/L	1	20.0	---	107	80-120%	---	---	
1,2,3-Trichlorobenzene	20.8	1.00	2.00	ug/L	1	20.0	---	104	80-120%	---	---	
1,2,4-Trichlorobenzene	18.9	1.00	2.00	ug/L	1	20.0	---	95	80-120%	---	---	
1,1,1-Trichloroethane	21.4	0.200	0.400	ug/L	1	20.0	---	107	80-120%	---	---	
1,1,2-Trichloroethane	22.4	0.250	0.500	ug/L	1	20.0	---	112	80-120%	---	---	
Trichloroethene (TCE)	20.2	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	
Trichlorofluoromethane	33.2	1.00	2.00	ug/L	1	20.0	---	166	80-120%	---	---	Q-56
1,2,3-Trichloropropane	19.7	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
1,2,4-Trimethylbenzene	22.4	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	
1,3,5-Trimethylbenzene	22.5	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Apex Laboratories, LLC

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Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050920 - EPA 5030B						Water						
LCS (1050920-BS1)				Prepared: 05/25/21 13:00		Analyzed: 05/25/21 15:00						
Vinyl chloride	28.9	0.200	0.400	ug/L	1	20.0	---	145	80-120%	---	---	Q-56
m,p-Xylene	44.4	0.500	1.00	ug/L	1	40.0	---	111	80-120%	---	---	
o-Xylene	20.6	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		89 %		80-120 %		"						
Duplicate (1050920-DUP1)				Prepared: 05/25/21 15:22		Analyzed: 05/25/21 17:18						
QC Source Sample: Non-SDG (A1E0935-01)												
Acetone	75.8	10.0	20.0	ug/L	1	---	71.1	---	---	6	30%	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
Benzene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromoform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Bromomethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Chloroethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%	
Chloroform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Chloromethane	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050920 - EPA 5030B						Water						
Duplicate (1050920-DUP1)			Prepared: 05/25/21 15:22 Analyzed: 05/25/21 17:18									
QC Source Sample: Non-SDG (A1E0935-01)												
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Styrene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050920 - EPA 5030B						Water						
Duplicate (1050920-DUP1)			Prepared: 05/25/21 15:22 Analyzed: 05/25/21 17:18									
QC Source Sample: Non-SDG (A1E0935-01)												
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
o-Xylene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 104 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		106 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"						
Matrix Spike (1050920-MS1)			Prepared: 05/25/21 15:22 Analyzed: 05/25/21 19:05									
QC Source Sample: GP10-GW-15-DUP (A1E0781-05)												
Acetone	43.7	10.0	20.0	ug/L	1	40.0	ND	109	39-160%	---	---	
Acrylonitrile	21.1	1.00	2.00	ug/L	1	20.0	ND	105	63-135%	---	---	
Benzene	22.7	0.100	0.200	ug/L	1	20.0	ND	114	79-120%	---	---	
Bromobenzene	20.4	0.250	0.500	ug/L	1	20.0	ND	102	80-120%	---	---	
Bromochloromethane	23.7	0.500	1.00	ug/L	1	20.0	ND	119	78-123%	---	---	
Bromodichloromethane	24.2	0.500	1.00	ug/L	1	20.0	ND	121	79-125%	---	---	
Bromoform	20.0	0.500	1.00	ug/L	1	20.0	ND	100	66-130%	---	---	
Bromomethane	28.6	5.00	5.00	ug/L	1	20.0	ND	143	53-141%	---	---	Q-54j
2-Butanone (MEK)	40.2	5.00	10.0	ug/L	1	40.0	ND	101	56-143%	---	---	
n-Butylbenzene	23.5	0.500	1.00	ug/L	1	20.0	ND	118	75-128%	---	---	
sec-Butylbenzene	22.7	0.500	1.00	ug/L	1	20.0	ND	114	77-126%	---	---	
tert-Butylbenzene	21.8	0.500	1.00	ug/L	1	20.0	ND	109	78-124%	---	---	
Carbon disulfide	23.0	5.00	10.0	ug/L	1	20.0	ND	115	64-133%	---	---	
Carbon tetrachloride	23.3	0.500	1.00	ug/L	1	20.0	ND	117	72-136%	---	---	
Chlorobenzene	22.7	0.250	0.500	ug/L	1	20.0	ND	113	80-120%	---	---	
Chloroethane	32.2	5.00	5.00	ug/L	1	20.0	ND	161	60-138%	---	---	Q-54d
Chloroform	24.7	0.500	1.00	ug/L	1	20.0	ND	124	79-124%	---	---	
Chloromethane	32.8	2.50	5.00	ug/L	1	20.0	ND	164	50-139%	---	---	Q-54g
2-Chlorotoluene	22.1	0.500	1.00	ug/L	1	20.0	ND	110	79-122%	---	---	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

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503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050920 - EPA 5030B						Water						
Matrix Spike (1050920-MS1)			Prepared: 05/25/21 15:22		Analyzed: 05/25/21 19:05							
QC Source Sample: GP10-GW-15-DUP (A1E0781-05)												
4-Chlorotoluene	22.5	0.500	1.00	ug/L	1	20.0	ND	113	78-122%	---	---	Q-54a
Dibromochloromethane	21.5	0.500	1.00	ug/L	1	20.0	ND	108	74-126%	---	---	
1,2-Dibromo-3-chloropropane	16.3	2.50	5.00	ug/L	1	20.0	ND	82	62-128%	---	---	
1,2-Dibromoethane (EDB)	22.2	0.250	0.500	ug/L	1	20.0	ND	111	77-121%	---	---	
Dibromomethane	24.1	0.500	1.00	ug/L	1	20.0	ND	120	79-123%	---	---	
1,2-Dichlorobenzene	20.6	0.250	0.500	ug/L	1	20.0	ND	103	80-120%	---	---	
1,3-Dichlorobenzene	21.1	0.250	0.500	ug/L	1	20.0	ND	106	80-120%	---	---	
1,4-Dichlorobenzene	21.4	0.250	0.500	ug/L	1	20.0	ND	107	79-120%	---	---	
Dichlorodifluoromethane	54.4	0.500	1.00	ug/L	1	20.0	ND	272	32-152%	---	---	
1,1-Dichloroethane	23.9	0.200	0.400	ug/L	1	20.0	ND	120	77-125%	---	---	
1,2-Dichloroethane (EDC)	24.7	0.200	0.400	ug/L	1	20.0	ND	123	73-128%	---	---	
1,1-Dichloroethene	25.4	0.200	0.400	ug/L	1	20.0	ND	127	71-131%	---	---	
cis-1,2-Dichloroethene	23.8	0.200	0.400	ug/L	1	20.0	ND	119	78-123%	---	---	
trans-1,2-Dichloroethene	24.2	0.200	0.400	ug/L	1	20.0	ND	121	75-124%	---	---	
1,2-Dichloropropane	24.3	0.250	0.500	ug/L	1	20.0	ND	122	78-122%	---	---	
1,3-Dichloropropane	22.1	0.500	1.00	ug/L	1	20.0	ND	111	80-120%	---	---	
2,2-Dichloropropane	19.8	0.500	1.00	ug/L	1	20.0	ND	99	60-139%	---	---	
1,1-Dichloropropene	23.6	0.500	1.00	ug/L	1	20.0	ND	118	79-125%	---	---	
cis-1,3-Dichloropropene	19.2	0.500	1.00	ug/L	1	20.0	ND	96	75-124%	---	---	
trans-1,3-Dichloropropene	21.0	0.500	1.00	ug/L	1	20.0	ND	105	73-127%	---	---	
Ethylbenzene	23.1	0.250	0.500	ug/L	1	20.0	ND	116	79-121%	---	---	
Hexachlorobutadiene	18.0	2.50	5.00	ug/L	1	20.0	ND	90	66-134%	---	---	
2-Hexanone	37.5	5.00	10.0	ug/L	1	40.0	ND	94	57-139%	---	---	
Isopropylbenzene	21.9	0.500	1.00	ug/L	1	20.0	ND	109	72-131%	---	---	
4-Isopropyltoluene	22.2	0.500	1.00	ug/L	1	20.0	ND	111	77-127%	---	---	
Methylene chloride	21.3	5.00	10.0	ug/L	1	20.0	ND	106	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	39.2	5.00	10.0	ug/L	1	40.0	ND	98	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	18.2	0.500	1.00	ug/L	1	20.0	ND	91	71-124%	---	---	
Naphthalene	16.1	1.00	2.00	ug/L	1	20.0	ND	80	61-128%	---	---	
n-Propylbenzene	23.8	0.250	0.500	ug/L	1	20.0	ND	119	76-126%	---	---	
Styrene	20.4	0.500	1.00	ug/L	1	20.0	ND	102	78-123%	---	---	
1,1,1,2-Tetrachloroethane	22.0	0.200	0.400	ug/L	1	20.0	ND	110	78-124%	---	---	
1,1,2,2-Tetrachloroethane	23.1	0.250	0.500	ug/L	1	20.0	ND	116	71-121%	---	---	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

