

**Site Investigation and Cleanup Report
Mason Transit Authority
Transit Community Center Parking Lot
Shelton, Washington**

July 6, 2020

Prepared for

Mason Transit Authority
790 East Johns Prairie Road
Shelton, Washington



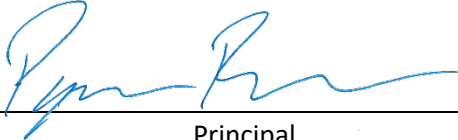
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Project Coordinator: KJG

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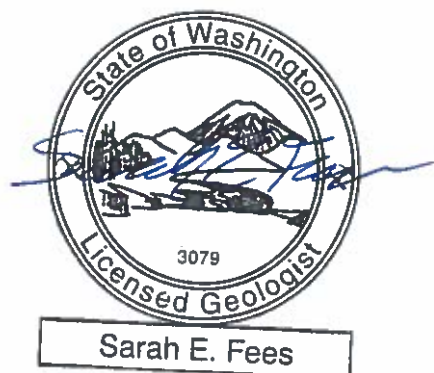
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<u>Appendix</u>	<u>Title</u>
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LIST OF ABBREVIATIONS AND ACRONYMS

bgs.....	below ground surface
cPAHs	carcinogenic polycyclic aromatic hydrocarbons
CUL.....	cleanup level
DRO	diesel-range petroleum hydrocarbons
Ecology.....	Washington State Department of Ecology
EIM	Environmental Information Management
EPA.....	US Environmental Protection Agency
ft	foot/feet
GPS.....	global positioning system
GRO	gasoline-range organics
HCID	petroleum hydrocarbons
ID.....	identification
JWM&A	Jerome W. Morrisette & Associates Inc., P.S.
LAI	Landau Associates, Inc.
MTA.....	Mason Transit Authority
mg/kg	milligrams per kilogram
MTC.....	Materials Testing and Consulting, Inc.
MTCA	Model Toxics Control Act
NFA	no further action
ORO	oil range petroleum hydrocarbons
PCBs	polychlorinated biphenyls
PID.....	photoionization detector
QA/QC	quality assurance/quality control
RCRA	Resource Conservation and Recovery Act
T-CC.....	Transit-Community Center
TCLP	toxicity characteristic leaching procedure
TEE	terrestrial ecological evaluation
TEQ.....	toxic equivalency
TestAmerica	Eurofins TestAmerica Laboratory
VCP.....	Voluntary Cleanup Program
VOC	volatile organic compound
WAC	Washington Administrative Code

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1.0 INTRODUCTION

On behalf of Mason Transit Authority (MTA), Landau Associates, Inc. (LAI) has prepared this report to document a subsurface investigation and voluntary cleanup action completed in support of the proposed MTA Transit-Community Center (T-CC) parking lot redevelopment project, located at 536 Railroad Avenue in Shelton, Washington (Site). LAI's subsurface investigation and cleanup action support activities took place in 2019 and 2020. The Site, location presented on Figure 1, has been enrolled in the Washington State Department of Ecology's (Ecology's) Voluntary Cleanup Program (VCP) due to various historical site uses and releases.

Site Identification Information	
Site Name	Mason County Public Trans Site
Site Address	536 W Railroad Ave., Shelton, Mason County, WA 98584
Cleanup Site ID	14444
Facility/Site ID	69807
VCP Project ID	SW1634

Abbreviations and acronyms:

ID = Identification

MTA is in the process of redeveloping the Site with a pervious parking lot and pedestrian corridor connecting Railroad Avenue to the T-CC. Prior to starting construction, MTA intended to remove and dispose of the top 3 feet (ft) of existing soil to make way for pervious pavement and associated subgrade material.

The primary objective of this report is to summarize previous investigations and cleanup action activities, characterize environmental conditions that may be present due to potential contamination sources, and summarize additional cleanup action activities which occurred as part of Site redevelopment. Based on the documentation in this report, a no further action (NFA) determination is requested from Ecology.

2.0 SITE DESCRIPTION AND HISTORY

The Site consists of a gravel parking lot and a small building, built in the 1950s, and is currently leased to a non-profit business. The primary historical use reportedly included materials staging, storage, and loading by the Simpson Timber Company when the railway was located along the south side of the Site (MTC 2017).

2.1 Previous Investigations

Two previous environmental investigations have been completed at the Site, one in 2012 (JWM&A 2012) and one in 2017 (MTC 2017). Ecology previously conveyed a number of concerns about the scope and reporting of these investigations. LAI's understanding of these previous investigations are summarized based on the 2017 report.

2.1.1 2012 Investigation and Limited Remedial Action

Jerome W. Morrisette & Associates Inc., P.S. (JWM&A) completed a subsurface investigation on February 15, 2012. The investigation included the advancement of four test pits spread throughout the Site for the collection of soil samples. Eleven soil samples were collected and analyzed for petroleum hydrocarbons (HCID) and Resource Conservation and Recovery Act (RCRA) 8 metals. The investigation concluded that shallow fill soil within the northwest portion of the Site was impacted with petroleum hydrocarbons and lead. Remedial action was recommended.

A remedial action was completed during fall 2012, which included excavation of contaminated soil in the northwest portion of the Site where high lead levels were reported, onsite stockpiling, and offsite disposal. The 2012 excavation area is shown on Figure 2. Approximately 180 cubic yards of soil were removed from the Site. The results of the investigation and remedial action were not formally provided to Ecology, and a request for no further action was not submitted.

2.1.2 2017 Investigation

Materials Testing and Consulting, Inc. (MTC) completed additional assessment of the Site in 2017 (MTC 2017). The assessment was comprised of a review of the JWM&A investigation and remedial activities, as well as the advancement of 14 borings for the collection of soil samples; borings were advanced 10 ft below ground surface (bgs) and groundwater was not encountered. The 2017 boring locations are shown on Figure 2.

A total of 12 soil samples were analyzed for diesel-range petroleum hydrocarbons (DRO) and oil-range petroleum hydrocarbons (ORO), and RCRA 8 metals. ORO was detected above the reporting limit, but below the Model Toxics Control Act (MTCA) Method A cleanup level (CUL), in one sample. No metals were detected above the MTCA Method A CUL in any sample.

2.2 Ecology Request for Additional Investigation

On February 21, 2019, MTA received a letter from Ecology's VCP (Ecology 2019) confirming the need for additional work at the Site. Ecology identified the following five potential contamination sources:

- Potentially contaminated imported fill material
- Use of the Site as an unpaved parking lot and equipment storage lot
- Use of the Site as a staging and storage yard by Simpson Timber Company
- The presence of coal in the upper 6-8 inches of soil
- The historical presence of a railroad line or lines that existed on the southern end of the property or adjacent to the southern property boundary.

A sixth potential contamination source was identified by MTA and referenced by Ecology:

- Use of the Site for "discarded metals refuse and tailings".

Based on the potential contamination sources, Ecology indicated that the Site had not been assessed for all potential contaminants and requested that soil and groundwater also be analyzed for polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), and carcinogenic polycyclic aromatic hydrocarbons (cPAHs). In addition, Ecology indicated that both an assessment of groundwater and potential for vapor intrusion would need to be completed.

2.3 Site Geology and Hydrogeology

Based on a review of available information, the Site is underlain with Pleistocene-age Vashon recessional outwash (Schasse et al. 2003). Soil borings advanced during LAI's investigation, as described in Section 3.0, encountered fill material consisting of gravel with silt and/or sand; the thickness of the fill varied from 1 ft to 10 ft. Vashon recessional outwash was encountered beneath the fill and consisted of sand and gravel deposits with silt interbeds. Previous investigations identified fill material across the Site at variable depths, to a maximum depth of 3 ft bgs. Native material was identified as consisting of an upper silt and sand unit, followed by a course-grained recessional outwash unit. No evidence of coal or tailings were identified during MTC's or LAI's investigation.

During LAI's investigation, groundwater was encountered at a depth of between approximately 10 ft and 12 ft bgs. Groundwater was not encountered at the Site during previous investigations, to the maximum depth explored, 10 ft bgs. The anticipated groundwater flow direction is to the east, towards Oakland Bay and the Puget Sound.

3.0 DEVELOPMENT OF CLEANUP LEVELS

MTCA Washington Administrative Code (WAC) 173-340-740 cleanup levels (CULs) were developed to evaluate soil and groundwater analytical data collected during this investigation and cleanup action activities. Selected cleanup levels consist of MTCA Method B CULs for soil and MTCA Method A unrestricted land use CULs for groundwater.

Soil Method B CULs were selected from evaluation of human direct contact. No protection of groundwater concentrations were required because there were no detections of any constituents of concern in groundwater above laboratory reporting limits. As provided for in WAC 173-340-747(3)(f), an empirical demonstration was used to show that measured concentrations in soil do not result in any exceedances of MTCA Method A CULs for groundwater. The initial soil screening levels were set at the lowest direct contact exposure pathway concentrations, and then, if appropriate, adjusted up for natural background (i.e. arsenic; USGS 1995). Where no Method B direct contact CULs are available (lead and mercury), and because the Site qualifies for an exclusion from use of ecological CULs (see below), Method A CULs for unrestricted land uses are used. The Method A CUL is appropriate for lead because, as indicated under MTCA Table 740-1, this lead CUL is a conservative value that is “based on preventing unacceptable blood lead levels”¹ (thereby protective of all applicable human exposure pathways). Similarly, the Method A CUL is applicable for mercury because the CUL is a conservative value that is appropriate for unrestricted land uses² (and no other applicable or relevant and appropriate requirements or exposure pathway specific CULs are available). Petroleum hydrocarbon cleanup levels are based on a generic Method B total petroleum hydrocarbon CUL of 1500 milligrams per kilogram (mg/kg) (Ecology 2017). CUL selection criteria for soil is presented in Table 1.

Although MTCA requires consideration of terrestrial plants and animals that may potentially be exposed to hazardous substances, the Site qualifies for exclusion from further terrestrial ecological evaluation (TEE) under WAC 173-340-7491(c)(i). The Site is located in a heavily developed area of downtown Shelton, and there is no contiguous undeveloped land on or within 500 feet of the Site. Therefore, contamination at the Site presents no threat to ecological receptors. A VCP TEE form indicating exclusion status is presented as Appendix C.

¹ Per value calculated under MTCA Equation 747-1, CUL is also lower than value protective of groundwater for vadose zone soils.

² *Id.*

4.0 2019 SUBSURFACE INVESTIGATION

LAI completed investigation activities to address Ecology's identified data gaps, and also to characterize the Site and prepare for the soil disposal needed for construction activities. This investigation included the collection of soil and groundwater samples in areas of potential concern. Soil borings were advanced with a direct-push drill rig at eight locations around the Site, focusing on areas within the historical excavation area, along the property boundary, and near the existing building. Soil samples were collected from each boring; groundwater samples were also collected from three of the borings. The sampling locations are shown on Figure 3 and boring logs are included in Appendix A.

4.1 Direct-Push Drilling

A licensed geologist from LAI supervised all drilling and sampling activities. Direct-push drilling collects a continuous soil core in a 2.25-inch-diameter core barrel with a removable polyethylene liner. Once the desired depth was reached, the core was extracted from the ground and the liner and soil core were removed from the core barrel. Between samples, the core sampler, including sampling points and rods, were properly decontaminated. All soil borings were advanced to 15-ft bgs. Soil borings were backfilled in accordance with Ecology regulations and the ground surface patched with like material to the original grade. Soil boring location coordinates were collected using a hand-held global positioning system (GPS) unit.

4.1.1 Soil Sampling

The following general sampling protocol was applied for each boring where soil samples were collected for laboratory analysis:

- Subsurface soil was field screened for indications of potential contamination via visual and olfactory screening (sheen and odor), as well as headspace analysis using a photoionization detector (PID). Soil was visually described in the field in general accordance with ASTM International D2488-17, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)
- A composite surface soil sample from a depth of 0 to 3 ft was collected from six of the eight soil borings, spaced evenly throughout the Site, and analyzed for disposal characterization purposes. At each of the six borings, the top 0 to 3 ft bgs was composited to represent the material that was planned for disposal
- A discreet soil sample was collected in each of the eight soil borings at the bottom of the boring or immediately above the groundwater table (where encountered). No field-evidence of contamination was observed in any of the samples, therefore, no additional sampling was conducted

- Soil samples were analyzed for gasoline-range organics (GRO), DRO, and ORO; RCRA 8 metals³; PCBs, select VOCs, and cPAHs.

Soil samples were collected in laboratory-supplied jars and submitted under proper chain-of-custody procedures to Eurofins TestAmerica Laboratory (TestAmerica) located in Fife, Washington.

4.1.2 Groundwater Sampling

The direct-push borings were advanced to 15-ft bgs, which was a minimum of 4 ft into the water table for groundwater sampling. Temporary wells, constructed of stainless steel and consisting of a 5-ft-long extendable screen section and a solid, non-slotted casing, were installed at three of the locations. The driller advanced the extendable screen section to the desired depth and pulled the casing 5 ft up to expose the screen to the water-bearing portion of the formation.

All groundwater samples were collected using a peristaltic pump and new dedicated tubing using low-flow groundwater sampling techniques, which include measuring the depth to water with an electronic groundwater level indicator, monitoring field parameters using a YSI 554 multi-parameter probe,⁴ and collecting water samples for laboratory analysis. Low-flow purging was performed using a peristaltic pump for a maximum of 30 minutes, or until the field parameters stabilized or the purge water was clear. To minimize volatilization, a pumping rate was maintained below 100 milliliters per minute. Groundwater samples for dissolved metals analyses were collected last and field-filtered through a 0.45-micron, in-line disposable filter.

Groundwater samples were collected in laboratory-supplied jars and submitted to TestAmerica. Groundwater samples were analyzed for GRO, DRO, and ORO; dissolved RCRA 8 metals; PCBs, select VOCs, and cPAHs.

4.2 Investigation Results

Upon receipt of soil and groundwater laboratory results, LAI conducted a review of the analytical data for quality assurance/quality control (QA/QC) purposes, tabulated the data, and compared the results to applicable regulatory criteria. Laboratory analytical data reports are included in Appendix B. Analytical results were submitted through Ecology's Environmental Information Management system (EIM; required for the VCP program) on September 30, 2019.

4.2.1 Field Screening

Field screening, including VOC headspace analysis using a PID and visual and olfactory screening, was completed at all eight boring locations. No field screening indications of potential contamination were identified.

³ Arsenic, barium, cadmium, total chromium, lead, mercury, selenium, and silver.

⁴ Field parameters include conductivity, dissolved oxygen, oxidation-reduction potential, pH, and temperature.

4.2.2 Soil Analytical Results

Soil analytical results for the 14 samples (six shallow soil samples [0 to 3 ft bgs] and eight samples collected directly above the water table) were compared to CULs and are presented in Table 2.

4.2.2.1 Shallow Soil Samples

Analyses and a summary of shallow soil sample (0 to 3 ft) results are presented below. These shallow soil samples were collected for the purpose of planning waste disposal needs for the planned construction activities.

- GRO, DRO, and/or ORO were detected above the laboratory reporting limit (shallow interval only) in five of the six samples. No total petroleum hydrocarbon concentrations exceeded the total petroleum hydrocarbon CUL
- Metals detected above the laboratory reporting limit in shallow soil samples included arsenic, barium, cadmium, chromium, lead, and mercury. No detected metals concentrations exceeded applicable CULs. Hexavalent chromium was analyzed in the sample with the highest reported total chromium results (60 mg/kg, at MTA-B08 collected from between 0 to 2.5 ft bgs), but was not detected above the laboratory reporting limit in the sample. Therefore, all chromium results were compared to the trivalent chromium CUL
- PCBs and VOCs were not detected above the laboratory reporting limit in any sample
- cPAHs were detected in four of the six shallow soil samples. Benzo(a)pyrene and the cPAH toxic equivalency (TEQ) concentrations exceeded CULs in one sample collected from 0-3 ft bgs at B-06 (1.9 mg/kg and 2.8 mg/kg, respectively). The CUL for both benzo(a)pyrene and the cPAH TEQ is 0.19 mg/kg.

4.2.2.2 Native Soil Samples

Analyses and a summary of native soil samples (collected directly above the water table) are presented below. These native soil samples were collected to characterize soil remaining in place after construction activities and to characterize soil directly above the groundwater.

- Petroleum hydrocarbons, PCBs, VOCs, and cPAHs were not detected above the laboratory reporting limit in any of the native soil samples
- Metals detected above the laboratory reporting limit in native soil samples included barium, cadmium, chromium, and lead. No detected concentrations exceeded CULs.

4.2.3 Groundwater Analytical Results

Groundwater analytical results for the three groundwater samples are presented in Table 3 and were compared to MTCA Method A CULs. One duplicate sample was collected at sample MTA-B02 for quality control purposes. Samples were analyzed for GRO, DRO, and ORO; RCRA 8 metals, PCBs, select VOCs, and cPAHs. No results exceeded laboratory reporting limits in any sample. All laboratory reporting limits were below the CULs.

4.2.4 Vapor Intrusion Assessment

As indicated in Ecology's request for additional investigation letter, dated February 21, 2019, a vapor intrusion assessment was required for the Site. To pose a potential vapor intrusion threat, hazardous substances must be both volatile and toxic. During this subsurface investigation, VOCs were not found in soil or groundwater above CULs anywhere on the Site. Therefore there is no risk to human health or the environment from the vapor intrusion pathway, and the vapor intrusion assessment is complete.

5.0 2020 CLEANUP ACTION AND CONSTRUCTION OVERSIGHT ACTIVITIES

Based on the completed investigation, a cleanup of shallow soil impacted with cPAHs was conducted at the Site as part of the redevelopment construction activities. The results of the subsurface investigation indicated that there was a localized area of soil impacted with cPAHs in the vicinity of boring B-06; analytical results for the soil sample collected between 0 and 3 ft bgs exceeded CULs for benzo(a)pyrene and the cPAH TEQ. Because Site redevelopment already included the removal of the top 1 to 3 ft of soil, the cleanup, consisting of removal and disposal of contaminated soil and excavation confirmation sampling, was integrated into Site redevelopment.

5.1 Summary of Cleanup Activities

Construction and cleanup activities at the Site began in March 2020. Based on final redevelopment plans, contractors initially excavated the top 1-ft of soil throughout the Site. Waste characterization sampling was completed for the top 1-ft of soil stockpiled on the Site. Contaminant concentrations in soil that was left in place after the initial 1-ft of excavation, were below CULs (see Section 5.2.2). Therefore, it was demonstrated that all soil remaining in place after the initial excavation activities were below CULs.

Following the initial excavation activities, an additional 3-ft of soil was excavated, where necessary, to install the permeable pavement parking features. To ensure that all contaminated soil was removed as part of the cleanup activities, confirmation soil sampling was completed at final excavation depths (1-ft or 3-ft below initial ground surface) throughout the Site (see Section 5.3).

5.2 Soil Disposal Activities

The following soil sampling was conducted to characterize stockpiles from the initial 1-ft of soil removal and the remaining soils in-place (1 to 3 ft) for waste disposal. All samples were analyzed by TestAmerica. Equipment decontamination procedures and data QA/QC procedures were followed.

5.2.1 Stockpile Sampling

During the remedial action, the top 1 ft of soil was excavated from the Site and initially stockpiled in five separate stockpiles, named SP-A through SP-E, totaling approximately 150-cubic yards. These stockpiles were later moved and resampled, and named SP-F through SP-J. Prior to disposal, LAI collected one composite sample from each of the five stockpiles, as well as one composite sample comprised of material from each of the first five stockpiles (sample ID: MTA-SP). All 11 composite soil samples were analyzed for cPAHs and 10 of the 11 composite soil samples were analyzed for RCRA 8 metals in order to supplement previously collected soil data and coordinate disposal.

Waste characterization analytical results are presented in Table 4. Analytical results indicate low-levels of metals, however lead was detected at a concentration as high as 300 mg/kg (SP-G). At SP-E,

lead was detected at a concentration of 260 mg/kg. Follow-up toxicity characteristic leaching procedure (TCLP) lead analysis was completed; the results was 0.13 mg/L, indicating that the material does not exceed the TCLP non-hazardous waste acceptance criteria for the disposal facility. cPAHs were detected above the laboratory reporting limit in all six samples. The highest detected concentrations of benzo(a)pyrene and the cPAH TEQ were 0.12 mg/kg and 0.176 mg/kg, respectively (SP-B).

5.2.2 Additional Soil Characterization Sampling

Following removal of the top 1-ft of soil, additional soil sampling was completed in the vicinity of B-06 (where the previous surface soil sample exceeded CULs for cPAHs) in order to determine if additional impacted soil was required to be removed, how much additional soil would need to be removed and managed as non-hazardous waste, and how much could be reused as clean soil. Four 2-ft deep test pits were excavated (B-09 through B-12). One test pit was located adjacent to boring location B-06, and the other three test pits surrounded the B-06 boring location, approximately 15 ft to the south, northeast, and northwest. One composite soil sample from 1 to 3 ft bgs was collected from each test pit. Samples were analyzed for cPAHs. Test pit locations are shown on Figure 4.

Soil analytical results were compared to CULs and are presented in Table 5. While cPAHs were detected above the laboratory reporting limit in three of the four samples, none of the detected cPAH concentrations exceeded CULs.

5.2.3 Soil Disposal

The owner was advised to dispose of excess soil from the Site at an appropriate permitted landfill facility. The top foot of the soil from the Site that was stockpiled was recommended for disposal at a Subtitle D landfill. The remaining soil from the Site was recommended for disposal at the Waller Road Inert Landfill.

5.3 Soil Confirmation Sampling and Results

Following completion of all excavation activities at the Site, soil confirmation sampling was completed to confirm that all contaminated soil was removed. Nine soil samples were collected from representative 1-ft and 3-ft excavation depth locations throughout the Site. All soil samples were analyzed for DRO, ORO, RCRA 8 metals, PCBs, and cPAHs. Soil confirmation sample locations, as well as the final excavation depths from Site redevelopment, are shown on Figure 5.

Upon receipt of soil and groundwater laboratory results, LAI conducted a review of the analytical data for quality assurance/quality control (QA/QC) purposes, tabulated the data, and compared the results to applicable CULs (Table 1). Laboratory analytical data reports are included in Appendix B. Analytical results were submitted through Ecology's EIM (required for the VCP program).

Soil confirmation sample analytical results indicate that all contaminated soil has been successfully removed from the Site and that no further action is required. Soil confirmation sample analytical results are presented in Table 5 and are summarized below:

- DRO and PCBs were not detected above the laboratory reporting limit in any sample
- ORO was detected in eight of the nine samples at a maximum concentration of 220 mg/kg (B15), well below the total petroleum hydrocarbon CUL (1,500 mg/kg)
- Arsenic, barium, chromium, lead, and mercury were all detected above the laboratory reporting limit in at least one sample; however, none were detected at concentrations exceeding CULs
- cPAHs were detected above the laboratory reporting limit in eight of the nine samples. The highest cPAH TEQ was detected at a maximum concentration of 0.1129 mg/kg (B13), which is below the CUL (0.19 mg/kg).

6.0 SUMMARY AND CONCLUSIONS

LAI completed a subsurface investigation in support of the proposed MTA Transit-Community Center (T-CC) parking lot redevelopment and cleanup action project, located at 536 Railroad Avenue in Shelton, Washington. The Site is enrolled in Ecology's VCP due to apparent releases of petroleum compounds and metals to soil. The source of the releases appear to be related to one or more historical site uses as identified by Ecology, which include potentially contaminated imported fill material, use of the Site as an unpaved parking lot and equipment storage lot, use of the Site as a staging and storage yard by Simpson Timber Company, the presence of coal in the upper 6-8 inches of soil, the historical presence of a railroad line or lines that existed on the southern end of the property or adjacent to the southern property boundary, and the use of the Site for "discarded metals refuse and tailings".

LAI completed the subsurface investigation documented in this report for the purpose of addressing data gaps identified by Ecology, to assist MTA in receiving an NFA determination, and to properly characterize soil for disposal during Site construction/soil excavation activities. The subsurface investigation included the collection of soil and groundwater samples in areas of potential concern (including the historical excavation area, property boundaries, and adjacent to the existing building). No coal or discarded metals refuse or tailings were identified during the investigation activities.

Pre-construction/soil excavation sampling analytical results indicate that concentrations of GRO, DRO, ORO (total petroleum hydrocarbons), RCRA 8 metals, PCBs, and VOCs were all below CULs in soil and groundwater. Hazardous substances with the potential to contaminate soil gas or indoor air were not identified, therefore do not indicate the potential for vapor intrusion. The only contaminants of concern at the Site were cPAHs in a discreet area of the Site.

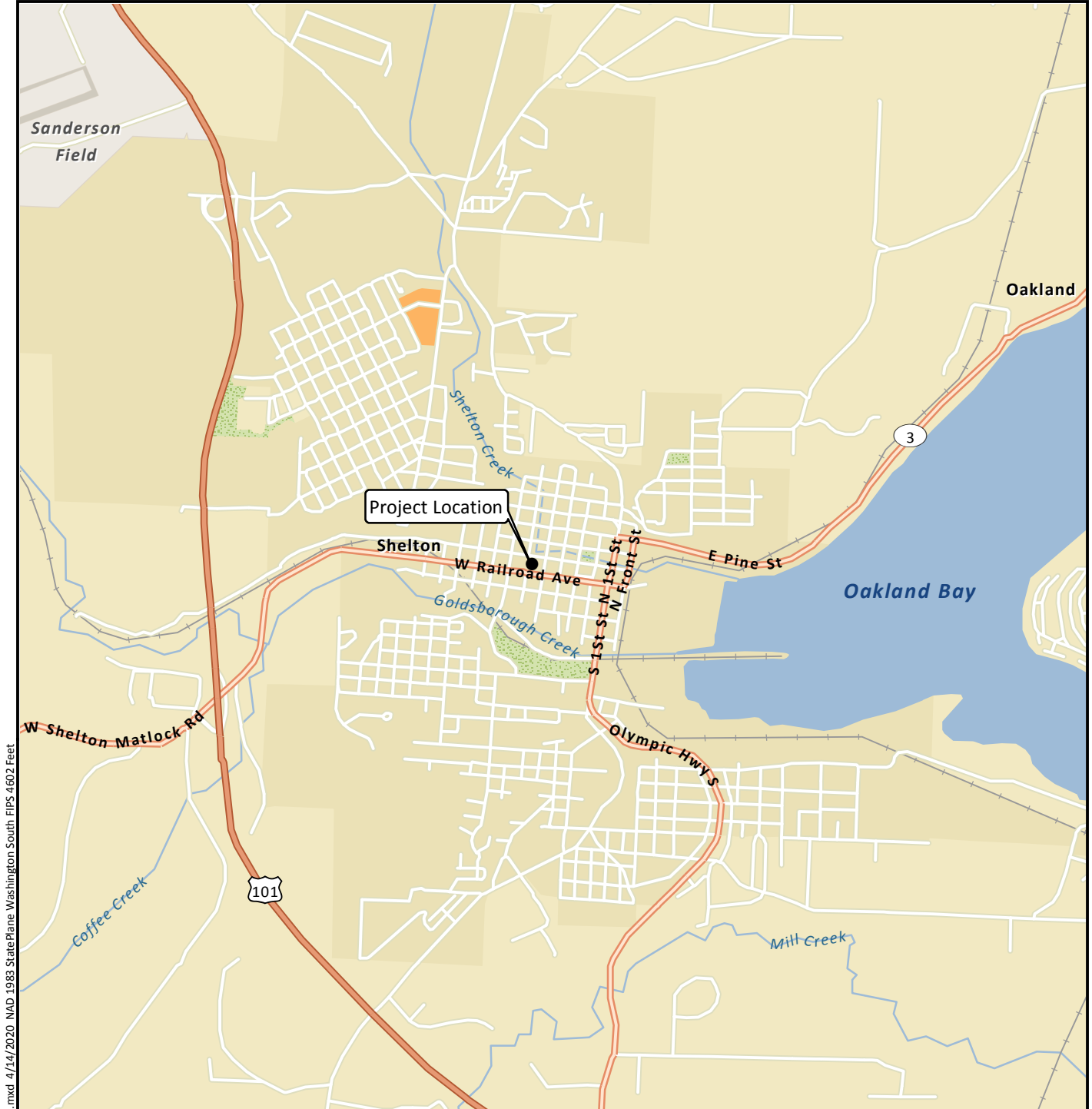
Soil excavation including the removal of cPAH-contaminated soil was completed as part of Site redevelopment activities. Based on the completed cleanup action and soil confirmation sample analytical results, soils containing contaminants of concern above CULs have been successfully removed from the Site, and remaining soils at the Site do not contain concentrations of cPAHs or other analytes above the applicable MTCA Method B CULs. Based on these results, on behalf of MTA, it is requested that Ecology grant an NFA determination for the Site.

7.0 USE OF THIS REPORT

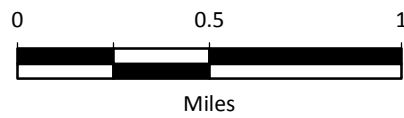
This report has been prepared for the exclusive use of MTA for the T-CC Site. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of LAI. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by LAI, shall be at the user's sole risk. LAI warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. LAI makes no other warranty, either express or implied.

8.0 REFERENCES

- Ecology. 2017. *Model Remedies for Sites with Petroleum Contaminated Soils*. edited by Toxics Cleanup Program: Washington State Department of Ecology.
- Ecology. 2019. Letter: Re: Further Action at the following Site: VCP Project ID SW1634. Prepared by Aaren Fiedler, Washington State Department of Ecology, Southwest Regional Office, Toxics Cleanup Program for Danette Brannin, Mason Transit Authority. February 21.
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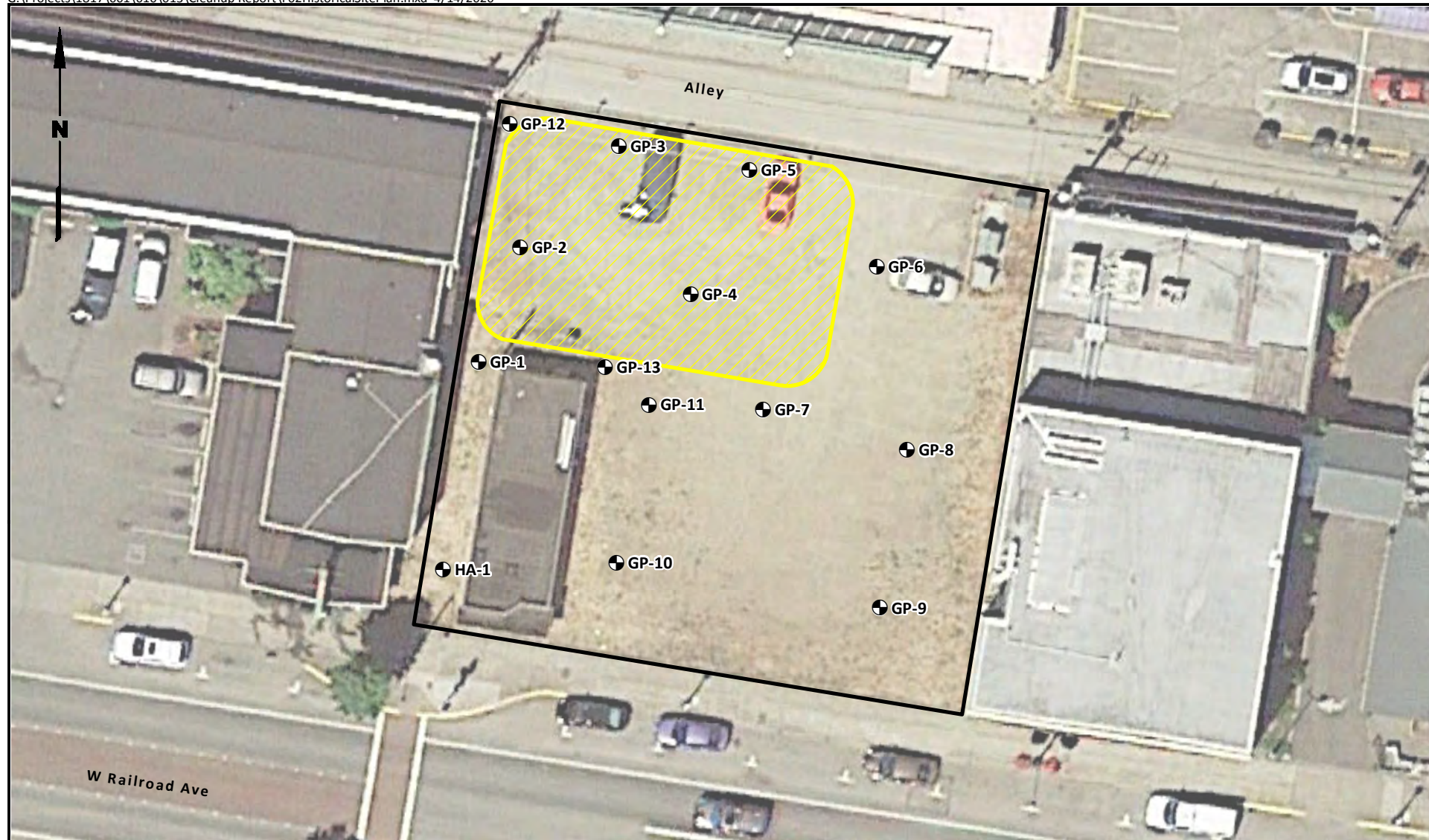
G:\Projects\1817\001\010\013\Cleanup Report\F01VicMap.mxd 4/14/2020 NAD 1983 StatePlane Washington South FIPS 4602 Feet



Data Source: Esri 2012

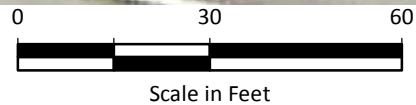


Mason Transit Authority T-CC Parking Lot Shelton, Washington	Vicinity Map	Figure 1



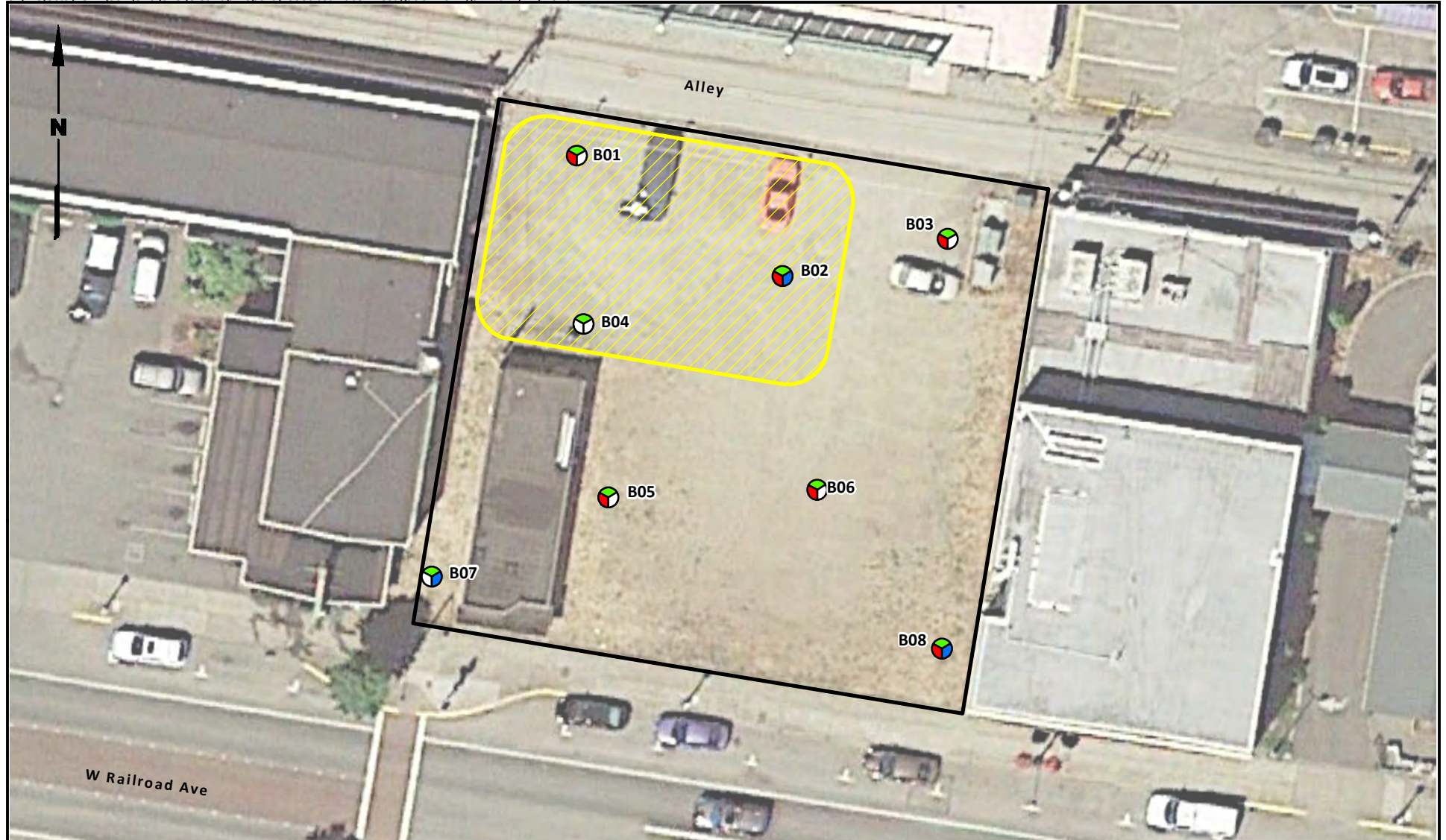
Legend

- 2017 Soil Sample
- Approximate Extent of 2012 JWM&A Excavation
- Subject Property



Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.