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3140 NE Broadway Street

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Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050920 - EPA 5030B						Water						
Matrix Spike (1050920-MS1)			Prepared: 05/25/21 15:22		Analyzed: 05/25/21 19:05							
QC Source Sample: GP10-GW-15-DUP (A1E0781-05)												
Tetrachloroethene (PCE)	21.1	0.200	0.400	ug/L	1	20.0	ND	105	74-129%	---	---	
Toluene	23.4	0.250	0.500	ug/L	1	20.0	0.827	113	80-121%	---	---	
1,2,3-Trichlorobenzene	18.9	1.00	2.00	ug/L	1	20.0	ND	94	69-129%	---	---	
1,2,4-Trichlorobenzene	17.2	1.00	2.00	ug/L	1	20.0	ND	86	69-130%	---	---	
1,1,1-Trichloroethane	23.2	0.200	0.400	ug/L	1	20.0	ND	116	74-131%	---	---	
1,1,2-Trichloroethane	23.2	0.250	0.500	ug/L	1	20.0	ND	116	80-120%	---	---	
Trichloroethene (TCE)	21.5	0.200	0.400	ug/L	1	20.0	ND	108	79-123%	---	---	
Trichlorofluoromethane	38.3	1.00	2.00	ug/L	1	20.0	ND	191	65-141%	---	---	Q-54i
1,2,3-Trichloropropane	21.0	0.500	1.00	ug/L	1	20.0	ND	105	73-122%	---	---	
1,2,4-Trimethylbenzene	22.1	0.500	1.00	ug/L	1	20.0	ND	110	76-124%	---	---	
1,3,5-Trimethylbenzene	23.4	0.500	1.00	ug/L	1	20.0	ND	117	75-124%	---	---	
Vinyl chloride	32.3	0.200	0.400	ug/L	1	20.0	ND	161	58-137%	---	---	Q-54f
m,p-Xylene	47.5	0.500	1.00	ug/L	1	40.0	ND	119	80-121%	---	---	
o-Xylene	21.6	0.250	0.500	ug/L	1	20.0	ND	108	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		88 %		80-120 %		"						

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Philip Nerenberg, Lab Director

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Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1051002 - EPA 5035A						Soil						
Blank (1051002-BLK1)			Prepared: 05/27/21 08:00 Analyzed: 05/27/21 12:38									
5035A/8260D SIM												
1,2-Dibromoethane (EDB)	ND	0.667	1.33	ug/kg wet	100	---	---	---	---	---	---	
Vinyl chloride	ND	3.33	6.67	ug/kg wet	100	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		79-120 %		"						
LCS (1051002-BS1)			Prepared: 05/27/21 08:00 Analyzed: 05/27/21 11:39									
5035A/8260D SIM												
1,2-Dibromoethane (EDB)	19.8	1.00	2.00	ug/kg wet	100	20.0	---	99	80-120%	---	---	
Vinyl chloride	28.0	5.00	10.0	ug/kg wet	100	20.0	---	140	80-120%	---	---	Q-56
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		79-120 %		"						
Duplicate (1051002-DUP1)			Prepared: 05/13/21 14:48 Analyzed: 05/27/21 13:32									
QC Source Sample: Non-SDG (A1E0621-12)												
1,2-Dibromoethane (EDB)	ND	1.63	3.26	ug/kg dry	100	---	ND	---	---	---	30%	
Vinyl chloride	ND	8.16	16.3	ug/kg dry	100	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		79-120 %		"						
Matrix Spike (1051002-MS1)			Prepared: 05/18/21 11:15 Analyzed: 05/27/21 15:45									
QC Source Sample: GP10-S-6 (A1E0781-03)												
5035A/8260D SIM												
1,2-Dibromoethane (EDB)	22.2	1.38	2.76	ug/kg dry	100	27.6	ND	80	78-122%	---	---	
Vinyl chloride	31.4	6.89	13.8	ug/kg dry	100	27.6	ND	114	56-135%	---	---	Q-54e
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		100 %		79-120 %		"						

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1051068 - EPA 5030B						Water						
Blank (1051068-BLK1)			Prepared: 05/28/21 08:00		Analyzed: 05/28/21 12:00							
EPA 8260D SIM												
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						
LCS (1051068-BS1)			Prepared: 05/28/21 08:00		Analyzed: 05/28/21 10:43							
EPA 8260D SIM												
1,2-Dibromoethane (EDB)	0.210	0.0100	0.0200	ug/L	1	0.200	---	105	80-120%	---	---	
Vinyl chloride	0.242	0.0100	0.0200	ug/L	1	0.200	---	121	80-120%	---	---	Q-56
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		98 %		80-120 %		"						
Duplicate (1051068-DUP1)			Prepared: 05/28/21 11:08		Analyzed: 05/28/21 16:27							
QC Source Sample: Non-SDG (A1E0702-01)												
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		97 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						
Matrix Spike (1051068-MS1)			Prepared: 05/28/21 11:08		Analyzed: 05/28/21 12:54							
QC Source Sample: Non-SDG (A1E0630-01)												
EPA 8260D SIM												
1,2-Dibromoethane (EDB)	0.226	0.0100	0.0200	ug/L	1	0.200	ND	113	77-121%	---	---	
Vinyl chloride	0.342	0.0100	0.0200	ug/L	1	0.200	0.133	104	58-137%	---	---	Q-54
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		98 %		80-120 %		"						
Matrix Spike Dup (1051068-MSD1)			Prepared: 05/28/21 11:08		Analyzed: 05/28/21 13:21							

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

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503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1051068 - EPA 5030B						Water						
Matrix Spike Dup (1051068-MSD1)			Prepared: 05/28/21 11:08 Analyzed: 05/28/21 13:21									
QC Source Sample: Non-SDG (A1E0630-01)												
1,2-Dibromoethane (EDB)	0.230	0.0100	0.0200	ug/L	1	0.200	ND	115	77-121%	2	30%	Q-54
Vinyl chloride	0.361	0.0100	0.0200	ug/L	1	0.200	0.133	114	58-137%	6	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		98 %		80-120 %		"						