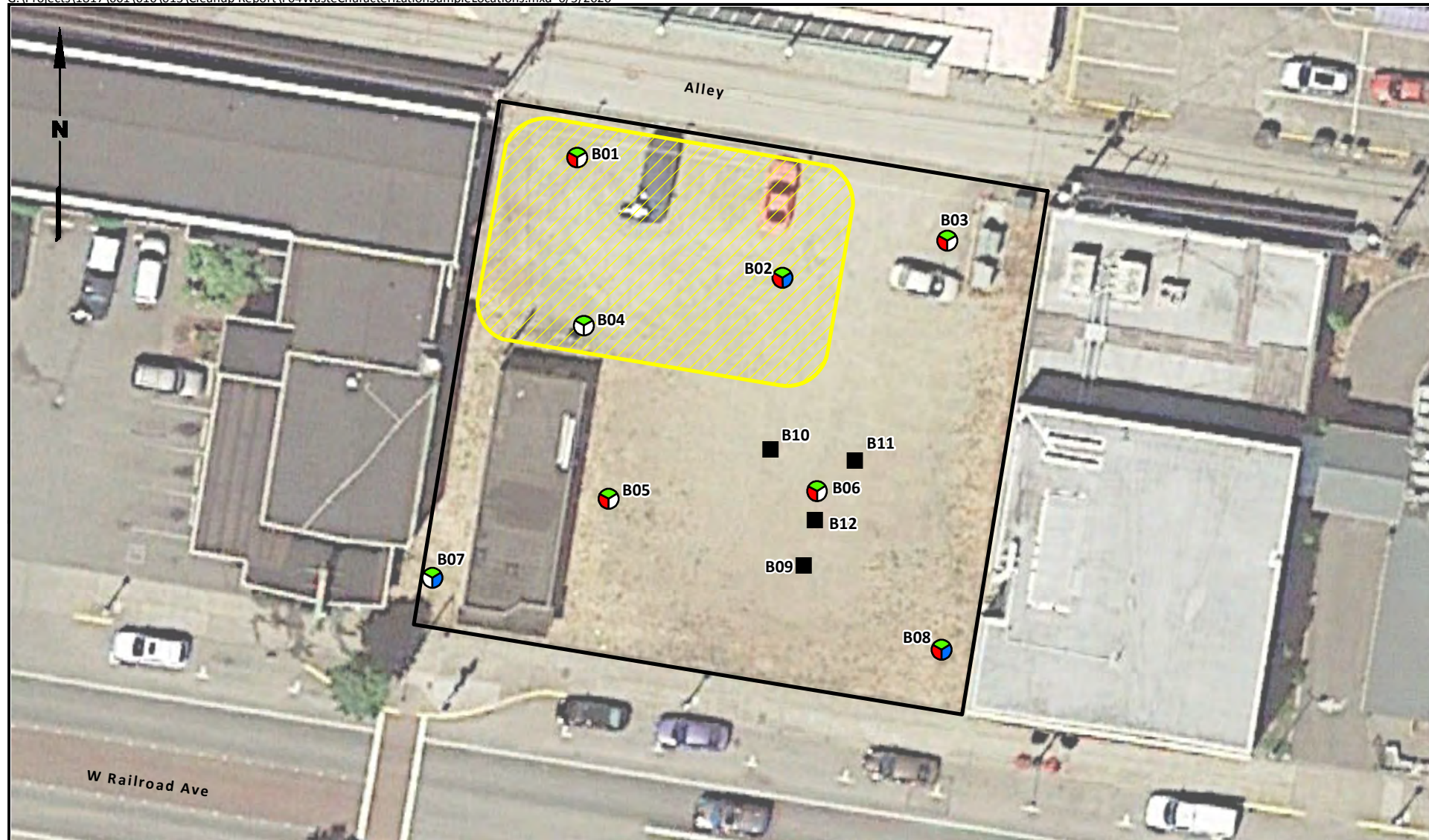
Legend

-  Shallow Soil Sample
-  Deep Soil Sample
-  Groundwater Sample
-  Approximate Extent of 2012 JWM&A Excavation
-  Subject Property

Data Source: Google Earth Pro.

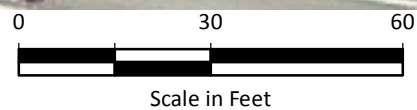
Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.



Legend

-  Shallow Soil Sample
-  Deep Soil Sample
-  Groundwater Sample
-  Soil Disposal Characterization Sample
-  Approximate Extent of 2012 JWM&A Excavation
-  Subject Property



Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.



Data Source: Google Earth Pro.

Mason Transit Authority
T-CC Parking Lot
Shelton, WA

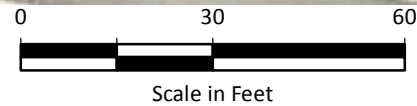
**2020 Waste
Characterization Sample Locations**

Figure
4



Legend

- Approximate Extent of 2012 JWM&A Excavation
- 1-ft Excavation - Gravel Walkway
- 1-ft Excavation - Planter Area
- 3-ft Excavation - Permeable Pavement Area
- 2020 Soil Characterization Sample
- Subject Property



Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Table 1
Cleanup Levels
Mason Transit Authority
Shelton, Washington

Analyte	Method A Unrestricted (mg/kg)	Method B		Background Soil Metals Concentration (a) (mg/kg)	Soil CUL (mg/kg)	Basis for Soil CUL
		Method B Non-Cancer Direct Contact (mg/kg)	Method B Cancer Direct Contact (mg/kg)			
Gasoline Range Organics	30/100	NA	NA	--	--	
Diesel Range Organics	2,000	NA	NA	--	--	
Oil Range Organics	2,000	NA	NA	--	--	
Total Petroleum Hydrocarbons	NA	1,500 (b)		--	1,500	Generic TPH Method B Cleanup Level
Arsenic	20	24	0.67	13	13	Method B Cancer direct contact adjusted for natural background.
Barium	N/A	16,000	--	760	16,000	Method B Non-cancer Direct Contact
Cadmium	2	80	--	<2.3	80	Method B Non-cancer Direct Contact
Chromium, Total	2,000 (c)	120,000	--	190	120,000	Method B Non-cancer Direct Contact
Chromium, Hexavalent	19	240	--	--	240	Method B Non-cancer Direct Contact
Lead	250	--	--	18	250	Method A, No Method B value available
Mercury	2	--	--	0.4	2	Method A, No Method B value available
Selenium	N/A	400	--	1	400	Method B Non-cancer Direct Contact
Silver	N/A	400	--	<2.0	400	Method B Non-cancer Direct Contact
Aroclor 1016	N/A	5.6	14	--	5.6	Method B Non-cancer Direct Contact
Aroclor 1221	N/A	--	--	--	--	
Aroclor 1232	N/A	--	--	--	--	
Aroclor 1242	N/A	--	--	--	--	
Aroclor 1248	N/A	--	--	--	--	
Aroclor 1254	N/A	1.6	0.5	--	0.5	Method B Cancer Direct Contact
Aroclor 1260	N/A	--	0.5	--	0.5	Method B Cancer Direct Contact
Total PCBs	1	--	0.5	--	0.5	Method B Cancer Direct Contact
1,2-Dibromoethane (EDB)	0.005	720	0.5		0.5	Method B Cancer Direct Contact
1,2-Dichloroethane	N/A	480	11	--	11	Method B Cancer Direct Contact
Benzene	0.03	320	18	--	18	Method B Cancer Direct Contact
Ethylbenzene	6	8,000	--	--	8000	Method B Cancer Direct Contact
m-&p-Xylenes	N/A	16,000	--	--	16000	Method B Cancer Direct Contact
Methyl-tert-butyl ether	0.1	--	560	--	560	Method B Non-cancer Direct Contact
o-Xylene	N/A	16,000	--	--	16,000	Method B Cancer Direct Contact
Toluene	7	6,400	--	--	6,400	Method B Cancer Direct Contact
Total Xylenes	9	16,000	--	--	16,000	Method B Cancer Direct Contact
Benzo(a)anthracene	N/A	--	--	--	--	
Benzo(a)pyrene	0.1	24	0.19	--	0.19	Method B Cancer Direct Contact
Benzo(b)fluoranthene	N/A	--	--	--	--	
Benzo(k)fluoranthene	N/A	--	--	--	--	
Chrysene	N/A	--	--	--	--	
Dibenzo(a,h)anthracene	N/A	--	--	--	--	
Indeno(1,2,3-cd)pyrene	N/A	--	--	--	--	
cPAH TEQ	0.1	24	0.19	--	0.19	Method B Cancer Direct Contact

Notes:

- (a) Washington State 90th percentile value as determined by the total method (USGS. 1995. *Background Concentrations of Metals in Soils from Selected Regions in the State of Washington*. Ames, Kenneth C. and Edumd A. Prych. U.S. Geological Survey (USGS), Water Resources Investigations Report 95-4018.)
- (b) Generic Method B CUL value for TPH based on Ecology Model Remedies Guidance (Ecology. 2017. *Model Remedies for Sites with Petroleum Contaminated Soils*; edited by Toxics Cleanup Program: Washington State Department of Ecology).
- (c) Hexavalent chromium was not detected above the laboratory reporting limit in any sample, therefore the trivalent chromium cleanup level is used for total chromium results.

Acronyms/Abbreviations:

MTCA = Model Toxics Control Act
N/A = not applicable
cPAH = carcinogenic polycyclic aromatic hydrocarbon

TEQ = toxicity equivalency quotient
TPH = total petroleum hydrocarbons

Table 2
2019 Subsurface Investigation Soil Analytical Results
Mason Transit Authority
Shelton, Washington

Analyte	CUL	Sample Location, Sample Depth Interval, Sample Date, Sample Type, Lab Sample ID													
		MTA-B01	MTA-B01	MTA-B02	MTA-B02	MTA-B03	MTA-B03	MTA-B04	MTA-B05	MTA-B05	MTA-B06	MTA-B06	MTA-B07	MTA-B08	MTA-B08
		0-3 ft	7.3-8.3 ft	0-3 ft	5.5-6.5 ft	0-3 ft	7-10.5 ft	10.5-11.5 ft	0-2.4 ft	8-9 ft	0-3 ft	7.5-8.5 ft	6.5-7.5 ft	0-2.5 ft	7.5-8.5 ft
		6/25/2019	6/25/2019	6/26/2019	6/26/2019	6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/26/2019	6/25/2019	6/26/2019	6/25/2019	6/25/2019
		N	N	N	N	N	N	N	N	N	N	N	N	N	N
		580-87175-12	580-87175-13	580-87205-4	580-87205-5	580-87175-7	580-87175-3	580-87175-11	580-87175-9	580-87175-10	580-87205-3	580-87175-8	580-87205-8	580-87175-4	580-87175-5
Select Volatile Organic Compounds (mg/kg; SW-846 8260C)															
1,2-Dibromoethane (EDB)	0.5	0.00076 UJ	0.0012 U	0.00096 UJ	0.0011 U	0.00085 UJ	0.00096 UJ	0.00089 U	0.00083 UJ	0.00085 U	0.00086 UJ	0.00086 U	0.00089 UJ	0.00093 U	0.00086 U
1,2-Dichloroethane	11	0.00076 UJ	0.0012 U	0.00085 UJ	0.0010 U	0.00085 UJ	0.00096 UJ	0.00089 U	0.00083 UJ	0.00085 U	0.0010 UJ	0.00086 U	0.00092 UJ	0.00093 U	0.00086 U
Benzene	18	0.0015 UJ	0.0024 U	0.0017 UJ	0.0020 U	0.0017 UJ	0.0019 UJ	0.0018 U	0.0017 UJ	0.0017 U	0.0020 UJ	0.0017 U	0.0018 UJ	0.0019 U	0.0017 U
Ethylbenzene	8000	0.0015 UJ	0.0024 U	0.0017 UJ	0.0020 U	0.0017 UJ	0.0019 UJ	0.0018 U	0.0017 UJ	0.0017 U	0.0020 UJ	0.0017 U	0.0018 UJ	0.0019 U	0.0017 U
m-&p-Xylenes	16000	0.0076 UJ	0.012 U	0.0085 UJ	0.01 U	0.0085 UJ	0.0096 UJ	0.0089 U	0.0083 UJ	0.0085 U	0.01 UJ	0.0086 U	0.0092 UJ	0.0093 U	0.0086 U
Methyl-tert-butyl ether	560	0.0015 UJ	0.0024 U	0.0019 UJ	0.0022 U	0.0017 UJ	0.0019 UJ	0.0018 U	0.0017 UJ	0.0017 U	0.0017 UJ	0.0017 U	0.0018 UJ	0.0019 U	0.0017 U
o-Xylene	16000	0.0038 UJ	0.0060 U	0.0042 UJ	0.0051 U	0.0043 UJ	0.0048 UJ	0.0045 U	0.0041 UJ	0.0042 U	0.0050 UJ	0.0043 U	0.0046 UJ	0.0046 U	0.0043 U
Toluene	6400	0.0076 UJ	0.012 U	0.0085 UJ	0.01 U	0.0085 UJ	0.0096 UJ	0.0089 U	0.0083 UJ	0.0085 U	0.01 UJ	0.0086 U	0.0092 UJ	0.0093 U	0.0086 U
Total Xylenes	16000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semivolatile Organic Compounds (mg/kg; SW-846 8270D SIM)															
Benzo(a)anthracene	N/A	0.0099 U	0.01 U	0.012 U	0.01 U	0.017	0.01 U	0.01 U	0.01 U	0.0098 U	2.4	0.01 U	0.01 U	0.021	0.0099 U
Benzo(a)pyrene	0.19	0.0099 U	0.01 U	0.012 U	0.01 U	0.021	0.01 U	0.01 U	0.01 U	0.0098 U	1.9	0.01 U	0.01 U	0.025	0.0099 U
Benzo(b)fluoranthene	N/A	0.023	0.01 U	0.012 U	0.01 U	0.034	0.01 U	0.01 U	0.014	0.0098 U	3.0	0.01 U	0.01 U	0.029	0.0099 U
Benzo(k)fluoranthene	N/A	0.0099 U	0.01 U	0.012 U	0.01 U	0.013	0.01 U	0.01 U	0.01 U	0.0098 U	1.1	0.01 U	0.01 U	0.01 U	0.0099 U
Chrysene	N/A	0.017	0.01 U	0.012 U	0.01 U	0.027	0.01 U	0.01 U	0.014	0.0098 U	2.6	0.01 U	0.01 U	0.032	0.0099 U
Dibenzo(a,h)anthracene	N/A	0.0099 U	0.01 U	0.012 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0098 U	0.47	0.01 U	0.01 U	0.01 U	0.0099 U
Indeno(1,2,3-cd)pyrene	N/A	0.0099 U	0.01 U	0.012 U	0.01 U	0.015	0.01 U	0.01 U	0.01 U	0.0098 U	1.3	0.01 U	0.01 U	0.013	0.0099 U
cPAH TEQ	0.19	0.0025	ND	ND	ND	0.029	ND	ND	0.0015	ND	2.8	ND	ND	0.032	ND

Notes:

- Bold** text indicates detected analyte
- Green shading indicates detected analyte exceeds applicable cleanup level
- (a) Hexavalent chromium was not detected above the laboratory reporting limit in any sample, therefore the trivalent chromium cleanup level is used.
- (b) Maximum concentration of contaminants for the toxicity characteristic; Washington Administrative Code 173-303-090.
- J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- U = The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
- UJ = The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Acronyms/Abbreviations:

- CUL = cleanup level

EDB = ethylene dibromide

FD = field duplicate

ft = feet

ID = Identification

µg/kg = micrograms per kilogram

MTCA = Model Toxics Control Act

N = primary sample
- = not analyzed

N/A = not applicable

ND = not detected

PAH = polycyclic aromatic hydrocarbon

SIM = selected ion monitoring

TCLP = toxicity characteristic leaching procedure

TEQ = toxicity equivalency quotient

Table 3
2019 Subsurface Investigation Groundwater Analytical Results
Mason Transit Authority
Shelton, Washington

Analyte	MTCA Method A CUL	Sample Location, Sample End Depth, Sample Date, Sample Type, Laboratory Sample ID			
		MTA-B02	MTA-B02	MTA-B07	MTA-B08
		14 ft	14 ft	14 ft	14 ft
		6/26/2019	6/26/2019	6/26/2019	6/25/2019
		N	FD	N	N
		580-87205-6	580-87205-7	580-87205-9	580-87175-6
Petroleum Hydrocarbons (µg/L; NWTPH-Gx, -Dx)					
Gasoline Range Organics	800/1,000	250 U	250 U	250 U	250 U
Diesel Range Organics	500	240 U	240 U	240 U	240 U
Oil Range Organics	500	400 U	400 U	400 U	400 U
Dissolved Metals (µg/L; SW-846 6020D, 7470A)					
Arsenic	5	5.0 U	5.0 U	5.0 U	5.0 U
Barium	N/A	6.0 U	6.0 U	6.0 U	6.0 U
Cadmium	5	2.0 U	2.0 U	2.0 U	2.0 U
Chromium, Total	50	2.0 U	2.0 U	2.0 U	2.0 U
Lead	15	4.0 U	4.0 U	4.0 U	4.0 U
Mercury	2	0.30 U	0.30 U	0.30 U	0.30 U
Selenium	N/A	40 U	40 U	40 U	40 U
Silver	N/A	2.0 U	2.0 U	2.0 U	2.0 U
Polychlorinated Biphenyls (µg/L; SW-846 8082A)					
Aroclor 1016	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1221	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1232	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1242	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1248	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1254	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1260	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Total PCBs	0.1	ND	ND	ND	ND
Select Volatile Organic Compounds (µg/L; SW-846 8011, 8260C)					
1,2-Dibromoethane (EDB)	0.01	0.010 U	0.020 U	0.0099 U	0.0099 U
1,2-Dichloroethane	5	0.20 U	0.20 U	0.20 U	0.20 U
Benzene	5	0.20 U	0.20 U	0.20 U	0.20 U
Ethylbenzene	700	0.20 U	0.20 U	0.20 U	0.20 U
m-&p-Xylenes	N/A	0.50 U	0.50 U	0.50 U	0.50 U
Methyl-tert-butyl ether	20	0.30 U	0.30 U	0.30 U	0.30 U
o-Xylene	N/A	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	1,000	0.20 U	0.20 U	0.20 U	0.20 U
Total Xylenes	1,000	ND	ND	ND	ND
Semivolatile Organic Compounds (µg/L; SW-846 8270D SIM)					
Benzo(a)anthracene	N/A	0.091 U	0.093 U	0.091 U	0.091 U
Benzo(a)pyrene	0.1	0.091 U	0.093 U	0.091 U	0.091 U
Benzo(b)fluoranthene	N/A	0.091 U	0.093 U	0.091 U	0.091 U
Benzo(k)fluoranthene	N/A	0.091 U	0.093 U	0.091 U	0.091 U
Chrysene	N/A	0.091 U	0.093 U	0.091 U	0.091 U
Dibenzo(a,h)anthracene	N/A	0.091 U	0.093 U	0.091 U	0.091 U
Indeno(1,2,3-cd)pyrene	N/A	0.091 U	0.093 U	0.091 U	0.091 U
cPAH TEQ	0.1	ND	ND	ND	ND