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Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050845 - EPA 3510C (Acid Extraction)						Water						
Blank (1050845-BLK1)			Prepared: 05/24/21 10:14 Analyzed: 05/24/21 18:28									
EPA 8270E SIM												
Acenaphthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 68 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		109 %		50-134 %		"						

LCS (1050845-BS1)

Prepared: 05/24/21 10:14 Analyzed: 05/24/21 18:53

EPA 8270E SIM												
Acenaphthene	3.19	0.0100	0.0200	ug/L	1	4.00	---	80	47-122%	---	---	
Acenaphthylene	3.36	0.0100	0.0200	ug/L	1	4.00	---	84	41-130%	---	---	
Anthracene	3.48	0.0100	0.0200	ug/L	1	4.00	---	87	57-123%	---	---	
Benz(a)anthracene	3.57	0.0100	0.0200	ug/L	1	4.00	---	89	58-125%	---	---	
Benzo(a)pyrene	3.60	0.0100	0.0200	ug/L	1	4.00	---	90	54-128%	---	---	
Benzo(b)fluoranthene	3.66	0.0100	0.0200	ug/L	1	4.00	---	91	53-131%	---	---	
Benzo(k)fluoranthene	3.51	0.0100	0.0200	ug/L	1	4.00	---	88	57-129%	---	---	
Benzo(g,h,i)perylene	3.63	0.0100	0.0200	ug/L	1	4.00	---	91	50-134%	---	---	
Chrysene	3.60	0.0100	0.0200	ug/L	1	4.00	---	90	59-123%	---	---	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

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Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050845 - EPA 3510C (Acid Extraction)						Water						
LCS (1050845-BS1)			Prepared: 05/24/21 10:14		Analyzed: 05/24/21 18:53							
Dibenz(a,h)anthracene	3.74	0.0100	0.0200	ug/L	1	4.00	---	94	51-134%	---	---	
Fluoranthene	3.45	0.0100	0.0200	ug/L	1	4.00	---	86	57-128%	---	---	
Fluorene	3.19	0.0100	0.0200	ug/L	1	4.00	---	80	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	3.42	0.0100	0.0200	ug/L	1	4.00	---	86	52-134%	---	---	
1-Methylnaphthalene	2.75	0.0200	0.0400	ug/L	1	4.00	---	69	41-120%	---	---	
2-Methylnaphthalene	2.73	0.0200	0.0400	ug/L	1	4.00	---	68	40-121%	---	---	
Naphthalene	2.64	0.0200	0.0400	ug/L	1	4.00	---	66	40-121%	---	---	
Phenanthrene	3.38	0.0100	0.0200	ug/L	1	4.00	---	85	59-120%	---	---	
Pyrene	3.41	0.0100	0.0200	ug/L	1	4.00	---	85	57-126%	---	---	
Dibenzofuran	3.14	0.0100	0.0200	ug/L	1	4.00	---	78	53-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 70 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		93 %		50-134 %		"						

LCS Dup (1050845-BSD1)				Prepared: 05/24/21 10:14 Analyzed: 05/24/21 19:19								Q-19
EPA 8270E SIM												
Acenaphthene	3.11	0.0100	0.0200	ug/L	1	4.00	---	78	47-122%	2	30%	
Acenaphthylene	3.30	0.0100	0.0200	ug/L	1	4.00	---	82	41-130%	2	30%	
Anthracene	3.52	0.0100	0.0200	ug/L	1	4.00	---	88	57-123%	1	30%	
Benz(a)anthracene	3.58	0.0100	0.0200	ug/L	1	4.00	---	90	58-125%	0.4	30%	
Benzo(a)pyrene	3.58	0.0100	0.0200	ug/L	1	4.00	---	89	54-128%	0.6	30%	
Benzo(b)fluoranthene	3.70	0.0100	0.0200	ug/L	1	4.00	---	93	53-131%	1	30%	
Benzo(k)fluoranthene	3.55	0.0100	0.0200	ug/L	1	4.00	---	89	57-129%	1	30%	
Benzo(g,h,i)perylene	3.60	0.0100	0.0200	ug/L	1	4.00	---	90	50-134%	0.9	30%	
Chrysene	3.52	0.0100	0.0200	ug/L	1	4.00	---	88	59-123%	2	30%	
Dibenz(a,h)anthracene	3.56	0.0100	0.0200	ug/L	1	4.00	---	89	51-134%	5	30%	
Fluoranthene	3.54	0.0100	0.0200	ug/L	1	4.00	---	88	57-128%	2	30%	
Fluorene	3.20	0.0100	0.0200	ug/L	1	4.00	---	80	52-124%	0.4	30%	
Indeno(1,2,3-cd)pyrene	3.40	0.0100	0.0200	ug/L	1	4.00	---	85	52-134%	0.8	30%	
1-Methylnaphthalene	2.66	0.0200	0.0400	ug/L	1	4.00	---	66	41-120%	3	30%	
2-Methylnaphthalene	2.62	0.0200	0.0400	ug/L	1	4.00	---	65	40-121%	4	30%	
Naphthalene	2.52	0.0200	0.0400	ug/L	1	4.00	---	63	40-121%	5	30%	
Phenanthrene	3.40	0.0100	0.0200	ug/L	1	4.00	---	85	59-120%	0.5	30%	
Pyrene	3.50	0.0100	0.0200	ug/L	1	4.00	---	88	57-126%	3	30%	
Dibenzofuran	3.10	0.0100	0.0200	ug/L	1	4.00	---	77	53-120%	1	30%	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

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Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**

Project Number: **0346.11.02**

Project Manager: **David Weatherby**

Report ID:

A1E0781 - 06 02 21 1049

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050845 - EPA 3510C (Acid Extraction)						Water						
LCS Dup (1050845-BSD1)			Prepared: 05/24/21 10:14 Analyzed: 05/24/21 19:19								Q-19	
Surr: 2-Fluorobiphenyl (Surr)			Recovery: 73 %	Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)			90 %	50-134 %								

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QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050892 - EPA 3546						Soil						
Blank (1050892-BLK1)			Prepared: 05/25/21 07:16 Analyzed: 05/25/21 13:41									
EPA 8270E SIM												
Acenaphthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 99 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		105 %		54-127 %		"						

LCS (1050892-BS1)