Notes:

Bold text indicates detected analyte

U = The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

Acronyms/Abbreviations:

CUL = cleanup level	N = primary sample
EDB = ethylene dibromide	N/A = not applicable
FD = field duplicate	ND = not detected
ft = feet	PAH = polycyclic aromatic hydrocarbon
ID = Identification	SIM = selected ion monitoring
µg/L = micrograms per liter	TEQ = toxicity equivalency quotient
MTCA = Model Toxics Control Act	

Table 4
2020 Waste Characterization Analytical Results
Mason Transit Authority
Shelton, Washington

Analyte	Location, Sample Date, Sample Type, Lab Sample ID										
	MTA-SP 3/16/2020 N	MTA-SP-A 3/16/2020 N	MTA-SP-B 3/16/2020 N	MTA-SP-C 3/16/2020 N	MTA-SP-D 3/16/2020 N	MTA-SP-E 3/16/2020 N	MTA-SP-F 5/11/2020 N	MTA-SP-G 5/11/2020 N	MTA-SP-H 5/11/2020 N	MTA-SP-I 5/11/2020 N	MTA-SP-J 5/11/2020 N
	580-93490-5	580-93490-6	580-93490-7	580-93490-8	580-93490-9	580-93490-10	580-94618-1	580-94618-1	580-94618-1	580-94618-1	580-94618-1
Semivolatile Organic Compounds (mg/kg; SW-846 8270D SIM)											
Benzo(a)anthracene	0.015 J	0.04 J	0.1 J	0.014 J	0.0057 UJ	0.0054 UJ	0.088	0.026	0.066	0.028 U	0.027 UJ
Benzo(a)pyrene	0.014 J	0.048 J	0.12 J	0.016 J	0.0057 UJ	0.0054 UJ	0.077	0.026 U	0.031	0.028 U	0.027 UJ
Benzo(b)fluoranthene	0.047 J	0.11 J	0.31 J	0.046 J	0.0057 UJ	0.012 J	0.16	0.064	0.092	0.028 U	0.032 J
Benzo(k)fluoranthene	0.0092 J	0.0052 UJ	0.0051 UJ	0.0054 UJ	0.0057 UJ	0.0054 UJ	0.044	0.026 U	0.027 U	0.028 U	0.027 UJ
Chrysene	0.037 J	0.07 J	0.15 J	0.031 J	0.0077 J	0.01 J	0.13	0.06	0.094	0.028 U	0.028 J
Dibenzo(a,h)anthracene	0.0053 UJ	0.0064 J	0.028 J	0.0054 UJ	0.0057 UJ	0.0054 UJ	0.026 U	0.026 U	0.027 U	0.028 U	0.027 UJ
Indeno(1,2,3-cd)pyrene	0.020 J	0.043 J	0.11 J	0.015 J	0.0057 UJ	0.0054 UJ	0.072	0.028	0.027 U	0.028 U	0.027 UJ
cPAH TEQ	0.023 J	0.069 J	0.176 J	0.024 J	0.0001 J	0.0013 J	0.1147	0.0124	0.04774	0.028 U	0.00348 J
Total Metals (mg/kg; SW-846 6010C/7471A)											
Arsenic	--	3.0	2.8	2.7	3.8	3.6	3.2	5.0	3.9	3.7	3.2
Barium	--	65	49	64	110	90	55	69	62	75	56
Cadmium	--	0.85 U	0.68 U	0.82 U	1.1	0.99 U	0.75 U	0.65 U	0.67 U	0.69 U	0.68 U
Chromium, Total	--	42	39	46	77	54	52	53	38	44	41
Lead	--	160	120	230	250	260	150	300	130	210	110
Mercury	--	0.051	0.040	0.047	0.063	0.064	0.074	0.089	0.056	0.070	0.040
Selenium	--	4.2 U	3.4 U	4.1 U	4.1 U	4.9 U	3.8 U	3.3 U	3.4 U	3.4 U	3.4 U
Silver	--	2.1 U	1.7 U	2.0 U	2.0 U	2.5 U	1.9 U	1.6 U	1.7 U	1.7 U	1.7 U
TCLP Metals (mg/L; SW-846 6020C)											
Lead	--	--	--	--	--	0.13	--	--	--	--	--

Notes:

Bold text indicates detected analyte
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Acronyms/Abbreviations:

ID = Identification
mg/kg = milligrams per kilogram
N = primary sample
N/A = not applicable
SIM = selected ion monitoring
TEQ = toxicity equivalency quotient

Table 5
2020 Additional Soil Characterization Results
Mason Transit Authority
Shelton, Washington

		Sample Location, Sample Depth Interval, Sample Date, Lab Sample ID			
		MTA-B09 1-3 ft 3/16/2020 580-93490-1	MTA-B10 1-3 ft 3/16/2020 580-93490-2	MTA-B11 1-3 ft 3/16/2020 580-93490-3	MTA-B12 1-3 ft 3/16/2020 580-93490-4
	CUL				
Semivolatile Organic Compounds (mg/kg; SW-846 8270D SIM)					
Benzo(a)anthracene	N/A	0.016	0.0061 U	0.0079	0.052
Benzo(a)pyrene	0.19	0.0090	0.0061 U	0.0059 U	0.044
Benzo(b)fluoranthene	N/A	0.043	0.0061 U	0.017	0.120
Benzo(k)fluoranthene	N/A	0.0094	0.0061 U	0.0059 U	0.026
Chrysene	N/A	0.028	0.0061 U	0.013	0.063
Dibenzo(a,h)anthracene	N/A	0.0062 U	0.0061 U	0.0059 U	0.011
Indeno(1,2,3-cd)pyrene	N/A	0.027	0.0061 U	0.011	0.059
cPAH TEQ	0.19	0.019	ND	0.004	0.071

Notes:

Bold text indicates detected analyte

U = The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

Acronyms/Abbreviations:

CUL = cleanup level

cPAH = carcinogenic polycyclic aromatic hydrocarbon

ft = feet

ID = Identification

mg/kg = milligrams per kilogram

ND = not detected

N/A = not applicable

SIM = selected ion monitoring

TEQ = toxicity equivalency quotient

Table 6
2020 Soil Confirmation Analytical Results
Mason Transit Authority
Shelton, Washington

Analyte	CUL	Sample Location, Sample Depth Interval, Sample Date, Sample Type, Lab Sample ID								
		MTA-B13	MTA-B14	MTA-B15	MTA-B16	MTA-B17	MTA-B18	MTA-B19	MTA-B20	MTA-B21
		1 ft	1 ft	1 ft	1 ft	3 ft	3 ft	3 ft	3 ft	3 ft
		5/11/2020	5/11/2020	5/11/2020	5/21/2020	5/21/2020	5/21/2020	5/21/2020	5/21/2020	5/21/2020
		N	N	N	N	N	N	N	N	N
		580-94618-1	580-94618-1	580-94618-1	580-94853-1	580-94853-2	580-94853-3	580-94853-4	580-94853-5	580-94853-6
Petroleum Hydrocarbons (mg/kg; NWTPH-Dx)										
Diesel Range Organics	--	53 U	56 U	58 U	52 U	51 U	49 U	52 U	51 U	52 U
Oil Range Organics	--	170	220	120	52 U	140	54	170	110	97
Total Petroleum Hydrocarbons	1,500	170	220	120	ND	140	54	170	110	97
Total Metals (mg/kg; SW-846 6020C, 7470A)										
Arsenic	13	7.3	3.4	3.1	4.7 U	4.7 U	4.3 U	5.1	4.7 U	4.6 U
Barium	16000	86 J	93	95	47	73	54	80	78	77
Cadmium	80	0.70 U	0.80 U	0.81 U	1.6 U	1.6 U	1.4 U	1.6 U	1.6 U	1.5 U
Chromium, Total (a)	120,000	69	94	95	52	93	70	82	94	83
Lead	250	140	170	62	14 J	63	26	56	43	35
Mercury	2	0.10 J	0.039	0.039	0.025 U	0.027 U	0.026	0.033	0.029	0.029 U
Selenium	400	3.5 U	4.0 U	4.1 U	7.8 U	7.8 U	7.1 U	7.8 U	7.8 U	7.6 U
Silver	400	1.8 U	2.0 U	2.0 U	3.9 U	3.9 U	3.6 U	3.9 U	3.9 U	3.8 U
Polychlorinated Biphenyls (mg/kg; SW-846 8082A)										
Aroclor 1016	5.6	0.021 U	0.022 U	0.023 U	0.020 U	0.021 U	0.022 U	0.022 U	0.022 U	0.021 U
Aroclor 1221	N/A	0.021 U	0.022 U	0.023 U	0.020 U	0.021 U	0.022 U	0.022 U	0.022 U	0.021 U
Aroclor 1232	N/A	0.021 U	0.022 U	0.023 U	0.020 U	0.021 U	0.022 U	0.022 U	0.022 U	0.021 U
Aroclor 1242	N/A	0.021 U	0.022 U	0.023 U	0.020 U	0.021 U	0.022 U	0.022 U	0.022 U	0.021 U
Aroclor 1248	N/A	0.021 U	0.022 U	0.023 U	0.020 U	0.021 U	0.022 U	0.022 U	0.022 U	0.021 U
Aroclor 1254	0.5	0.021 U	0.022 U	0.023 U	0.020 U	0.021 U	0.022 U	0.022 U	0.022 U	0.021 U
Aroclor 1260	0.5	0.021 U	0.022 U	0.023 U	0.020 U	0.021 U	0.022 U	0.022 U	0.022 U	0.021 U
Total PCBs	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semivolatile Organic Compounds (mg/kg; SW-846 8270D SIM)										
Benzo(a)anthracene	N/A	0.095	0.028 U	0.027 U	0.0049 U	0.025 U	0.034	0.049	0.026	0.011
Benzo(a)pyrene	0.19	0.082	0.028 U	0.027 U	0.0049 U	0.025 U	0.027	0.037	0.017	0.0076
Benzo(b)fluoranthene	N/A	0.11	0.028	0.027 U	0.0096	0.042	0.043	0.076	0.038	0.018
Benzo(k)fluoranthene	N/A	0.033	0.028 U	0.027 U	0.0049 U	0.025 U	0.016	0.022	0.0077	0.0054
Chrysene	N/A	0.12	0.03	0.027 U	0.0067	0.040	0.043	0.072	0.033	0.019
Dibenzo(a,h)anthracene	N/A	0.027 U	0.028 U	0.027 U	0.0049 U	0.025 U	0.0059	0.0083	0.0051 U	0.0053 U
Indeno(1,2,3-cd)pyrene	N/A	0.059	0.028 U	0.027 U	0.0049 U	0.025 U	0.025	0.036	0.016	0.0088
cPAH TEQ	0.19	0.1129	0.0031	ND	0.001	0.005	0.040	0.057	0.026	0.012

Notes:

- Bold** text indicates detected analyte
- Green shading indicates detected analyte exceeds applicable cleanup level
- (a) Hexavalent chromium was not detected above the laboratory reporting limit in any sample, therefore total chromium values are representative of trivalent chromium.
- J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- U = The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
- UJ = The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Acronyms/Abbreviations:

- = not analyzed

µg/kg = micrograms per kilogram

CUL = cleanup level

ft = feet
- ID = Identification

MTCA = Model Toxics Control Act

N = primary sample

N/A = not applicable
- ND = not detected

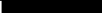
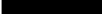
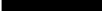
PAH = polycyclic aromatic hydrocarbon

SIM = selected ion monitoring

TEQ = toxicity equivalency quotient

Boring Logs

**USCS
GRAPHIC LETTER
SYMBOL SYMBOL⁽¹⁾**

OTHER MATERIALS	GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
PAVEMENT		AC or PC	Asphalt concrete pavement or Portland cement pavement
ROCK		RK	Rock (See Rock Classification)
WOOD		WD	Wood, lumber, wood chips
DEBRIS		DB	Construction debris, garbage

1. USCS letter symbols correspond to symbols used by the Unified Soil Classification System and ASTM classification methods. Dual letter symbols (e.g., SP-SM for sand or gravel) indicate soil with an estimated 5-15% fines. Multiple letter symbols (e.g., ML/CL) indicate borderline or multiple soil classifications.
2. Soil descriptions are based on the general approach presented in the *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*, outlined in ASTM D 2488. Where laboratory index testing has been conducted, soil classifications are based on the *Standard Test Method for Classification of Soils for Engineering Purposes*, as outlined in ASTM D 2487.
3. Soil description terminology is based on visual estimates (in the absence of laboratory test data) of the percentages of each soil type and is defined as follows:



LANDAU
ASSOCIATES

Soil Classification System and Key

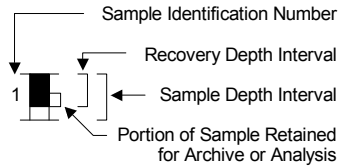
Figure
A-1
(1 of 2)

Drilling and Sampling Key

SAMPLER TYPE

SAMPLE NUMBER & INTERVAL

Code	Description
a	3.25-inch O.D., 2.42-inch I.D. Split Spoon
b	2.00-inch O.D., 1.50-inch I.D. Split Spoon
c	Shelby Tube
d	Grab Sample
e	Single-Tube Core Barrel
f	Double-Tube Core Barrel
g	Other - See text if applicable
1	300-lb Hammer, 30-inch Drop
2	140-lb Hammer, 30-inch Drop
3	Pushed
4	Rotosonic
5	Air Rotary (Rock)
6	Wash Rotary (Rock)
7	Other - See text if applicable



Field and Lab Test Data

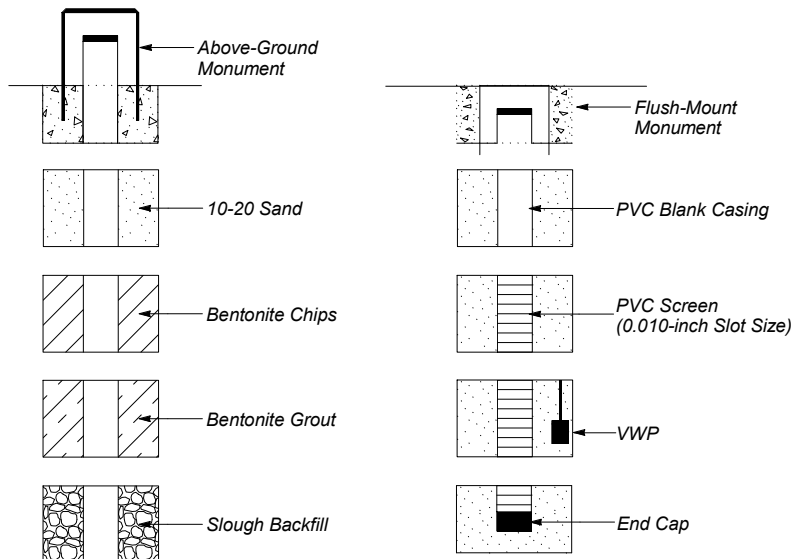
Code	Description
PP = 1.0	Pocket Penetrometer, tsf
TV = 0.5	Torvane, tsf
PID = 100	Photoionization Detector VOC screening, ppm
W = 10	Moisture Content, %
D = 120	Dry Density, pcf
-200 = 60	Material smaller than No. 200 sieve, %
GS	Grain Size - See separate figure for data
AL	Atterberg Limits - See separate figure for data
VST	Vane Shear Test
GT	Other Geotechnical Testing
CA	Chemical Analysis

Groundwater

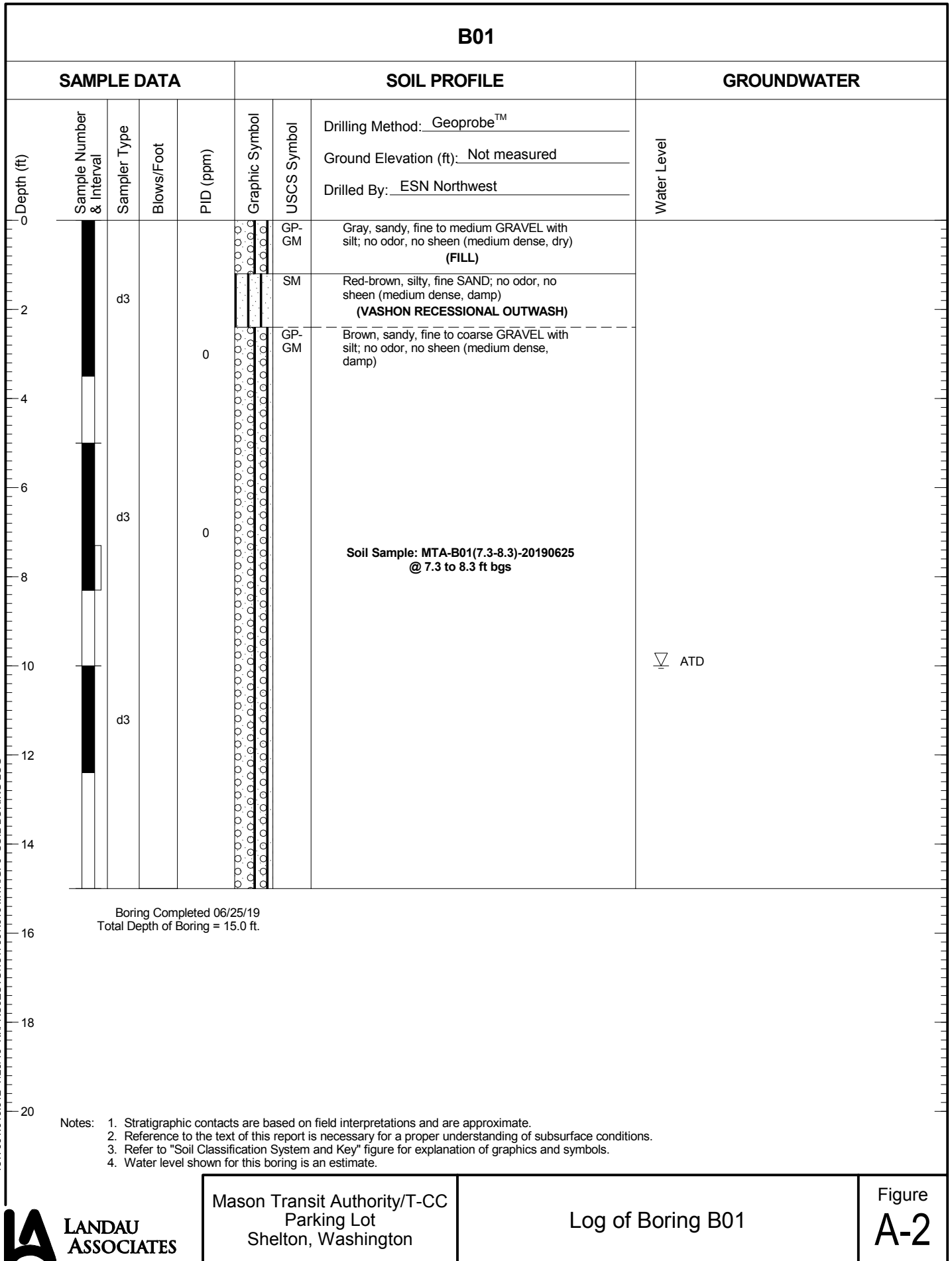
- ▽ Approximate water elevation at time of drilling (ATD).
- ▼ Approximate water elevation at other time(s). When multiple water levels are obtained other than ATD, only a representative range is shown. See text for additional information.