Prepared: 05/25/21 07:16 Analyzed: 05/25/21 14:06

EPA 8270E SIM												
Acenaphthene	486	1.33	2.67	ug/kg wet	1	533	---	91	40-123%	---	---	
Acenaphthylene	513	1.33	2.67	ug/kg wet	1	533	---	96	32-132%	---	---	
Anthracene	484	1.33	2.67	ug/kg wet	1	533	---	91	47-123%	---	---	
Benz(a)anthracene	480	1.33	2.67	ug/kg wet	1	533	---	90	49-126%	---	---	
Benzo(a)pyrene	495	1.33	2.67	ug/kg wet	1	533	---	93	45-129%	---	---	
Benzo(b)fluoranthene	486	1.33	2.67	ug/kg wet	1	533	---	91	45-132%	---	---	
Benzo(k)fluoranthene	486	1.33	2.67	ug/kg wet	1	533	---	91	47-132%	---	---	
Benzo(g,h,i)perylene	513	1.33	2.67	ug/kg wet	1	533	---	96	43-134%	---	---	
Chrysene	483	1.33	2.67	ug/kg wet	1	533	---	90	50-124%	---	---	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050892 - EPA 3546						Soil						
LCS (1050892-BS1)				Prepared: 05/25/21 07:16		Analyzed: 05/25/21 14:06						
Dibenz(a,h)anthracene	492	1.33	2.67	ug/kg wet	1	533	---	92	45-134%	---	---	
Fluoranthene	413	1.33	2.67	ug/kg wet	1	533	---	78	50-127%	---	---	
Fluorene	468	1.33	2.67	ug/kg wet	1	533	---	88	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	479	1.33	2.67	ug/kg wet	1	533	---	90	45-133%	---	---	
1-Methylnaphthalene	484	1.33	2.67	ug/kg wet	1	533	---	91	40-120%	---	---	
2-Methylnaphthalene	488	1.33	2.67	ug/kg wet	1	533	---	91	38-122%	---	---	
Naphthalene	440	1.33	2.67	ug/kg wet	1	533	---	82	35-123%	---	---	
Phenanthrene	464	1.33	2.67	ug/kg wet	1	533	---	87	50-121%	---	---	
Pyrene	405	1.33	2.67	ug/kg wet	1	533	---	76	47-127%	---	---	
Dibenzofuran	468	1.33	2.67	ug/kg wet	1	533	---	88	44-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 91 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		109 %		54-127 %		"						
Duplicate (1050892-DUP1)						Prepared: 05/25/21 07:16 Analyzed: 05/25/21 14:57						
QC Source Sample: Non-SDG (A1E0520-01)												
Acenaphthene	143	6.24	12.5	ug/kg dry	4	---	277	---	---	64	30%	Q-04
Acenaphthylene	ND	6.24	12.5	ug/kg dry	4	---	ND	---	---	---	30%	
Anthracene	71.7	6.24	12.5	ug/kg dry	4	---	122	---	---	52	30%	Q-04
Benz(a)anthracene	31.5	6.24	12.5	ug/kg dry	4	---	37.9	---	---	18	30%	
Benzo(a)pyrene	12.4	6.24	12.5	ug/kg dry	4	---	17.2	---	---	32	30%	Q-05, J
Benzo(b)fluoranthene	31.0	6.24	12.5	ug/kg dry	4	---	42.4	---	---	31	30%	Q-04
Benzo(k)fluoranthene	9.11	6.24	12.5	ug/kg dry	4	---	12.7	---	---	33	30%	Q-05, J
Benzo(g,h,i)perylene	7.75	6.24	12.5	ug/kg dry	4	---	16.7	---	---	73	30%	Q-05, J
Chrysene	52.2	6.24	12.5	ug/kg dry	4	---	70.7	---	---	30	30%	
Dibenz(a,h)anthracene	ND	6.24	12.5	ug/kg dry	4	---	ND	---	---	---	30%	
Fluoranthene	196	6.24	12.5	ug/kg dry	4	---	308	---	---	44	30%	Q-04
Fluorene	102	6.24	12.5	ug/kg dry	4	---	194	---	---	62	30%	Q-04
Indeno(1,2,3-cd)pyrene	11.8	6.24	12.5	ug/kg dry	4	---	18.1	---	---	42	30%	Q-05, J
1-Methylnaphthalene	18.6	6.24	12.5	ug/kg dry	4	---	38.1	---	---	69	30%	Q-04
2-Methylnaphthalene	ND	6.24	12.5	ug/kg dry	4	---	ND	---	---	---	30%	
Naphthalene	13.9	6.24	12.5	ug/kg dry	4	---	7.69	---	---	57	30%	Q-05
Phenanthrene	94.3	6.24	12.5	ug/kg dry	4	---	354	---	---	116	30%	Q-04
Pyrene	139	6.24	12.5	ug/kg dry	4	---	212	---	---	41	30%	Q-04
Dibenzofuran	99.9	6.24	12.5	ug/kg dry	4	---	181	---	---	58	30%	Q-04

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
Batch 1050892 - EPA 3546						Soil							
Duplicate (1050892-DUP1)			Prepared: 05/25/21 07:16 Analyzed: 05/25/21 14:57										
QC Source Sample: Non-SDG (A1E0520-01)													
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 77 %		Limits: 44-120 %		Dilution: 4x							
p-Terphenyl-d14 (Surr)		92 %		54-127 %		"							
Matrix Spike (1050892-MS1)			Prepared: 05/25/21 07:16 Analyzed: 05/25/21 15:48										
QC Source Sample: Non-SDG (A1E0520-03)													
EPA 8270E SIM													
Acenaphthene	434	55.2	110	ug/kg dry	40	552	ND	79	40-123%	---	---		
Acenaphthylene	439	55.2	110	ug/kg dry	40	552	ND	79	32-132%	---	---		
Anthracene	474	55.2	110	ug/kg dry	40	552	ND	86	47-123%	---	---		
Benz(a)anthracene	548	55.2	110	ug/kg dry	40	552	94.4	82	49-126%	---	---		
Benzo(a)pyrene	519	55.2	110	ug/kg dry	40	552	137	69	45-129%	---	---		
Benzo(b)fluoranthene	552	55.2	110	ug/kg dry	40	552	200	64	45-132%	---	---		
Benzo(k)fluoranthene	479	55.2	110	ug/kg dry	40	552	69.2	74	47-132%	---	---		
Benzo(g,h,i)perylene	638	55.2	110	ug/kg dry	40	552	205	78	43-134%	---	---		
Chrysene	596	55.2	110	ug/kg dry	40	552	139	83	50-124%	---	---		
Dibenz(a,h)anthracene	458	55.2	110	ug/kg dry	40	552	ND	83	45-134%	---	---		
Fluoranthene	533	55.2	110	ug/kg dry	40	552	102	78	50-127%	---	---		
Fluorene	417	55.2	110	ug/kg dry	40	552	ND	76	43-125%	---	---		
Indeno(1,2,3-cd)pyrene	560	55.2	110	ug/kg dry	40	552	181	69	45-133%	---	---		
1-Methylnaphthalene	400	55.2	110	ug/kg dry	40	552	ND	72	40-120%	---	---		
2-Methylnaphthalene	405	55.2	110	ug/kg dry	40	552	ND	73	38-122%	---	---		
Naphthalene	349	55.2	110	ug/kg dry	40	552	ND	63	35-123%	---	---		
Phenanthrene	598	55.2	110	ug/kg dry	40	552	ND	108	50-121%	---	---		
Pyrene	493	55.2	110	ug/kg dry	40	552	101	71	47-127%	---	---		
Dibenzofuran	428	55.2	110	ug/kg dry	40	552	ND	77	44-120%	---	---		
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 74 %		Limits: 44-120 %		Dilution: 40x							S-05
p-Terphenyl-d14 (Surr)		97 %		54-127 %		"							S-05

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050943 - EPA 3546						Soil						
Blank (1050943-BLK1)			Prepared: 05/26/21 06:47 Analyzed: 05/26/21 12:47									
EPA 8270E SIM												
Acenaphthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 97 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		118 %		54-127 %		"						

LCS (1050943-BS1)