Note: Groundwater levels can fluctuate due to precipitation, seasonal conditions, and other factors.

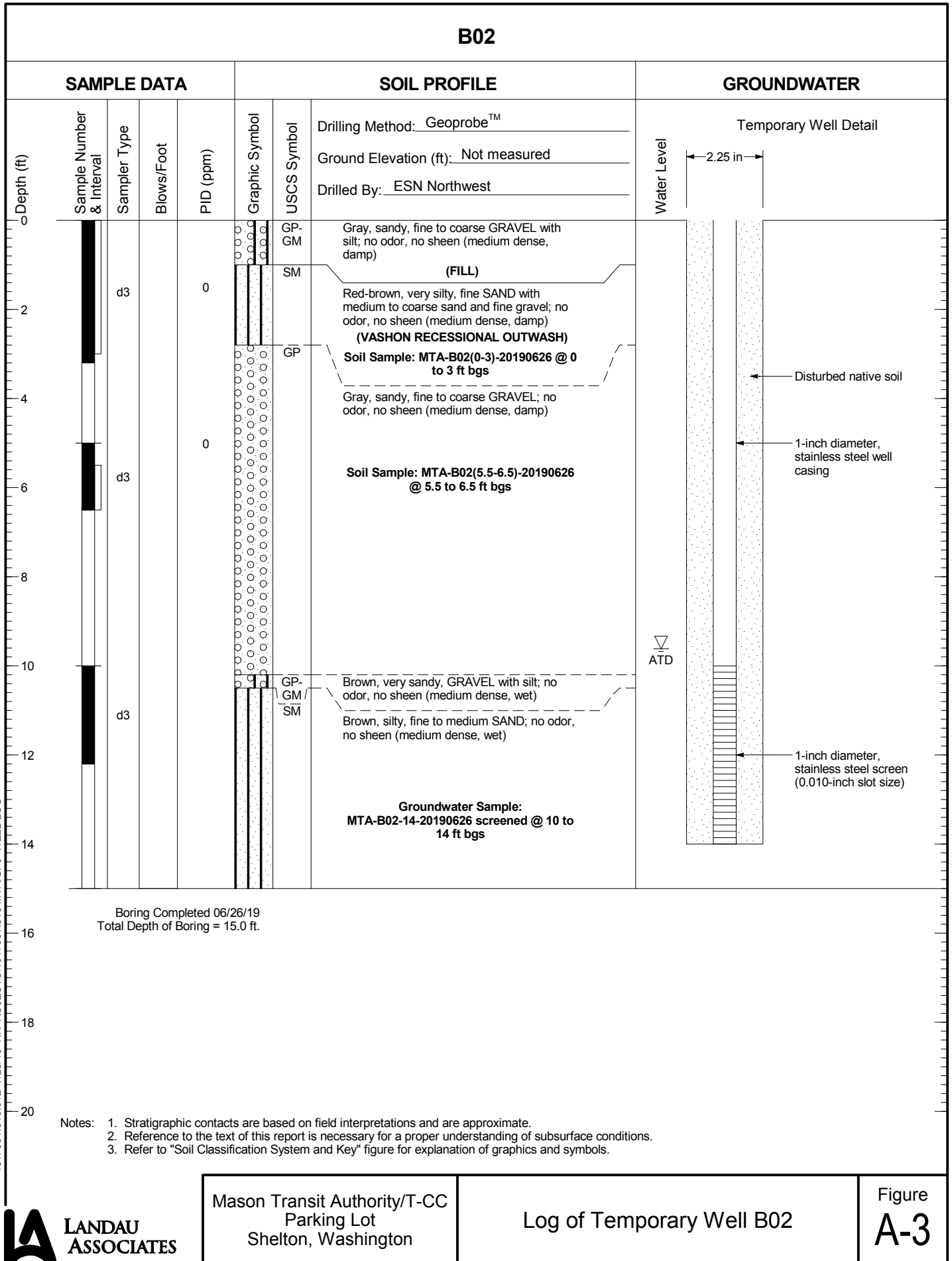
Well Log Graphics



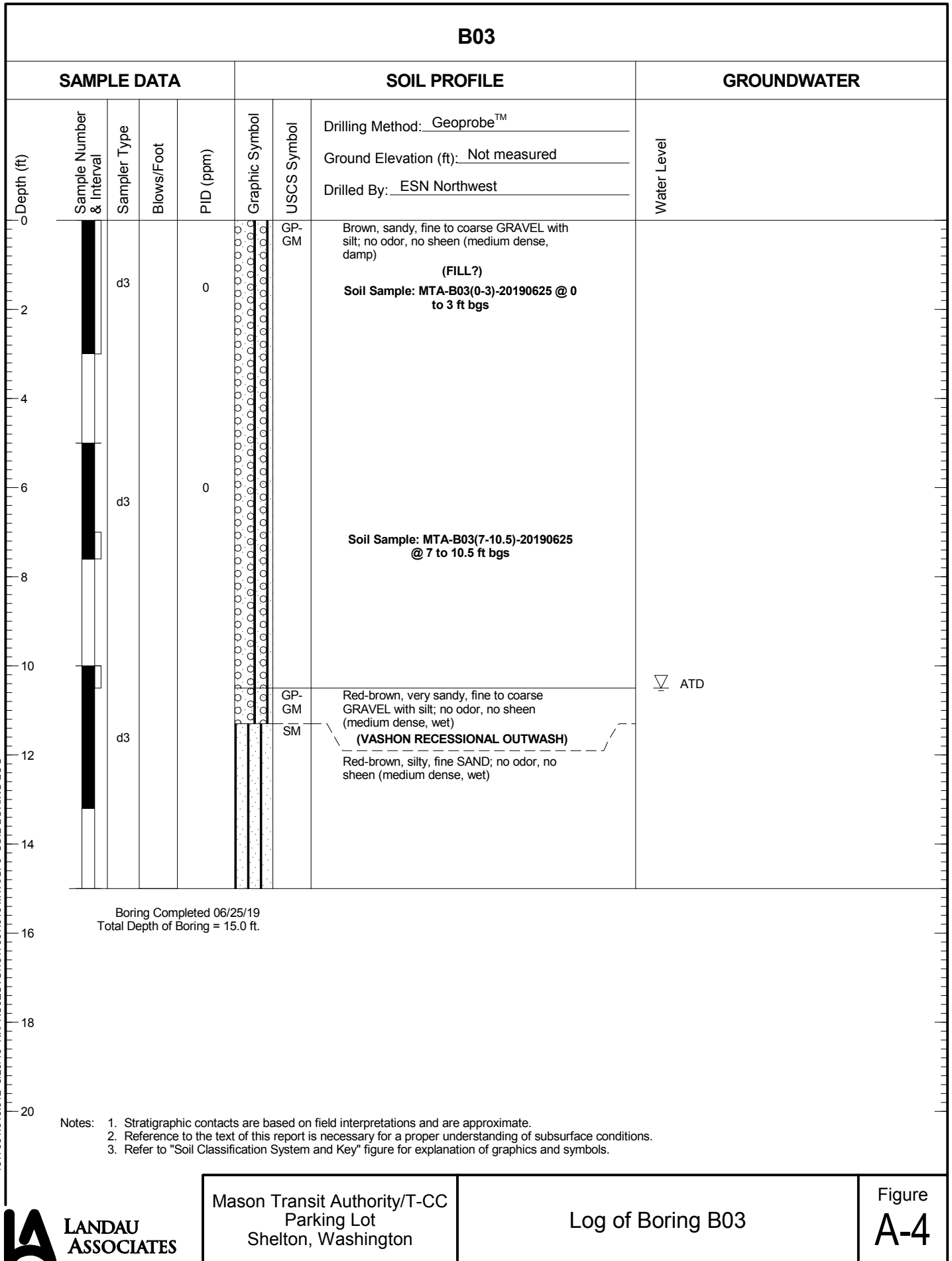
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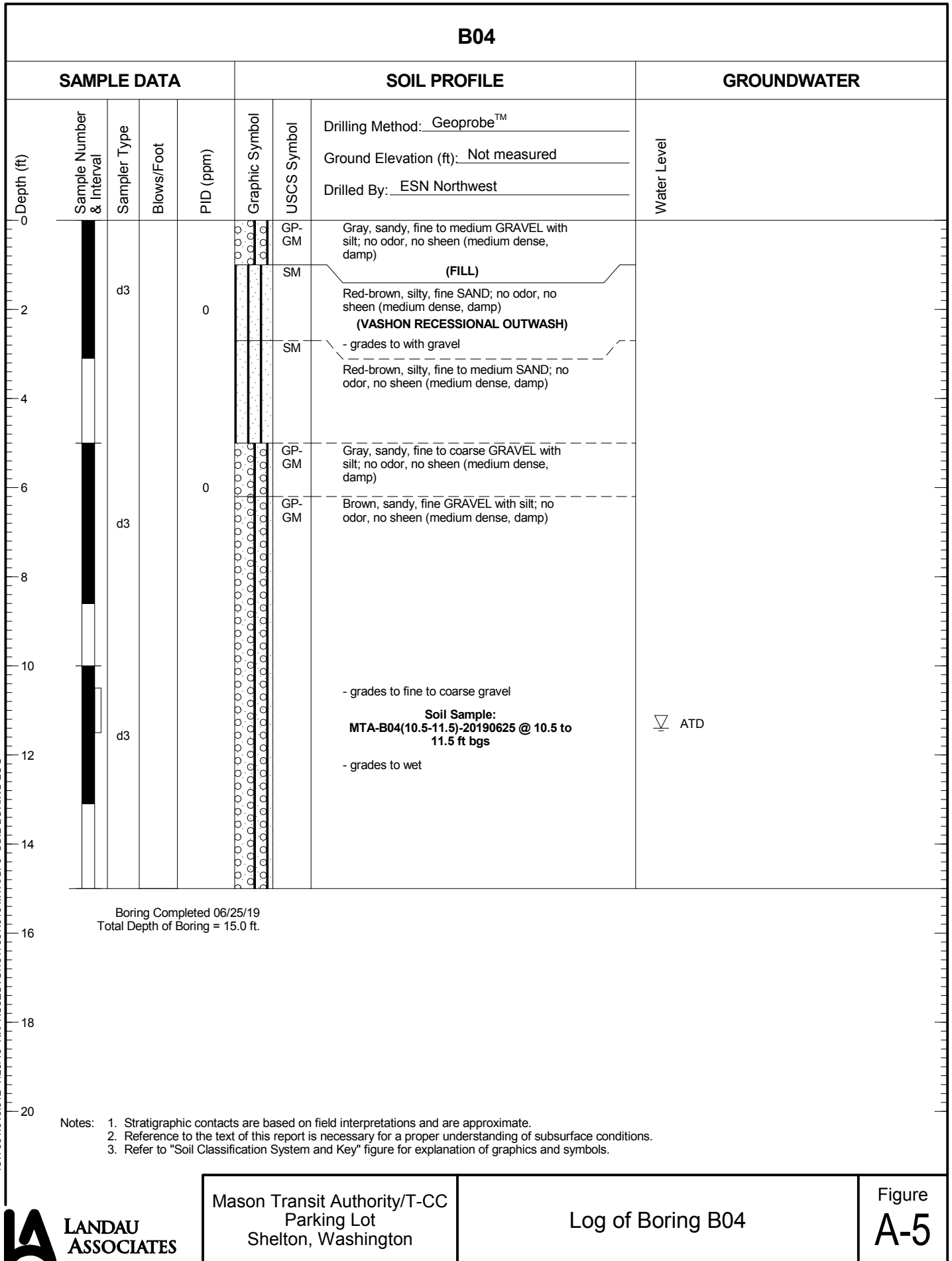
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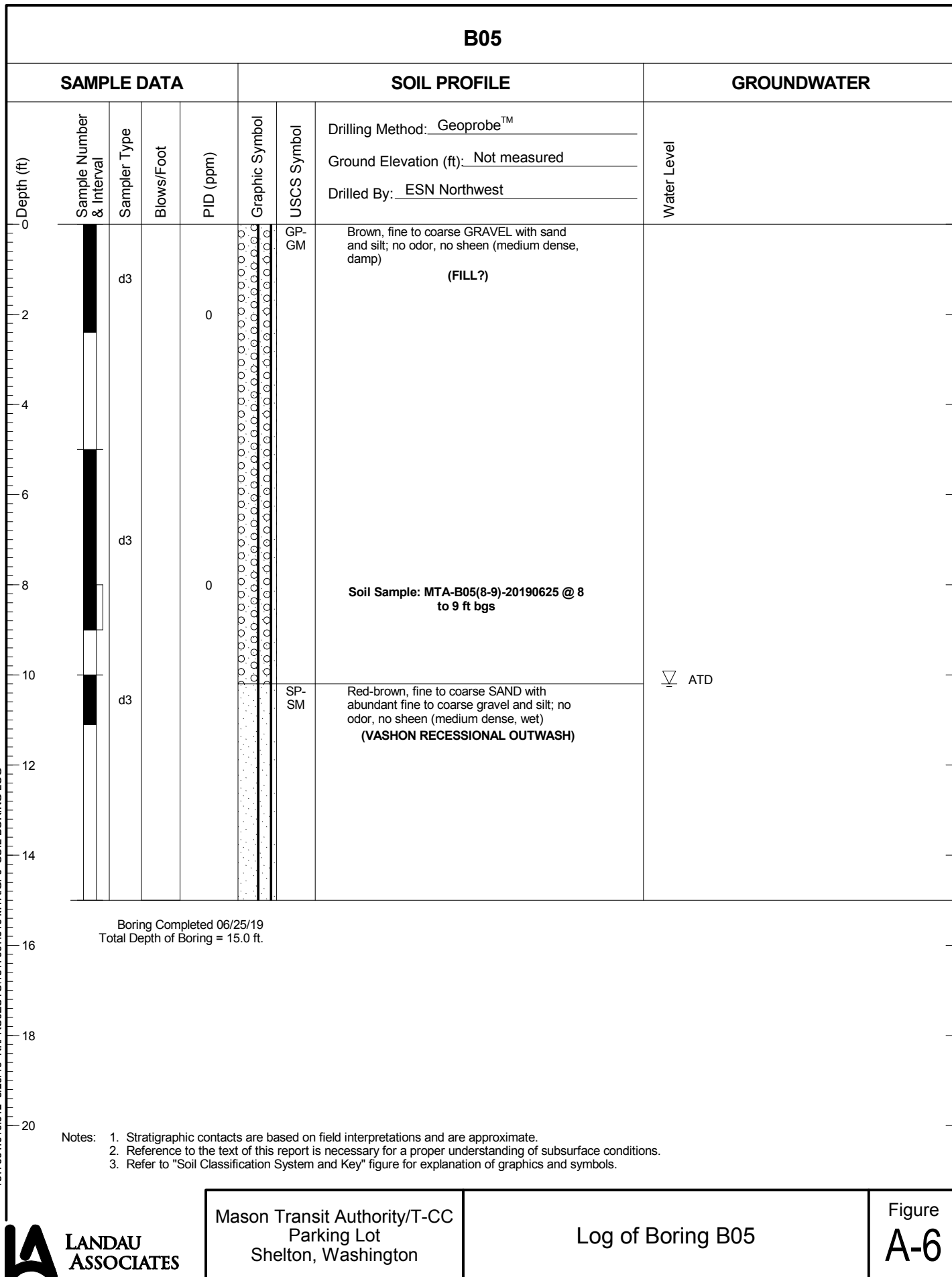
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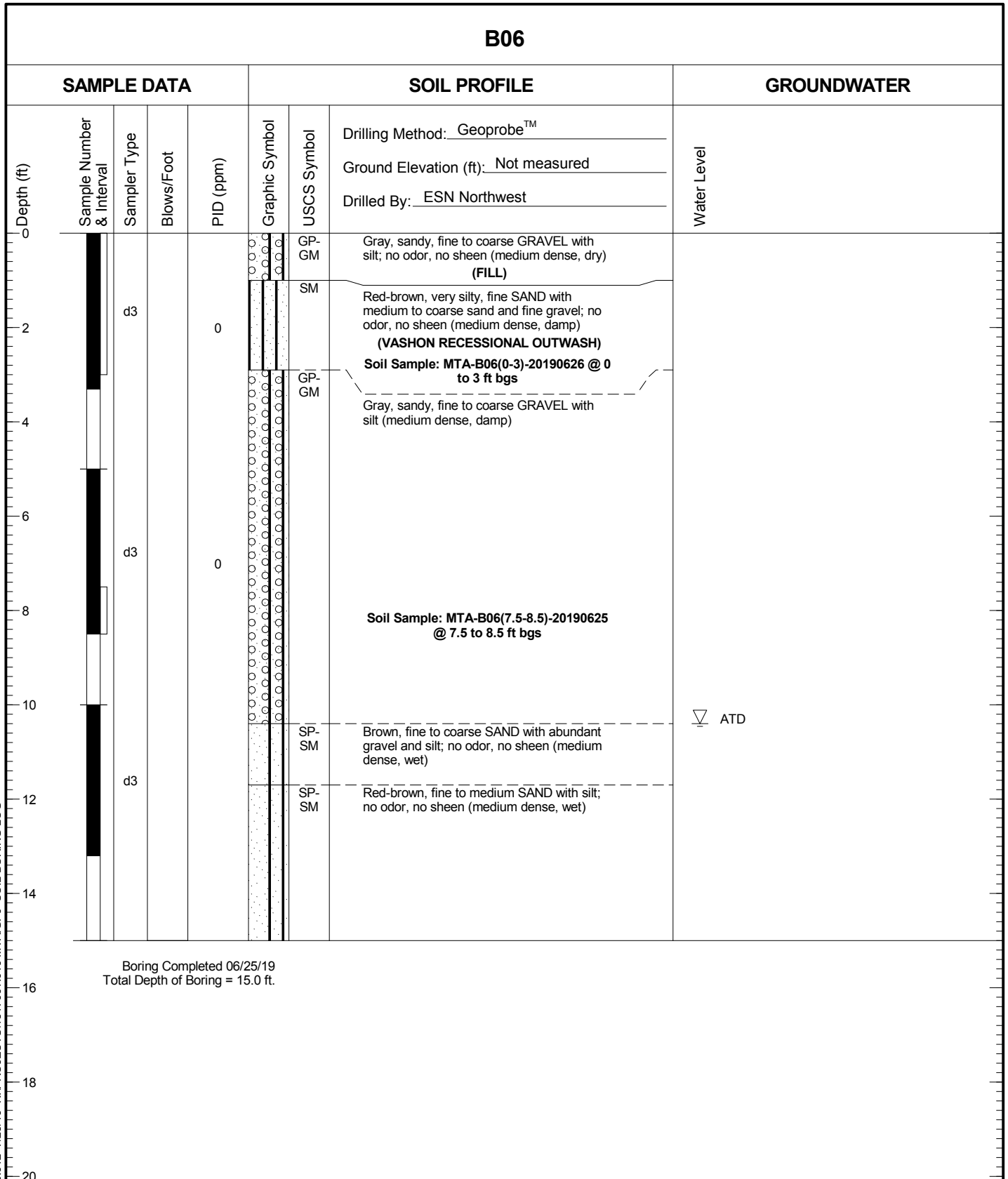
1817001.010.012 7/23/19 N:\PROJECTS\1817001.010 MTA.GPJ SOIL BORING LOG