Prepared: 05/26/21 06:47 Analyzed: 05/26/21 13:12

EPA 8270E SIM												
Acenaphthene	505	1.33	2.67	ug/kg wet	1	533	---	95	40-123%	---	---	
Acenaphthylene	534	1.33	2.67	ug/kg wet	1	533	---	100	32-132%	---	---	
Anthracene	490	1.33	2.67	ug/kg wet	1	533	---	92	47-123%	---	---	
Benz(a)anthracene	487	1.33	2.67	ug/kg wet	1	533	---	91	49-126%	---	---	
Benzo(a)pyrene	497	1.33	2.67	ug/kg wet	1	533	---	93	45-129%	---	---	
Benzo(b)fluoranthene	457	1.33	2.67	ug/kg wet	1	533	---	86	45-132%	---	---	
Benzo(k)fluoranthene	466	1.33	2.67	ug/kg wet	1	533	---	87	47-132%	---	---	
Benzo(g,h,i)perylene	519	1.33	2.67	ug/kg wet	1	533	---	97	43-134%	---	---	
Chrysene	494	1.33	2.67	ug/kg wet	1	533	---	93	50-124%	---	---	

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050943 - EPA 3546						Soil						
LCS (1050943-BS1)			Prepared: 05/26/21 06:47 Analyzed: 05/26/21 13:12									
Dibenz(a,h)anthracene	518	1.33	2.67	ug/kg wet	1	533	---	97	45-134%	---	---	
Fluoranthene	404	1.33	2.67	ug/kg wet	1	533	---	76	50-127%	---	---	
Fluorene	470	1.33	2.67	ug/kg wet	1	533	---	88	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	481	1.33	2.67	ug/kg wet	1	533	---	90	45-133%	---	---	
1-Methylnaphthalene	495	1.33	2.67	ug/kg wet	1	533	---	93	40-120%	---	---	
2-Methylnaphthalene	504	1.33	2.67	ug/kg wet	1	533	---	94	38-122%	---	---	
Naphthalene	461	1.33	2.67	ug/kg wet	1	533	---	86	35-123%	---	---	
Phenanthrene	479	1.33	2.67	ug/kg wet	1	533	---	90	50-121%	---	---	
Pyrene	390	1.33	2.67	ug/kg wet	1	533	---	73	47-127%	---	---	
Dibenzofuran	476	1.33	2.67	ug/kg wet	1	533	---	89	44-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 99 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		110 %		54-127 %		"						
Duplicate (1050943-DUP1)						Prepared: 05/26/21 06:47 Analyzed: 05/26/21 14:28						
QC Source Sample: Non-SDG (A1E0561-01)												
Acenaphthene	ND	1.41	2.82	ug/kg dry	1	---	ND	---	---	---	30%	
Acenaphthylene	ND	1.41	2.82	ug/kg dry	1	---	ND	---	---	---	30%	
Anthracene	ND	1.41	2.82	ug/kg dry	1	---	ND	---	---	---	30%	
Benz(a)anthracene	ND	1.41	2.82	ug/kg dry	1	---	1.44	---	---	***	30%	Q-05
Benzo(a)pyrene	ND	1.41	2.82	ug/kg dry	1	---	ND	---	---	---	30%	
Benzo(b)fluoranthene	1.98	1.41	2.82	ug/kg dry	1	---	2.25	---	---	13	30%	J
Benzo(k)fluoranthene	ND	1.41	2.82	ug/kg dry	1	---	ND	---	---	---	30%	
Benzo(g,h,i)perylene	ND	1.41	2.82	ug/kg dry	1	---	1.63	---	---	***	30%	Q-05
Chrysene	1.95	1.41	2.82	ug/kg dry	1	---	3.13	---	---	47	30%	Q-05, J
Dibenz(a,h)anthracene	ND	1.41	2.82	ug/kg dry	1	---	ND	---	---	---	30%	
Fluoranthene	2.79	1.41	2.82	ug/kg dry	1	---	3.17	---	---	13	30%	J
Fluorene	ND	1.41	2.82	ug/kg dry	1	---	ND	---	---	---	30%	
Indeno(1,2,3-cd)pyrene	ND	1.41	2.82	ug/kg dry	1	---	ND	---	---	---	30%	
1-Methylnaphthalene	5.06	1.41	2.82	ug/kg dry	1	---	2.95	---	---	53	30%	Q-05
2-Methylnaphthalene	10.1	1.41	2.82	ug/kg dry	1	---	6.19	---	---	48	30%	Q-05
Naphthalene	7.70	1.41	2.82	ug/kg dry	1	---	6.96	---	---	10	30%	
Phenanthrene	5.18	1.41	2.82	ug/kg dry	1	---	5.53	---	---	6	30%	
Pyrene	2.24	1.41	2.82	ug/kg dry	1	---	2.64	---	---	16	30%	J
Dibenzofuran	2.12	1.41	2.82	ug/kg dry	1	---	2.12	---	---	0.1	30%	J

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Maul Foster & Alongi, INC.

3140 NE Broadway Street

Portland, OR 97232

Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050943 - EPA 3546						Soil						
Duplicate (1050943-DUP1)			Prepared: 05/26/21 06:47 Analyzed: 05/26/21 14:28									
<u>QC Source Sample: Non-SDG (A1E0561-01)</u>												
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 98 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		105 %		54-127 %		"						
Matrix Spike (1050943-MS1)						Prepared: 05/26/21 06:47 Analyzed: 05/26/21 15:18						
<u>QC Source Sample: Non-SDG (A1E0561-04)</u>												
<u>EPA 8270E SIM</u>												
Acenaphthene	526	1.56	3.13	ug/kg dry	1	625	ND	84	40-123%	---	---	
Acenaphthylene	562	1.56	3.13	ug/kg dry	1	625	ND	90	32-132%	---	---	
Anthracene	519	1.56	3.13	ug/kg dry	1	625	ND	83	47-123%	---	---	
Benz(a)anthracene	493	1.56	3.13	ug/kg dry	1	625	1.87	79	49-126%	---	---	
Benzo(a)pyrene	478	1.56	3.13	ug/kg dry	1	625	ND	76	45-129%	---	---	
Benzo(b)fluoranthene	462	1.56	3.13	ug/kg dry	1	625	3.40	73	45-132%	---	---	
Benzo(k)fluoranthene	424	1.56	3.13	ug/kg dry	1	625	ND	68	47-132%	---	---	
Benzo(g,h,i)perylene	493	1.56	3.13	ug/kg dry	1	625	ND	79	43-134%	---	---	
Chrysene	502	1.56	3.13	ug/kg dry	1	625	4.94	80	50-124%	---	---	
Dibenz(a,h)anthracene	460	1.56	3.13	ug/kg dry	1	625	ND	74	45-134%	---	---	
Fluoranthene	452	1.56	3.13	ug/kg dry	1	625	9.80	71	50-127%	---	---	
Fluorene	479	1.56	3.13	ug/kg dry	1	625	ND	77	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	448	1.56	3.13	ug/kg dry	1	625	ND	72	45-133%	---	---	
1-Methylnaphthalene	483	1.56	3.13	ug/kg dry	1	625	ND	77	40-120%	---	---	
2-Methylnaphthalene	492	1.56	3.13	ug/kg dry	1	625	1.76	78	38-122%	---	---	
Naphthalene	485	1.56	3.13	ug/kg dry	1	625	10.3	76	35-123%	---	---	
Phenanthrene	527	1.56	3.13	ug/kg dry	1	625	22.9	81	50-121%	---	---	
Pyrene	431	1.56	3.13	ug/kg dry	1	625	3.16	68	47-127%	---	---	
Dibenzofuran	499	1.56	3.13	ug/kg dry	1	625	6.09	79	44-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 90 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		87 %		54-127 %		"						