1817001.010.012 8/29/19 N:\PROJECTS\1817001.010 MTA.GPJ SOIL BORING LOG

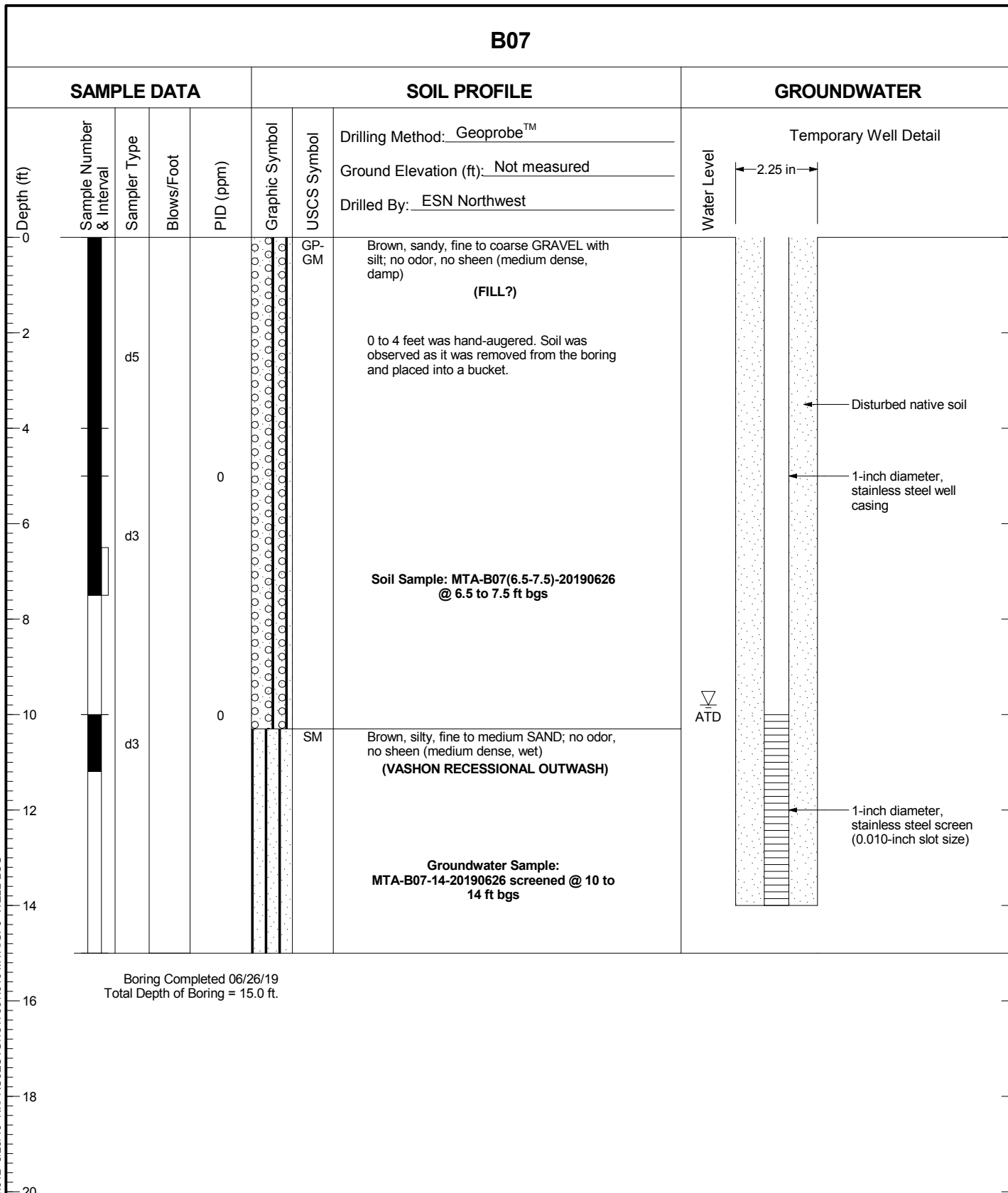


1817001.010.012 7/23/19 N:\PROJECTS\1817001.010 MTA.GPJ SOIL BORING LOG



- Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
 2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
 3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1817001.010.012 8/29/19 N:\PROJECTS\1817001.010 MTA.GPJ WELL LOG



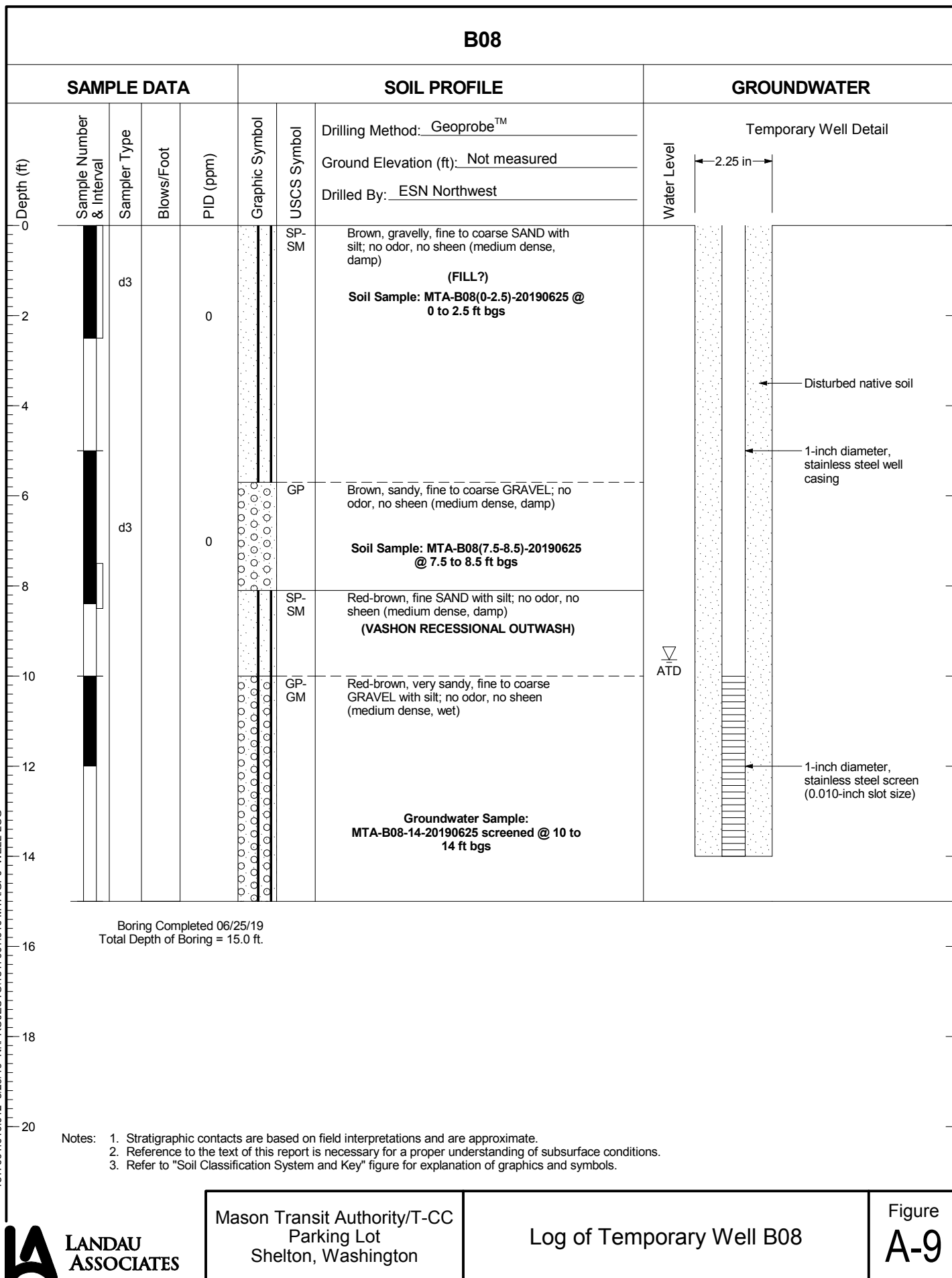
LANDAU ASSOCIATES

Mason Transit Authority/T-CC
Parking Lot
Shelton, Washington

Log of Temporary Well B07

Figure
A-8

1817001.010.012 8/29/19 N:\PROJECTS\1817001.010 MTA.GPJ WELL LOG



Laboratory Analytical Data Packages

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

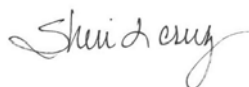
Laboratory Job ID: 580-87175-1

Client Project/Site: MTA Parking Lot, Shelton, WA

For:

Landau & Associates, Inc.
2107 South C Street
Tacoma, Washington 98402

Attn: Sierra Mott



Authorized for release by:
7/11/2019 5:40:41 PM

Sheri Cruz, Project Manager I
(253)922-2310
sheri.cruz@testamericainc.com

LINKS

Review your project
results through
TotalAccess

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Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Job ID: 580-87175-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-87175-1

Comments

No additional comments.

Receipt

The samples were received on 6/25/2019 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.2° C and 3.7° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 580-304251 recovered above the upper control limit for Methyl tert-butyl ether (23.7%). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8260C: Surrogate 1,2-Dichloroethane-d4 (Surr) recovery for the following samples were outside the upper control limit: MTA-B08(0-2.5)-20190625 (580-87175-4), MTA-B08(7.5-8.5)-20190625 (580-87175-5), MTA-B03(0-3)-20190625 (580-87175-7), MTA-B06(7.5-8.5)-20190625 (580-87175-8), MTA-B05(0-2.4)-20190625 (580-87175-9), MTA-B05(8-9)-20190625 (580-87175-10), MTA-B04(10.5-11.5)-20190625 (580-87175-11) and MTA-B01(0-3)-20190625 (580-87175-12). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8011: The continuing calibration verification (CCV) associated with 580-305285 recovered outside the control limits for 1,2-Dibromopropane on one column. Results are confirmed on both columns and reported from the passing column. The following samples are impacted: MTA-B08-14-20190625 (580-87175-6) and (CCV 580-305243/1-A).

Method(s) NWTPH-Dx: Detected hydrocarbons in the diesel range appear to be due to oil overlap. MTA-B08(0-2.5)-20190625 (580-87175-4), MTA-B03(0-3)-20190625 (580-87175-7), MTA-B01(0-3)-20190625 (580-87175-12) and (580-87175-D-7-C DU)

Method(s) 8082A: The following sample(s) contained more than one Aroclor with insufficient separation to quantify individually. The PCBs present are quantified as the predominant Aroclor: MTA-B03(0-3)-20190625 (580-87175-7) and MTA-B01(0-3)-20190625 (580-87175-12).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

Method(s) Moisture: Percent moisture associated with duplicate QC MTA-B08(0-2.5)-20190625 (580-87175-4) and (580-87175-F-4 DU) is outside RPD limits. Due to low moisture content in the sample and duplicate, effects of RPD on moisture content are amplified. The data is reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Case Narrative

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Job ID: 580-87175-1 (Continued)

Laboratory: Eurofins TestAmerica, Seattle (Continued)

VOA Prep

Method(s) 5035: The following sample(s) was provided to the laboratory with a significantly different initial weight than that required by the reference method: 580-87175-a-7 (6.042g), 580-87175-b-9 (6.099g), 580-87175-a-12 (6.657g), and 580-87097-b-3. Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 5g. The amount provided was above this range.

Method(s) 5035: The following sample was provided to the laboratory with a significantly different initial weight than that required by the reference method: MTA-B04(10.5-11.5)-20190625 (580-87175-11). The method requires 8g-12g. The amount provided was above this range at 12.313g.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-87175-1	TripBlank1-20190625	Solid	06/25/19 00:01	06/25/19 16:55	
580-87175-2	TripBlank2-20190625	Water	06/25/19 00:01	06/25/19 16:55	
580-87175-3	MTA-B03(7.-10.5)-20190625	Solid	06/25/19 09:15	06/25/19 16:55	
580-87175-4	MTA-B08(0-2.5)-20190625	Solid	06/25/19 10:00	06/25/19 16:55	
580-87175-5	MTA-B08(7.5-8.5)-20190625	Solid	06/25/19 10:20	06/25/19 16:55	
580-87175-6	MTA-B08-14-20190625	Water	06/25/19 11:09	06/25/19 16:55	
580-87175-7	MTA-B03(0-3)-20190625	Solid	06/25/19 11:45	06/25/19 16:55	
580-87175-8	MTA-B06(7.5-8.5)-20190625	Solid	06/25/19 12:35	06/25/19 16:55	
580-87175-9	MTA-B05(0-2.4)-20190625	Solid	06/25/19 13:00	06/25/19 16:55	
580-87175-10	MTA-B05(8-9)-20190625	Solid	06/25/19 13:15	06/25/19 16:55	
580-87175-11	MTA-B04(10.5-11.5)-20190625	Solid	06/25/19 14:00	06/25/19 16:55	
580-87175-12	MTA-B01(0-3)-20190625	Solid	06/25/19 14:35	06/25/19 16:55	
580-87175-13	MTA-B01(7.3-8.3)-20190625	Solid	06/25/19 14:45	06/25/19 16:55	



Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☒ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080

Date 6/25/2019
 Page 1 of 1

Turnaround Time:
☒ Standard
☐ Accelerated

Project Name Mason Transit Authority Project No. 1817001.010.012
 Project Location/Event Shelton, WA
 Sampler's Name Katie Gauglitz
 Project Contact Sarah Fees
 Send Results To D. Jorgensen, S. Fees

Testing Parameters
 PCRA Metals 6020A/741B
 Hex Chromium 7190A
 BTEX, EDC, MTBE 8260CL
 TPH-G NWTPH-GX
 TPH-D, TPH-O NWTPH-DX
 CPAH 8270
 PCBs 8082A
 EDB 8260CL
 EDB 8011

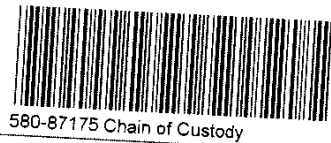
Special Handling Requirements:
 Shipment Method:
 Stored on ice: ☒ Yes ☐ No

Sample I.D.	Date	Time	Matrix	No. of Containers
Trip Blank 1-20190625	—	—	Soil	3
Trip Blank 2-20190625	—	—	Ag	6
MTA-B03(7-10.5)-20190625	6/25/19	915	Soil	5
MTA-B08(0-2.5)-20190625		1000	Soil	5
MTA-B04(7.5-8.5)-20190625		1020	Soil	5
MTA-B08-14-20190625		1109	Ag	15
MTA-B03(0-3)-20190625		1145	Soil	5
MTA-B06(7.5-8.5)-20190625		1235	Soil	5
MTA-B05(0-2.4)-20190625		1300	Soil	5
MTA-B05(8-9)-20190625		1315	Soil	5
MTA-B04(10.5-11.5)-20190625		1400	Soil	5
MTA-B01(0-3)-20190625		1435	Soil	5
MTA-B01(7.3-8.3)-20190625		1445	Soil	5

Observations/Comments
 Allow water samples to settle, collect aliquot from clear portion ☐
 NWTPH-Dx - Acid wash cleanup ☐
 - Silica gel cleanup ☐
☒ Dissolved metal samples were field filtered

Other _____
 Therm. ID: A2 Cor: 3.2 ° Unc: 3.5 °
 Cooler Desc: kg Blue FedEx:
 Packing: bubb UPS:
 Cust. Seal: Yes No Lab Cour:
 Blue Ice, ☒ Wet, Dry, None Other:

Therm. ID: A2 Cor: 3.7 ° Unc: 4.0 °
 Cooler Desc: kg Blue FedEx:
 Packing: bubb UPS:
 Cust. Seal: Yes No Lab Cour:
 Blue Ice, ☒ Wet, Dry, None Other: cf. drc



Relinquished by
 Signature Katie Gauglitz
 Printed Name Katie Gauglitz
 Company Landau Associates
 Date 6/25/2019 Time 16:55

Received by
 Signature Tom Blankinship
 Printed Name Blankinship
 Company TA-SEA
 Date 6/25/19 Time 1655

Relinquished by
 Signature _____
 Printed Name _____
 Company _____
 Date _____ Time _____

Received by
 Signature _____
 Printed Name _____
 Company _____
 Date _____ Time _____