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062Maul Foster & Alongi, INC.3140 NE Broadway Street
Portland, OR 97232Project: Former Planter's Hotel Site

Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050718 - Total Solids (Dry Weight)							Soil					
Duplicate (1050718-DUP1)			Prepared: 05/20/21 08:27 Analyzed: 05/21/21 08:51									
<u>QC Source Sample: Non-SDG (A1E0635-01)</u>												
% Solids	82.5	1.00	1.00	%	1	---	82.5	---	---	0.06	10%	
Duplicate (1050718-DUP2)			Prepared: 05/20/21 08:27 Analyzed: 05/21/21 08:51									
<u>QC Source Sample: Non-SDG (A1E0701-01)</u>												
% Solids	69.8	1.00	1.00	%	1	---	70.1	---	---	0.5	10%	
Duplicate (1050718-DUP3)			Prepared: 05/20/21 08:27 Analyzed: 05/21/21 08:51									
<u>QC Source Sample: Non-SDG (A1E0719-03)</u>												
% Solids	86.3	1.00	1.00	%	1	---	86.1	---	---	0.3	10%	
Duplicate (1050718-DUP4)			Prepared: 05/20/21 08:27 Analyzed: 05/21/21 08:51									
<u>QC Source Sample: Non-SDG (A1E0722-03)</u>												
% Solids	93.7	1.00	1.00	%	1	---	93.8	---	---	0.1	10%	
Duplicate (1050718-DUP5)			Prepared: 05/20/21 08:27 Analyzed: 05/21/21 08:51									
<u>QC Source Sample: Non-SDG (A1E0724-03)</u>												
% Solids	80.4	1.00	1.00	%	1	---	82.0	---	---	2	10%	
Duplicate (1050718-DUP6)			Prepared: 05/20/21 08:27 Analyzed: 05/21/21 08:51									
<u>QC Source Sample: Non-SDG (A1E0731-01)</u>												
% Solids	89.0	1.00	1.00	%	1	---	89.0	---	---	0.04	10%	
Duplicate (1050718-DUP7)			Prepared: 05/20/21 08:27 Analyzed: 05/21/21 08:51									
<u>QC Source Sample: Non-SDG (A1E0735-01)</u>												
% Solids	88.1	1.00	1.00	%	1	---	88.1	---	---	0.04	10%	
Duplicate (1050718-DUP8)			Prepared: 05/20/21 08:27 Analyzed: 05/21/21 08:51									
<u>QC Source Sample: Non-SDG (A1E0747-01)</u>												
% Solids	87.7	1.00	1.00	%	1	---	87.7	---	---	0.004	10%	

Apex Laboratories

Philip Nerenberg, Lab Director

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**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Maul Foster & Alongi, INC.**3140 NE Broadway Street
Portland, OR 97232Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049****QUALITY CONTROL (QC) SAMPLE RESULTS****Percent Dry Weight**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050718 - Total Solids (Dry Weight)							Soil					
Duplicate (1050718-DUP9)			Prepared: 05/20/21 19:27 Analyzed: 05/21/21 08:51									
QC Source Sample: Non-SDG (A1E0831-01)												
% Solids	87.4	1.00	1.00	%	1	---	86.6	---	---	0.9	10%	
Duplicate (1050718-DUPA)			Prepared: 05/20/21 19:27 Analyzed: 05/21/21 08:51									
QC Source Sample: Non-SDG (A1E0838-01)												
% Solids	85.0	1.00	1.00	%	1	---	83.6	---	---	2	10%	
Duplicate (1050718-DUPB)			Prepared: 05/20/21 19:27 Analyzed: 05/21/21 08:51									
QC Source Sample: Non-SDG (A1E0845-01)												
% Solids	80.3	1.00	1.00	%	1	---	79.9	---	---	0.5	10%	
Duplicate (1050718-DUPC)			Prepared: 05/20/21 19:27 Analyzed: 05/21/21 08:51									
QC Source Sample: Non-SDG (A1E0847-04)												
% Solids	75.0	1.00	1.00	%	1	---	75.0	---	---	0.03	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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Portland, OR 97232

Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049****SAMPLE PREPARATION INFORMATION****Diesel and/or Oil Hydrocarbons by NWTPH-Dx**Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 1050859</u>							
A1E0781-04	Water	NWTPH-Dx LL	05/18/21 12:05	05/24/21 12:38	1020mL/2mL	1000mL/2mL	0.98
A1E0781-05	Water	NWTPH-Dx LL	05/18/21 12:05	05/24/21 12:38	1040mL/2mL	1000mL/2mL	0.96

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 1050798</u>							
A1E0781-01RE1	Soil	NWTPH-Dx	05/18/21 13:10	05/21/21 12:56	10.39g/5mL	10g/5mL	0.96
<u>Batch: 1050857</u>							
A1E0781-02	Soil	NWTPH-Dx	05/18/21 13:10	05/24/21 12:29	10.15g/5mL	10g/5mL	0.99
A1E0781-03	Soil	NWTPH-Dx	05/18/21 11:15	05/24/21 12:29	10.46g/5mL	10g/5mL	0.96

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-GxPrep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 1050920</u>							
A1E0781-04	Water	NWTPH-Gx (MS)	05/18/21 12:05	05/25/21 15:22	5mL/5mL	5mL/5mL	1.00
A1E0781-05	Water	NWTPH-Gx (MS)	05/18/21 12:05	05/25/21 15:22	5mL/5mL	5mL/5mL	1.00

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 1050785</u>							
A1E0781-01	Soil	NWTPH-Gx (MS)	05/18/21 13:10	05/18/21 13:10	4.95g/5mL	5g/5mL	1.01
A1E0781-02	Soil	NWTPH-Gx (MS)	05/18/21 13:10	05/18/21 13:10	4.79g/5mL	5g/5mL	1.04
A1E0781-03	Soil	NWTPH-Gx (MS)	05/18/21 11:15	05/18/21 11:15	5.79g/5mL	5g/5mL	0.86

Volatile Organic Compounds by EPA 8260DPrep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 1050920</u>							
A1E0781-04	Water	EPA 8260D	05/18/21 12:05	05/25/21 15:22	5mL/5mL	5mL/5mL	1.00
A1E0781-05	Water	EPA 8260D	05/18/21 12:05	05/25/21 15:22	5mL/5mL	5mL/5mL	1.00
A1E0781-06	Water	EPA 8260D	05/18/21 00:00	05/25/21 15:22	5mL/5mL	5mL/5mL	1.00

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Portland, OR 97232Project: **Former Planter's Hotel Site**Project Number: **0346.11.02**Project Manager: **David Weatherby****Report ID:****A1E0781 - 06 02 21 1049****SAMPLE PREPARATION INFORMATION****Volatile Organic Compounds by EPA 8260D****Prep: EPA 5035A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050785							
A1E0781-01	Soil	5035A/8260D	05/18/21 13:10	05/18/21 13:10	4.95g/5mL	5g/5mL	1.01
A1E0781-02	Soil	5035A/8260D	05/18/21 13:10	05/18/21 13:10	4.79g/5mL	5g/5mL	1.04
A1E0781-03	Soil	5035A/8260D	05/18/21 11:15	05/18/21 11:15	5.79g/5mL	5g/5mL	0.86