Chain-of-Custody Record

Seattle/Edmonds (425) 775-5500
Tacoma (253) 835-2453

Spokane (509) 327-4747
Portland (503) 342-4200

Date 11/25/2019
Page 1 of 1

Transportation Time
Accelerated

Project Name: <u>Midway Transit Authority</u>		Project No.: <u>817001.00.012</u>		Testing Parameters	
Project Location/Route: <u>Shelton, WA</u>				Special Handling Requirements:	
Sampler's Name: <u>Katie Gungite</u>				Shipping Method:	
Project Contact: <u>Sarah Fees</u>				Stored on Ice: ☐ Yes ☒ No	
Send Results To: <u>D. Ingerson, S. Fees</u>				Observations/Comments:	
Sample ID	Date	Time	Matrix	No. of Containers	
WTA-B01(1-3)-20190625			Soil	3	
WTA-B02(1-3)-20190625			Ag	6	
WTA-B03(1-3)-20190625	6/25/25	9:15	Soil	3	
WTA-B04(1-3)-20190625		10:00	Soil	3	
WTA-B05(1-3)-20190625		10:30	Soil	3	
WTA-B06(1-3)-20190625		11:04	Ag	3	
WTA-B07(1-3)-20190625		11:45	Soil	3	
WTA-B08(1-3)-20190625		12:35	Soil	3	
WTA-B09(1-3)-20190625		13:00	Soil	3	
WTA-B10(1-3)-20190625		13:15	Soil	3	
WTA-B11(1-3)-20190625		14:00	Soil	3	
WTA-B12(1-3)-20190625		14:35	Soil	3	
WTA-B13(1-3)-20190625		14:45	Soil	3	
					Align water samples to settle, collect aliquot from clear portion ☐
					WATPH-20 - Acid wash cleanup ☐
					Glass gel cleanup ☐
					☒ Dissolved metal samples were held filtered
					Other:
					* Hex Chromium Soil Samples are on hold pending results of RCRA 8 metals analysis (SEP)
Relinquished by: <u>Katie Gungite</u>		Received by: <u>[Signature]</u>		Relinquished by: <u>[Signature]</u>	
Signature: <u>[Signature]</u>		Signature: <u>[Signature]</u>		Signature: <u>[Signature]</u>	
Printed Name: <u>Katie Gungite</u>		Printed Name: <u>[Signature]</u>		Printed Name: <u>[Signature]</u>	
Company: <u>Landam Associates</u>		Company: <u>[Signature]</u>		Company: <u>[Signature]</u>	
Date: <u>11/25/19</u> Time: <u>16:55</u>		Date: <u>11/25/19</u> Time: <u>16:55</u>		Date: <u>11/25/19</u> Time: <u>16:55</u>	



Chain-of-Custody Record

Date 6/25/2019
Page 1 of 1

Turnaround Time:
Standard _____
Accelerated _____

Project Name Moson Transit Authority Project No. 1817001.010.012
Project Location/Event Shelton, WA
Sampler's Name Katie Gauglitz
Project Contact Sarah Fees
Send Results To D. Jorgensen, S. Fees

Testing Parameters

Special Handling Requirements:

Shipment Method:

Stored on ice: ☒ Yes / ☐ No

Observations/Comments
1. The patient is a 65-year-old male with a long history of hypertension and hyperlipidemia. He has been on treatment for these conditions for many years. 2. The patient has a recent diagnosis of Type 2 Diabetes Mellitus, which has been managed with oral hypoglycemic agents. 3. The patient has a family history of cardiovascular disease, including a recent heart attack in his brother. 4. The patient has been experiencing symptoms of fatigue and weakness over the past few weeks, which has led to a decrease in his usual level of activity. 5. The patient has been taking a daily aspirin for the prevention of heart disease, as recommended by his physician. 6. The patient has been following a low-fat, low-sodium diet to help manage his hypertension and hyperlipidemia. 7. The patient has been smoking cigarettes for 30 years, which is a significant risk factor for cardiovascular disease. 8. The patient has been drinking alcohol in moderation, as advised by his physician. 9. The patient has been taking a daily multivitamin supplement to ensure he is getting all the necessary nutrients. 10. The patient has been attending to his dental hygiene and has had a recent dental check-up. 11. The patient has been taking his medications as prescribed and has been attending to his medical appointments. 12. The patient has been feeling well overall, but the recent symptoms of fatigue and weakness are a concern. 13. The patient has been advised to continue with his current treatment plan and to monitor his symptoms closely. 14. The patient has been advised to continue with his healthy lifestyle choices, including a balanced diet, regular exercise, and no smoking. 15. The patient has been advised to continue with his regular medical check-ups and to report any new symptoms to his physician.

Sample I.D.	Date	Time	Matrix	No. of Containers
Trip Blank 1 - 20190625	—	—	Soil	3
Trip Blank 2 - 20190625	—	—	Ag	6
NTA-B03 (7-10.5) - 20190625	6/25/19	9:15	Soil	5
NTA-B08 (0-2.5) - 20190625		1000	Soil	5
NTA-B09 (7.5-8.5) - 20190625		1020	Soil	5
NTA-B08-14 - 20190625		1109	Ag	15
NTA-B03 (0-3) - 20190625		1145	Soil	5
NTA-B06 (7.5-8.5) - 20190625		1235	Soil	5
NTA-B05 (0-2.4) - 20190625		1300	Soil	5
NTA-B05 (8-9) - 20190625		1315	Soil	5
NTA-B04 (10.5-11.5) - 20190625		1400	Soil	5
NTA-B01 (0-3) - 20190625		1435	Soil	5
NTA-B01 (7.3-8.3) - 20190625		1445	Soil	5

Allow water samples to settle, collect aliquot from clear portion ☐

NWTPH-Dx - Acid wash cleanup ☐
- Silica gel cleanup ☐

☒ Dissolved metal samples were field filtered

Other

* Hex Chromium Soil Samples are on hold pending results of RCRA 8 metals analysis (SEF) 6/26/19

Relinquished by
Signature *Kathleen E. Ganglitz*
Printed Name *Katie Ganglitz*
Company *Landan Associates*
Date *6/25/2011* Time *16:55*

Received by _____
Signature _____
Printed Name _____
Company _____
Date 6/25/19 Time 1655

Relinquished by
Signature _____
Printed Name _____
Company _____
Date _____

Received by
Signature _____
Printed Name _____
Company _____
Date _____

COOLER RECEIPT FORM



580-87175 Chain of Custody

Cooler Received/Opened On 6/28/2019 @ 9:55

Time Samples Removed From Cooler _____ Time Samples Placed In Storage _____ (2 Hour Window)

1. Tracking # 0623 (last 4 digits, FedEx) Courier: FedEx
IR Gun ID 17960358 pH Strip Lot N/A Chlorine Strip Lot N/A

2. Temperature of rep. sample or temp blank when opened: 5.9 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? 1 side YES...NO...NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) _____

7. Were custody seals on containers: YES NO and intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA



Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # KD

I certify that I unloaded the cooler and answered questions 7-14 (initial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) _____

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) _____

I certify that I attached a label with the unique LIMS number to each container (initial) _____

21. Were there Non-Conformance issues at login? YES...NO...# Was a NCM generated? YES...NO...#

Chain of Custody Record

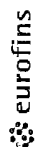
Loc: 580

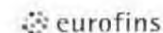
87175

Environment Testing
TestAmerica

Client Information (Sub Contract Lab)		Sampler: Lab Pkt: Cruz, Sheri L								
Client Contact: Phone: E-Mail: sheri.cruz@testamericainc.com		Washington								
Shipping/Receiving Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):								
Address: 2960 Foster Creighton Drive,		Due Date Requested: 7/9/2019								
City: Nashville		TAT Requested (days):								
State, Zip: TN, 37204										
Phone: 615-726-0177(Tel) 615-726-3404(Fax)		PO #:								
Email:		WO #:								
Project Name: MTA Parking Lot, Shelton, WA		Project #: 58013965								
Site:		SSOW#:								
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=biological, A=air)	Field Filtered Sample (Yes or No)	7196A/3060A Hexavalent Chromium (CrVI) (Hold)	Analysis Requested	Preservation Codes:	Total Number of Containers	Special Instructions/Note:
MTA-B03(7-10.5)-20190625 (580-87175-3)	6/25/19	09:15 Pacific	Solid	Solid	X				1	
MTA-B08(0-2.5)-20190625 (580-87175-4)	6/25/19	10:00 Pacific	Solid	Solid	X				1	
MTA-B08(7.5-8.5)-20190625 (580-87175-5)	6/25/19	10:20 Pacific	Solid	Solid	X				1	
MTA-B03(0-3)-20190625 (580-87175-7)	6/25/19	11:45 Pacific	Solid	Solid	X				1	
MTA-B06(7.5-8.5)-20190625 (580-87175-8)	6/25/19	12:35 Pacific	Solid	Solid	X				1	
MTA-B05(0-2.4)-20190625 (580-87175-9)	6/25/19	13:00 Pacific	Solid	Solid	X				1	
MTA-B05(8-9)-20190625 (580-87175-10)	6/25/19	13:15 Pacific	Solid	Solid	X				1	
MTA-B04(10.5-11.5)-20190625 (580-87175-11)	6/25/19	14:00 Pacific	Solid	Solid	X				1	
MTA-B01(0-3)-20190625 (580-87175-12)	6/25/19	14:35 Pacific	Solid	Solid	X				1	
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.										
Possible Hazard Identification ☐ Unconfirmed ☐ Deliverable Requested: I, II, III, IV, Other (specify)										
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months										
Special Instructions/QC Requirements:										
Empty Kit Relinquished by:										
Relinquished by: Tom Blunk Date/Time: 6/27/19 Company: TA-Sea										
Relinquished by: Date/Time: Company:										
Relinquished by: Date/Time: Company:										
Custody Seals Intact: ☐ Yes ☐ No Custody Seal No.:										
Cooler Temperature(s) °C and Other Remarks: 5.9										

Chain of Custody Record

[illegible]



Environment Testing
TestAmerica

Client Information (Sub Contract Lab)			Lab PM: Cruz, Sheri L			Carrier Tracking No(s):			DOC No: 580-67452-1																							
Client Contact:			Phone:			E-Mail: sheri.cruz@testamericainc.com			State of Origin: Washington			Page: Page 1 of 2																				
Shipping/Receiving						Accreditations Required (See note):						Job #: 580-87175-1																				
Company: TestAmerica Laboratories, Inc.																																
Address: 11922 East 1st Ave.			Due Date Requested: 7/2/2019			Analysis Requested						Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:																				
City: Spokane			TAT Requested (days):																													
State, Zip: WA, 99206			PO #:																													
Phone: 509-924-9200(Tel) 509-924-9290(Fax)			WO #:																													
Email:			Project #:																													
Project Name: MTA Parking Lot, Shelton, WA			SSOW#:																													
Site:																																
Sample Identification - Client ID (Lab ID)			Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Au)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		NWTPH_Dv/3550C DRG and RRO		8270D_SIM/3550C cPAHs		8082A/3550C_PCB_1YR PCBs, standard list		NWTPH_Dv/3510C_LVI_14d DRO and RRO		8270D_SIM/3510C_LVI cPAHs		8082A/3510C_LVI_1YR PCBs, standard list		Total Number of containers		Special Instructions/Note:			
MTA-B03(7.-10.5)-20190625 (580-87175-3)			6/25/19		09:15 Pacific				Solid						X		X		X										1			
MTA-B08(0-2.5)-20190625 (580-87175-4)			6/25/19		10:00 Pacific				Solid						X		X		X										1			
MTA-B08(7.5-8.5)-20190625 (580-87175-5)			6/25/19		10:20 Pacific				Solid						X		X		X										1			
MTA-B08-14-20190625 (580-87175-6)			6/25/19		11:09 Pacific				Water										X		X		X						6			
MTA-B03(0-3)-20190625 (580-87175-7)			6/25/19		11:45 Pacific				Solid						X		X		X										1			
MTA-B06(7.5-8.5)-20190625 (580-87175-8)			6/25/19		12:35 Pacific				Solid						X		X		X										1			
MTA-B05(0-2.4)-20190625 (580-87175-9)			6/25/19		13:00 Pacific				Solid						X		X		X										1			
MTA-B05(8-9)-20190625 (580-87175-10)			6/25/19		13:15 Pacific				Solid						X		X		X										1			
MTA-B04(10.5-11.5)-20190625 (580-87175-11)			6/25/19		14:00 Pacific				Solid						X		X		X										1			
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.																																
Possible Hazard Identification										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																						
Unconfirmed										☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months																						
Deliverable Requested: I, II, III, IV, Other (specify)										Primary Deliverable Rank: 2																						
Empty Kit Relinquished by:										Special Instructions/QC Requirements:																						
Relinquished by: [Signature]					Date/Time: 6/27/19					Company: TA-Spa					Received by: Maria Grook					Date/Time: 6/28/19 13:51					Company: TASP							
Relinquished by:					Date/Time:					Company:					Received by:					Date/Time:					Company:							
Relinquished by:					Date/Time:					Company:					Received by:					Date/Time:					Company:							
Custody Seals Intact:					Custody Seal No.:					Cooler Temperature(s) °C and Other Remarks: 2.9																						
Δ Yes Δ No																																

Page 14 of 65

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-87175-1

Login Number: 87175

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Vallelunga, Diana L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-87175-1

Login Number: 87175

List Number: 3

Creator: O'Toole, Maria C

List Source: Eurofins TestAmerica, Spokane

List Creation: 06/28/19 02:06 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	496969
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	2.9
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Not listed on COC
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: TripBlank2-20190625

Date Collected: 06/25/19 00:01

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-2

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.20	0.20	ug/L			06/28/19 01:08	1
Benzene	ND		0.20	0.20	ug/L			06/28/19 01:08	1
Ethylbenzene	ND		0.20	0.20	ug/L			06/28/19 01:08	1
Methyl tert-butyl ether	ND		0.30	0.30	ug/L			06/28/19 01:08	1
m-Xylene & p-Xylene	ND		0.50	0.50	ug/L			06/28/19 01:08	1
o-Xylene	ND		0.50	0.50	ug/L			06/28/19 01:08	1
Toluene	ND		0.20	0.20	ug/L			06/28/19 01:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		80 - 120		06/28/19 01:08	1
4-Bromofluorobenzene (Surr)	100		80 - 120		06/28/19 01:08	1
Dibromofluoromethane (Surr)	103		80 - 120		06/28/19 01:08	1
Toluene-d8 (Surr)	103		80 - 120		06/28/19 01:08	1
Trifluorotoluene (Surr)	99		80 - 120		06/28/19 01:08	1

Client Sample ID: MTA-B08-14-20190625

Date Collected: 06/25/19 11:09

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-6

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.20	0.20	ug/L			06/28/19 06:53	1
Benzene	ND		0.20	0.20	ug/L			06/28/19 06:53	1
Ethylbenzene	ND		0.20	0.20	ug/L			06/28/19 06:53	1
Methyl tert-butyl ether	ND		0.30	0.30	ug/L			06/28/19 06:53	1
m-Xylene & p-Xylene	ND		0.50	0.50	ug/L			06/28/19 06:53	1
o-Xylene	ND		0.50	0.50	ug/L			06/28/19 06:53	1
Toluene	ND		0.20	0.20	ug/L			06/28/19 06:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		80 - 120		06/28/19 06:53	1
4-Bromofluorobenzene (Surr)	99		80 - 120		06/28/19 06:53	1
Dibromofluoromethane (Surr)	104		80 - 120		06/28/19 06:53	1
Toluene-d8 (Surr)	104		80 - 120		06/28/19 06:53	1
Trifluorotoluene (Surr)	101		80 - 120		06/28/19 06:53	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: TripBlank1-20190625

Date Collected: 06/25/19 00:01

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-1

Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0	1.0	ug/Kg		06/25/19 17:00	06/27/19 19:37	1
Benzene	ND		2.0	2.0	ug/Kg		06/25/19 17:00	06/27/19 19:37	1
Ethylbenzene	ND		2.0	2.0	ug/Kg		06/25/19 17:00	06/27/19 19:37	1
Ethylene Dibromide	ND		1.0	1.0	ug/Kg		06/25/19 17:00	06/27/19 19:37	1
Methyl tert-butyl ether	ND		2.0	2.0	ug/Kg		06/25/19 17:00	06/27/19 19:37	1
m-Xylene & p-Xylene	ND		10	10	ug/Kg		06/25/19 17:00	06/27/19 19:37	1
o-Xylene	ND		5.0	5.0	ug/Kg		06/25/19 17:00	06/27/19 19:37	1
Toluene	ND		10	10	ug/Kg		06/25/19 17:00	06/27/19 19:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		80 - 121	06/25/19 17:00	06/27/19 19:37	1
4-Bromofluorobenzene (Surr)	100		80 - 120	06/25/19 17:00	06/27/19 19:37	1
Dibromofluoromethane (Surr)	104		80 - 120	06/25/19 17:00	06/27/19 19:37	1
Toluene-d8 (Surr)	100		80 - 120	06/25/19 17:00	06/27/19 19:37	1
Trifluorotoluene (Surr)	100		80 - 120	06/25/19 17:00	06/27/19 19:37	1

Client Sample ID: MTA-B03(7.-10.5)-20190625

Date Collected: 06/25/19 09:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-3

Matrix: Solid

Percent Solids: 97.7

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.96	0.96	ug/Kg	☼	06/25/19 17:00	06/27/19 21:41	1
Benzene	ND		1.9	1.9	ug/Kg	☼	06/25/19 17:00	06/27/19 21:41	1
Ethylbenzene	ND		1.9	1.9	ug/Kg	☼	06/25/19 17:00	06/27/19 21:41	1
Ethylene Dibromide	ND		0.96	0.96	ug/Kg	☼	06/25/19 17:00	06/27/19 21:41	1
Methyl tert-butyl ether	ND		1.9	1.9	ug/Kg	☼	06/25/19 17:00	06/27/19 21:41	1
m-Xylene & p-Xylene	ND		9.6	9.6	ug/Kg	☼	06/25/19 17:00	06/27/19 21:41	1
o-Xylene	ND		4.8	4.8	ug/Kg	☼	06/25/19 17:00	06/27/19 21:41	1
Toluene	ND		9.6	9.6	ug/Kg	☼	06/25/19 17:00	06/27/19 21:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		80 - 121	06/25/19 17:00	06/27/19 21:41	1
4-Bromofluorobenzene (Surr)	101		80 - 120	06/25/19 17:00	06/27/19 21:41	1
Dibromofluoromethane (Surr)	103		80 - 120	06/25/19 17:00	06/27/19 21:41	1
Toluene-d8 (Surr)	98		80 - 120	06/25/19 17:00	06/27/19 21:41	1
Trifluorotoluene (Surr)	100		80 - 120	06/25/19 17:00	06/27/19 21:41	1

Client Sample ID: MTA-B08(0-2.5)-20190625

Date Collected: 06/25/19 10:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-4

Matrix: Solid

Percent Solids: 95.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.93	0.93	ug/Kg	☼	06/25/19 17:00	06/27/19 22:05	1
Benzene	ND		1.9	1.9	ug/Kg	☼	06/25/19 17:00	06/27/19 22:05	1
Ethylbenzene	ND		1.9	1.9	ug/Kg	☼	06/25/19 17:00	06/27/19 22:05	1
Ethylene Dibromide	ND		0.93	0.93	ug/Kg	☼	06/25/19 17:00	06/27/19 22:05	1
Methyl tert-butyl ether	ND		1.9	1.9	ug/Kg	☼	06/25/19 17:00	06/27/19 22:05	1
m-Xylene & p-Xylene	ND		9.3	9.3	ug/Kg	☼	06/25/19 17:00	06/27/19 22:05	1
o-Xylene	ND		4.6	4.6	ug/Kg	☼	06/25/19 17:00	06/27/19 22:05	1
Toluene	ND		9.3	9.3	ug/Kg	☼	06/25/19 17:00	06/27/19 22:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	127	X	80 - 121	06/25/19 17:00	06/27/19 22:05	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MTA-B08(0-2.5)-20190625