Volatile Organic Compounds by EPA 8260D SIM**Prep: EPA 5030B**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1051068							
A1E0781-04	Water	EPA 8260D SIM	05/18/21 12:05	05/28/21 11:08	5mL/5mL	5mL/5mL	1.00
A1E0781-05	Water	EPA 8260D SIM	05/18/21 12:05	05/28/21 11:08	5mL/5mL	5mL/5mL	1.00

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1051002							
A1E0781-01	Soil	5035A/8260D SIM	05/18/21 13:10	05/18/21 13:10	4.95g/5mL	5g/5mL	1.01
A1E0781-02	Soil	5035A/8260D SIM	05/18/21 13:10	05/18/21 13:10	4.79g/5mL	5g/5mL	1.04
A1E0781-03	Soil	5035A/8260D SIM	05/18/21 11:15	05/18/21 11:15	5.79g/5mL	5g/5mL	0.86

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM**Prep: EPA 3510C (Acid Extraction)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050845							
A1E0781-04	Water	EPA 8270E SIM	05/18/21 12:05	05/24/21 10:14	1070mL/2mL	1000mL/2mL	0.94
A1E0781-05	Water	EPA 8270E SIM	05/18/21 12:05	05/24/21 10:14	1020mL/2mL	1000mL/2mL	0.98

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050892							
A1E0781-01	Soil	EPA 8270E SIM	05/18/21 13:10	05/25/21 08:34	10.06g/5mL	10g/5mL	0.99
Batch: 1050943							
A1E0781-02	Soil	EPA 8270E SIM	05/18/21 13:10	05/26/21 11:34	10.38g/5mL	10g/5mL	0.96
A1E0781-03	Soil	EPA 8270E SIM	05/18/21 11:15	05/26/21 11:34	10.21g/5mL	10g/5mL	0.98

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SAMPLE PREPARATION INFORMATION

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 1050718</u>							
A1E0781-01	Soil	EPA 8000D	05/18/21 13:10	05/20/21 19:27			NA
A1E0781-02	Soil	EPA 8000D	05/18/21 13:10	05/20/21 19:27			NA
A1E0781-03	Soil	EPA 8000D	05/18/21 11:15	05/20/21 19:27			NA

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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

- B-02** Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)
- H-06** This sample was received, or the analysis requested, outside the recommended holding time.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- Q-04** Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.
- Q-05** Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +1%. The results are reported as Estimated Values.
- Q-54a** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +111%. The results are reported as Estimated Values.
- Q-54b** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +14%. The results are reported as Estimated Values.
- Q-54c** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +15%. The results are reported as Estimated Values.
- Q-54d** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +152%. The results are reported as Estimated Values.
- Q-54e** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +20%. The results are reported as Estimated Values.
- Q-54f** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +25%. The results are reported as Estimated Values.
- Q-54g** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +29%. The results are reported as Estimated Values.
- Q-54h** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +4%. The results are reported as Estimated Values.
- Q-54i** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +46%. The results are reported as Estimated Values.
- Q-54j** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +7%. The results are reported as Estimated Values.
- Q-54k** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -1%. The results are reported as Estimated Values.
- Q-55** Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.

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Project Number: 0346.11.02

Project Manager: David Weatherby

Report ID:

A1E0781 - 06 02 21 1049

- Q-56** Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260
- S-01** Surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.
ND Analyte NOT DETECTED at or above the detection or reporting limit.
NR Result Not Reported
RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).

If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.

The Result Basis is listed following the units as "dry", "wet", or " " (blank) designation.

"dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")

See Percent Solids section for details of dry weight analysis.

"wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.

For further details, please request a copy of this document.

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Project Number: **0346.11.02**

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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Project Manager: **David Weatherby**

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A1E0781 - 06 02 21 1049

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -

EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation
--------	----------	--------	---------	--------	---------------

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.

Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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Portland, OR 97232

Project: Former Planter's Hotel SiteProject Number: 0346.11.02Project Manager: David WeatherbyReport ID:

A1E0781 - 06 02 21 1049

APEX LABS COOLER RECEIPT FORMClient: MFA Former + ^{AKK} 5/18/21 Element WO#: A1 E0781Project/Project #: Former Planters Hotel #0346-11.02Delivery Info:Date/time received: 5/18/21 @ 1735 By: AKKDelivered by: Apex Client ☒ ESS FedEx ☐ UPS ☐ Swift ☐ Senvoy ☐ SDS ☐ Other ☐Cooler Inspection Date/time inspected: 5/18/21 @ 1735 By: AKKChain of Custody included? Yes ☒ No ☐ Custody seals? Yes ☐ No ☒Signed/dated by client? Yes ☒ No ☐Signed/dated by Apex? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>5.3</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. blanks? (Y/N)	<u>Y</u>						
Ice type: (Gel/Real/Other)	<u>Real</u>						
Condition:	<u>Good</u>						

Cooler out of temp? (Y/N) ☒ Possible reason why: _____Green dots applied to out of temperature samples? Yes ☐ No ☒Out of temperature samples form initiated? Yes ☐ No ☒Sample Inspection: Date/time inspected: 5/20/21 @ 1215 By: JSAll samples intact? Yes ☒ No ☐ Comments: _____Bottle labels/COCs agree? Yes ☒ No ☐ Comments: _____COC/container discrepancies form initiated? Yes ☐ No ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments: _____Do VOA vials have visible headspace? Yes ☐ No ☒ NA ☐

Comments: _____

Water samples: pH checked: Yes ☒ No ☐ NA ☐ pH appropriate? Yes ☒ No ☐ NA ☐

Comments: _____

Additional information: TB #2183 1 out of two TB out of temp.

Labeled by:

JS

Witness:

AKK

Cooler Inspected by:

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Philip Nerenberg, Lab Director

ATTACHMENT F

DATA VALIDATION MEMORANDUM



DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0346.11.02 | JUNE 3, 2021 | PORT OF SUNNYSIDE

Maul Foster & Alongi, Inc., conducted an independent review of the quality of analytical results for groundwater and soil samples collected at the historical Planters Hotel site in Sunnyside, Washington. The samples were collected on May 18, 2021.

Apex Laboratories, LLC (Apex), performed the analyses. Apex report number A1E0781 was reviewed. The analyses performed and samples analyzed are listed below.

Analysis	Reference
Diesel- and oil-range hydrocarbons	NWTPH-Dx
Gasoline-range hydrocarbons	NWTPH-Gx
Percent dry weight	EPA 8000D
Polycyclic Aromatic Hydrocarbons	EPA 8270E-SIM
Volatile organic compounds	EPA 8260D
Volatile organic compounds	EPA 8260D-SIM
NOTES: EPA = U.S. Environmental Protection Agency. NWTPH = Northwest Total Petroleum Hydrocarbons. SIM = selected ion monitoring.	

Samples Analyzed
Report A1E0781
GP09-S-6.5
GP09-S-6.5-DUP
GP10-S-6
GP10-GW-15
GP10-GW-15-DUP
051821TB

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of U.S. Environmental Protection Agency (EPA) procedures (EPA, 2017) and appropriate laboratory and method-specific guidelines (Apex, 2021; EPA, 1986).

Data validation procedures were modified, as appropriate, to accommodate quality-control requirements for methods not specifically addressed by the EPA procedures (e.g., NWTPH-Dx, NWTPH-Gx).

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the method blanks were associated with all samples prepared in the analytical batch.

According to report A1E0781, the EPA Method 8260D batch 1050785 laboratory method blank (1050785-BLK1) had a methylene chloride detection between the method detection limit (MDL) and method reporting limit (MRL), at a concentration of 173 micrograms per kilogram (ug/kg). The associated methylene chloride results were non-detect; thus, no qualifications were necessary.

All remaining laboratory method blank results were non-detect to MDLs.

Trip Blanks

One trip blank (051821TB) was submitted for EPA Method 8260D analysis. The trip blank was non-detect to MDLs for all analytes.

Equipment Rinse Blanks

Equipment rinse blanks were not required for this sampling event, as all samples were collected using dedicated, single-use equipment.

SURROGATE RECOVERY RESULTS

The samples were spiked with surrogate compounds to evaluate laboratory performance on individual samples.

All surrogate recoveries were within acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Matrix spike/matrix spike duplicate (MS/MSD) results are used to evaluate laboratory precision and accuracy. All MS/MSD samples were extracted and analyzed at the required frequency. When MS/MSD percent recoveries and relative percent differences (RPD) were outside acceptance limits because of high concentrations of analyte in the sample, and MS/MSD exceedances were flagged by the laboratory because of high concentrations of analyte, no qualifications were made by the reviewer.

According to report A1E0781, the EPA Method 8260D batch 1050785 MS (1050785-MS1) exceeded the upper percent recovery acceptance limit of 125 percent for 1,1,1,2-tetrachloroethane, at 126 percent. The MS was prepared with a non-project-related sample; thus, qualification was not required.

According to report A1E0781, NWTPH-Dx and NWTPH-Gx MS/MSD results were not reported. Batch precision and accuracy were evaluated with laboratory duplicate, laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) results.

Apex noted in report A1E0781 that the NWTPH-Dx batch 1050859 and EPA Method 8270E-SIM batch 1050845 had limited sample amount available for MS analysis. Batch precision and accuracy were evaluated with LCS/LCSD results. No action was required by the reviewer.

According to report A1E0781, the EPA Method 8260D batch 1050920 MS (1050920-MS1) bromomethane, chloroethane, chloromethane, dichlorodifluoromethane, trichlorofluoromethane, and vinyl chloride recoveries exceeded the upper percent recovery acceptance limits, at 143, 161, 164, 272, 191, and 161 percent, respectively. The associated sample results were non-detect; thus, qualifications were not required.

All remaining MS/MSD results were within acceptance limits for percent recovery and RPDs.

LABORATORY DUPLICATE RESULTS

Laboratory duplicate results are used to evaluate laboratory precision. All duplicate samples were extracted and analyzed at the required frequency. Laboratory duplicate results within five times the MRL were not evaluated for precision.

Duplicate samples prepared with non-project-related samples that exceeded RPD acceptance limits were evaluated but did not require qualification by the reviewer.

Apex noted in report A1E0781 that the NWTPH-Dx batch 1050859 and EPA Method 8270E-SIM batch 1050845 had limited sample amount available for duplicate analysis. Batch precision and accuracy were evaluated with LCS/LCSD results. No action was required by the reviewer.

All project-related laboratory duplicate RPDs were within acceptance limits.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

An LCS/LCSD is spiked with target analytes to provide information on laboratory precision and accuracy. The LCS/LCSD samples were extracted and analyzed at the required frequency.

According to report A1E0781, the EPA Method 8260D batch 1050785 LCS (1050785-BS1) had bromoform, carbon tetrachloride, 2,2-dichloropropane, and 1,1,1,2-tetrachloroethane results that exceeded the upper percent recovery acceptance limit of 120 percent, at 135, 149, 124, and 134 percent, respectively. Additionally, the carbon disulfide result exceeded the lower percent recovery acceptance limit of 80 percent, at 79 percent. Apex noted that there was adequate sensitivity to ensure detection at the reporting level for this analyte. Bromoform, carbon tetrachloride, 2,2-dichloropropane, and 1,1,1,2-tetrachloroethane were not detected in the associated samples; thus, qualification was not required. The associated carbon disulfide results have been qualified by the reviewer with "UJ," as non-detect with an estimated detection limit, as shown in the table below.

Report	Sample	Component	Original Result (ug/kg)	Qualified Result (ug/kg)
A1E0781	GP09-S-6.5	Carbon disulfide	742 U	742 UJ
	GP09-S-6.5-DUP		747 U	747 UJ
	GP10-S-6		689 U	689 UJ
NOTES: ug/kg = micrograms per kilogram. U = result is non-detect. UJ = result is non-detect with an estimated detection limit.				

According to report A1E0781, the EPA Method 8260D batch 1050920 LCS (1050920-BS1) had bromomethane, chloroethane, chloromethane, dichlorodifluoromethane, trichlorofluoromethane, and vinyl chloride results that exceeded the upper percent recovery acceptance limit of 120 percent, at 127, 272, 149, 231, 166, and 145 percent, respectively. These analytes were not detected in the associated samples; thus, qualification was not required.

According to report A1E0781, the EPA Method 8260D-SIM batches 1051002 and 1051068 LCSs (1051002-BS1 and 1051068-BS1) had vinyl chloride recoveries that exceeded the upper percent recovery acceptance limit of 120 percent, at 140 and 121 percent, respectively. Vinyl chloride was not detected in the associated samples; thus, qualification was not required.

All remaining LCS/LCSD results were within acceptance limits for percent recovery and RPD.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. Two primary sample/field duplicate sample pairs were submitted for analysis (GP09-S-6.5/GP09-S-6.5-DUP and GP10-GW-15/GP10-GW-15-DUP). Maul Foster & Alongi, Inc, uses acceptance

criteria of 100 percent RPD for results that are less than five times the MRL, or 50 percent RPD for results that are greater than five times the MRL. Non-detect data are not used in the evaluation of field duplicate results.

All field duplicate results met the RPD acceptance criteria.

CONTINUING CALIBRATION VERIFICATION RESULTS

Continuing calibration verification (CCV) results are used to demonstrate instrument precision and accuracy through the end of the sample batch. CCV results were not reported by Apex. Quality control results that were flagged by the laboratory based on CCV exceedances required no action from the reviewer when the results met percent recovery and RPD acceptance criteria.

REPORTING LIMITS

Apex used routine reporting limits for non-detect results, except for samples requiring dilutions because of high analyte concentrations and/or matrix interferences. Results between the MDL and the reporting limit were qualified by Apex with “J” as estimated.

The reviewer confirmed that NWTPH-Gx and EPA Method 8260D soil results were reported with a base dilution factor of 1:50 due to a dilution required for analysis. The EPA Method 8260D-SIM soil results were reported with a base dilution factor of 1:100 due to sensitivity of the method. No action was required.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies.

Apex noted that one of the two temperature blank containers was received outside of acceptable temperature limits. The reviewer confirmed that the remaining temperature blank was within acceptable temperature limits, and that samples were not impacted by a temperature exceedance. No further action was required.

No other issues were found.

REFERENCES

Apex. 2021. Quality systems manual. Revision 9. Apex Laboratories, LLC. Tigard, Oregon. January 1.

EPA. 1986. Test methods for evaluating solid waste, physical/chemical methods. EPA publication SW-846. 3d ed. U.S. Environmental Protection Agency. Final updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), V (2015), VI phase I (2017), VI phase II (2018), and VI phase III (2019).

EPA. 2017. EPA contract laboratory program, national functional guidelines for Superfund organic methods data review. EPA 540-R-2017-002. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. January.