Date Collected: 06/25/19 10:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-4

Matrix: Solid

Percent Solids: 95.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		80 - 120	06/25/19 17:00	06/27/19 22:05	1
Dibromofluoromethane (Surr)	113		80 - 120	06/25/19 17:00	06/27/19 22:05	1
Toluene-d8 (Surr)	98		80 - 120	06/25/19 17:00	06/27/19 22:05	1
Trifluorotoluene (Surr)	95		80 - 120	06/25/19 17:00	06/27/19 22:05	1

Client Sample ID: MTA-B08(7.5-8.5)-20190625

Date Collected: 06/25/19 10:20

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-5

Matrix: Solid

Percent Solids: 99.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.86	0.86	ug/Kg	☼	06/25/19 17:00	06/27/19 22:30	1
Benzene	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/27/19 22:30	1
Ethylbenzene	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/27/19 22:30	1
Ethylene Dibromide	ND		0.86	0.86	ug/Kg	☼	06/25/19 17:00	06/27/19 22:30	1
Methyl tert-butyl ether	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/27/19 22:30	1
m-Xylene & p-Xylene	ND		8.6	8.6	ug/Kg	☼	06/25/19 17:00	06/27/19 22:30	1
o-Xylene	ND		4.3	4.3	ug/Kg	☼	06/25/19 17:00	06/27/19 22:30	1
Toluene	ND		8.6	8.6	ug/Kg	☼	06/25/19 17:00	06/27/19 22:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	133	X	80 - 121	06/25/19 17:00	06/27/19 22:30	1
4-Bromofluorobenzene (Surr)	99		80 - 120	06/25/19 17:00	06/27/19 22:30	1
Dibromofluoromethane (Surr)	115		80 - 120	06/25/19 17:00	06/27/19 22:30	1
Toluene-d8 (Surr)	100		80 - 120	06/25/19 17:00	06/27/19 22:30	1
Trifluorotoluene (Surr)	96		80 - 120	06/25/19 17:00	06/27/19 22:30	1

Client Sample ID: MTA-B03(0-3)-20190625

Date Collected: 06/25/19 11:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-7

Matrix: Solid

Percent Solids: 97.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.85	0.85	ug/Kg	☼	06/25/19 17:00	06/27/19 22:55	1
Benzene	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/27/19 22:55	1
Ethylbenzene	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/27/19 22:55	1
Ethylene Dibromide	ND		0.85	0.85	ug/Kg	☼	06/25/19 17:00	06/27/19 22:55	1
Methyl tert-butyl ether	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/27/19 22:55	1
m-Xylene & p-Xylene	ND		8.5	8.5	ug/Kg	☼	06/25/19 17:00	06/27/19 22:55	1
o-Xylene	ND		4.3	4.3	ug/Kg	☼	06/25/19 17:00	06/27/19 22:55	1
Toluene	ND		8.5	8.5	ug/Kg	☼	06/25/19 17:00	06/27/19 22:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	135	X	80 - 121	06/25/19 17:00	06/27/19 22:55	1
4-Bromofluorobenzene (Surr)	101		80 - 120	06/25/19 17:00	06/27/19 22:55	1
Dibromofluoromethane (Surr)	117		80 - 120	06/25/19 17:00	06/27/19 22:55	1
Toluene-d8 (Surr)	98		80 - 120	06/25/19 17:00	06/27/19 22:55	1
Trifluorotoluene (Surr)	95		80 - 120	06/25/19 17:00	06/27/19 22:55	1

Client Sample ID: MTA-B06(7.5-8.5)-20190625

Date Collected: 06/25/19 12:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-8

Matrix: Solid

Percent Solids: 99.9

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.86	0.86	ug/Kg	☼	06/25/19 17:00	06/27/19 23:20	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MTA-B06(7.5-8.5)-20190625

Date Collected: 06/25/19 12:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-8

Matrix: Solid

Percent Solids: 99.9

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/27/19 23:20	1
Ethylbenzene	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/27/19 23:20	1
Ethylene Dibromide	ND		0.86	0.86	ug/Kg	☼	06/25/19 17:00	06/27/19 23:20	1
Methyl tert-butyl ether	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/27/19 23:20	1
m-Xylene & p-Xylene	ND		8.6	8.6	ug/Kg	☼	06/25/19 17:00	06/27/19 23:20	1
o-Xylene	ND		4.3	4.3	ug/Kg	☼	06/25/19 17:00	06/27/19 23:20	1
Toluene	ND		8.6	8.6	ug/Kg	☼	06/25/19 17:00	06/27/19 23:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	127	X	80 - 121	06/25/19 17:00	06/27/19 23:20	1
4-Bromofluorobenzene (Surr)	99		80 - 120	06/25/19 17:00	06/27/19 23:20	1
Dibromofluoromethane (Surr)	105		80 - 120	06/25/19 17:00	06/27/19 23:20	1
Toluene-d8 (Surr)	101		80 - 120	06/25/19 17:00	06/27/19 23:20	1
Trifluorotoluene (Surr)	102		80 - 120	06/25/19 17:00	06/27/19 23:20	1

Client Sample ID: MTA-B05(0-2.4)-20190625

Date Collected: 06/25/19 13:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-9

Matrix: Solid

Percent Solids: 99.0

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.83	0.83	ug/Kg	☼	06/25/19 17:00	06/27/19 23:44	1
Benzene	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/27/19 23:44	1
Ethylbenzene	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/27/19 23:44	1
Ethylene Dibromide	ND		0.83	0.83	ug/Kg	☼	06/25/19 17:00	06/27/19 23:44	1
Methyl tert-butyl ether	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/27/19 23:44	1
m-Xylene & p-Xylene	ND		8.3	8.3	ug/Kg	☼	06/25/19 17:00	06/27/19 23:44	1
o-Xylene	ND		4.1	4.1	ug/Kg	☼	06/25/19 17:00	06/27/19 23:44	1
Toluene	ND		8.3	8.3	ug/Kg	☼	06/25/19 17:00	06/27/19 23:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	129	X	80 - 121	06/25/19 17:00	06/27/19 23:44	1
4-Bromofluorobenzene (Surr)	100		80 - 120	06/25/19 17:00	06/27/19 23:44	1
Dibromofluoromethane (Surr)	108		80 - 120	06/25/19 17:00	06/27/19 23:44	1
Toluene-d8 (Surr)	101		80 - 120	06/25/19 17:00	06/27/19 23:44	1
Trifluorotoluene (Surr)	98		80 - 120	06/25/19 17:00	06/27/19 23:44	1

Client Sample ID: MTA-B05(8-9)-20190625

Date Collected: 06/25/19 13:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-10

Matrix: Solid

Percent Solids: 99.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.85	0.85	ug/Kg	☼	06/25/19 17:00	06/28/19 00:09	1
Benzene	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/28/19 00:09	1
Ethylbenzene	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/28/19 00:09	1
Ethylene Dibromide	ND		0.85	0.85	ug/Kg	☼	06/25/19 17:00	06/28/19 00:09	1
Methyl tert-butyl ether	ND		1.7	1.7	ug/Kg	☼	06/25/19 17:00	06/28/19 00:09	1
m-Xylene & p-Xylene	ND		8.5	8.5	ug/Kg	☼	06/25/19 17:00	06/28/19 00:09	1
o-Xylene	ND		4.2	4.2	ug/Kg	☼	06/25/19 17:00	06/28/19 00:09	1
Toluene	ND		8.5	8.5	ug/Kg	☼	06/25/19 17:00	06/28/19 00:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	130	X	80 - 121	06/25/19 17:00	06/28/19 00:09	1
4-Bromofluorobenzene (Surr)	102		80 - 120	06/25/19 17:00	06/28/19 00:09	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MTA-B05(8-9)-20190625

Date Collected: 06/25/19 13:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-10

Matrix: Solid

Percent Solids: 99.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	115		80 - 120	06/25/19 17:00	06/28/19 00:09	1
Toluene-d8 (Surr)	102		80 - 120	06/25/19 17:00	06/28/19 00:09	1
Trifluorotoluene (Surr)	97		80 - 120	06/25/19 17:00	06/28/19 00:09	1

Client Sample ID: MTA-B04(10.5-11.5)-20190625

Date Collected: 06/25/19 14:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-11

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.89	0.89	ug/Kg	☼	06/25/19 17:00	06/28/19 00:33	1
Benzene	ND		1.8	1.8	ug/Kg	☼	06/25/19 17:00	06/28/19 00:33	1
Ethylbenzene	ND		1.8	1.8	ug/Kg	☼	06/25/19 17:00	06/28/19 00:33	1
Ethylene Dibromide	ND		0.89	0.89	ug/Kg	☼	06/25/19 17:00	06/28/19 00:33	1
Methyl tert-butyl ether	ND		1.8	1.8	ug/Kg	☼	06/25/19 17:00	06/28/19 00:33	1
m-Xylene & p-Xylene	ND		8.9	8.9	ug/Kg	☼	06/25/19 17:00	06/28/19 00:33	1
o-Xylene	ND		4.5	4.5	ug/Kg	☼	06/25/19 17:00	06/28/19 00:33	1
Toluene	ND		8.9	8.9	ug/Kg	☼	06/25/19 17:00	06/28/19 00:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	135	X	80 - 121	06/25/19 17:00	06/28/19 00:33	1
4-Bromofluorobenzene (Surr)	101		80 - 120	06/25/19 17:00	06/28/19 00:33	1
Dibromofluoromethane (Surr)	117		80 - 120	06/25/19 17:00	06/28/19 00:33	1
Toluene-d8 (Surr)	103		80 - 120	06/25/19 17:00	06/28/19 00:33	1
Trifluorotoluene (Surr)	100		80 - 120	06/25/19 17:00	06/28/19 00:33	1

Client Sample ID: MTA-B01(0-3)-20190625

Date Collected: 06/25/19 14:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-12

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.76	0.76	ug/Kg	☼	06/25/19 17:00	06/28/19 00:58	1
Benzene	ND		1.5	1.5	ug/Kg	☼	06/25/19 17:00	06/28/19 00:58	1
Ethylbenzene	ND		1.5	1.5	ug/Kg	☼	06/25/19 17:00	06/28/19 00:58	1
Ethylene Dibromide	ND		0.76	0.76	ug/Kg	☼	06/25/19 17:00	06/28/19 00:58	1
Methyl tert-butyl ether	ND		1.5	1.5	ug/Kg	☼	06/25/19 17:00	06/28/19 00:58	1
m-Xylene & p-Xylene	ND		7.6	7.6	ug/Kg	☼	06/25/19 17:00	06/28/19 00:58	1
o-Xylene	ND		3.8	3.8	ug/Kg	☼	06/25/19 17:00	06/28/19 00:58	1
Toluene	ND		7.6	7.6	ug/Kg	☼	06/25/19 17:00	06/28/19 00:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	142	X	80 - 121	06/25/19 17:00	06/28/19 00:58	1
4-Bromofluorobenzene (Surr)	101		80 - 120	06/25/19 17:00	06/28/19 00:58	1
Dibromofluoromethane (Surr)	112		80 - 120	06/25/19 17:00	06/28/19 00:58	1
Toluene-d8 (Surr)	100		80 - 120	06/25/19 17:00	06/28/19 00:58	1
Trifluorotoluene (Surr)	94		80 - 120	06/25/19 17:00	06/28/19 00:58	1

Client Sample ID: MTA-B01(7.3-8.3)-20190625

Date Collected: 06/25/19 14:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-13

Matrix: Solid

Percent Solids: 99.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.2	1.2	ug/Kg	☼	06/25/19 17:00	06/28/19 01:23	1
Benzene	ND		2.4	2.4	ug/Kg	☼	06/25/19 17:00	06/28/19 01:23	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MTA-B01(7.3-8.3)-20190625

Date Collected: 06/25/19 14:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-13

Matrix: Solid

Percent Solids: 99.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		2.4	2.4	ug/Kg	☼	06/25/19 17:00	06/28/19 01:23	1
Ethylene Dibromide	ND		1.2	1.2	ug/Kg	☼	06/25/19 17:00	06/28/19 01:23	1
Methyl tert-butyl ether	ND		2.4	2.4	ug/Kg	☼	06/25/19 17:00	06/28/19 01:23	1
m-Xylene & p-Xylene	ND		12	12	ug/Kg	☼	06/25/19 17:00	06/28/19 01:23	1
o-Xylene	ND		6.0	6.0	ug/Kg	☼	06/25/19 17:00	06/28/19 01:23	1
Toluene	ND		12	12	ug/Kg	☼	06/25/19 17:00	06/28/19 01:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		80 - 121	06/25/19 17:00	06/28/19 01:23	1
4-Bromofluorobenzene (Surr)	98		80 - 120	06/25/19 17:00	06/28/19 01:23	1
Dibromofluoromethane (Surr)	103		80 - 120	06/25/19 17:00	06/28/19 01:23	1
Toluene-d8 (Surr)	104		80 - 120	06/25/19 17:00	06/28/19 01:23	1
Trifluorotoluene (Surr)	107		80 - 120	06/25/19 17:00	06/28/19 01:23	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Client Sample ID: MTA-B03(7.-10.5)-20190625

Date Collected: 06/25/19 09:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-3

Matrix: Solid

Percent Solids: 97.7

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 16:58	1
Chrysene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 16:58	1
Benzo[b]fluoranthene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 16:58	1
Benzo[k]fluoranthene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 16:58	1
Benzo[a]pyrene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 16:58	1
Indeno[1,2,3-cd]pyrene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 16:58	1
Dibenz(a,h)anthracene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 16:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	103		61 - 136	07/02/19 11:58	07/02/19 16:58	1
Nitrobenzene-d5	82		31 - 120	07/02/19 11:58	07/02/19 16:58	1
2-Fluorobiphenyl (Surr)	87		46 - 120	07/02/19 11:58	07/02/19 16:58	1

Client Sample ID: MTA-B08(0-2.5)-20190625

Date Collected: 06/25/19 10:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-4

Matrix: Solid

Percent Solids: 95.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	21		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 17:24	1
Chrysene	32		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 17:24	1
Benzo[b]fluoranthene	29		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 17:24	1
Benzo[k]fluoranthene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 17:24	1
Benzo[a]pyrene	25		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 17:24	1
Indeno[1,2,3-cd]pyrene	13		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 17:24	1
Dibenz(a,h)anthracene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 17:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	107		61 - 136	07/02/19 11:58	07/02/19 17:24	1
Nitrobenzene-d5	87		31 - 120	07/02/19 11:58	07/02/19 17:24	1
2-Fluorobiphenyl (Surr)	93		46 - 120	07/02/19 11:58	07/02/19 17:24	1

Client Sample ID: MTA-B08(7.5-8.5)-20190625

Date Collected: 06/25/19 10:20

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-5

Matrix: Solid

Percent Solids: 99.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		9.9	9.9	ug/Kg	☼	07/02/19 11:58	07/02/19 17:50	1
Chrysene	ND		9.9	9.9	ug/Kg	☼	07/02/19 11:58	07/02/19 17:50	1
Benzo[b]fluoranthene	ND		9.9	9.9	ug/Kg	☼	07/02/19 11:58	07/02/19 17:50	1
Benzo[k]fluoranthene	ND		9.9	9.9	ug/Kg	☼	07/02/19 11:58	07/02/19 17:50	1
Benzo[a]pyrene	ND		9.9	9.9	ug/Kg	☼	07/02/19 11:58	07/02/19 17:50	1
Indeno[1,2,3-cd]pyrene	ND		9.9	9.9	ug/Kg	☼	07/02/19 11:58	07/02/19 17:50	1
Dibenz(a,h)anthracene	ND		9.9	9.9	ug/Kg	☼	07/02/19 11:58	07/02/19 17:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	105		61 - 136	07/02/19 11:58	07/02/19 17:50	1
Nitrobenzene-d5	82		31 - 120	07/02/19 11:58	07/02/19 17:50	1
2-Fluorobiphenyl (Surr)	88		46 - 120	07/02/19 11:58	07/02/19 17:50	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Client Sample ID: MTA-B08-14-20190625

Date Collected: 06/25/19 11:09

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-6

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/02/19 23:44	1
Chrysene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/02/19 23:44	1
Benzo[b]fluoranthene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/02/19 23:44	1
Benzo[k]fluoranthene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/02/19 23:44	1
Benzo[a]pyrene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/02/19 23:44	1
Indeno[1,2,3-cd]pyrene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/02/19 23:44	1
Dibenz(a,h)anthracene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/02/19 23:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	87		51 - 121	07/02/19 10:14	07/02/19 23:44	1
Nitrobenzene-d5	71		36 - 126	07/02/19 10:14	07/02/19 23:44	1
2-Fluorobiphenyl (Surr)	73		44 - 120	07/02/19 10:14	07/02/19 23:44	1

Client Sample ID: MTA-B03(0-3)-20190625

Date Collected: 06/25/19 11:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-7

Matrix: Solid

Percent Solids: 97.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	17		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 18:17	1
Chrysene	27		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 18:17	1
Benzo[b]fluoranthene	34		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 18:17	1
Benzo[k]fluoranthene	13		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 18:17	1
Benzo[a]pyrene	21		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 18:17	1
Indeno[1,2,3-cd]pyrene	15		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 18:17	1
Dibenz(a,h)anthracene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 18:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	109		61 - 136	07/02/19 11:58	07/02/19 18:17	1
Nitrobenzene-d5	87		31 - 120	07/02/19 11:58	07/02/19 18:17	1
2-Fluorobiphenyl (Surr)	96		46 - 120	07/02/19 11:58	07/02/19 18:17	1

Client Sample ID: MTA-B06(7.5-8.5)-20190625

Date Collected: 06/25/19 12:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-8

Matrix: Solid

Percent Solids: 99.9

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 18:43	1
Chrysene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 18:43	1
Benzo[b]fluoranthene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 18:43	1
Benzo[k]fluoranthene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 18:43	1
Benzo[a]pyrene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 18:43	1
Indeno[1,2,3-cd]pyrene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 18:43	1
Dibenz(a,h)anthracene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 18:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	105		61 - 136	07/02/19 11:58	07/02/19 18:43	1
Nitrobenzene-d5	81		31 - 120	07/02/19 11:58	07/02/19 18:43	1
2-Fluorobiphenyl (Surr)	91		46 - 120	07/02/19 11:58	07/02/19 18:43	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Client Sample ID: MTA-B05(0-2.4)-20190625

Date Collected: 06/25/19 13:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-9

Matrix: Solid

Percent Solids: 99.0

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 19:09	1
Chrysene	14		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 19:09	1
Benzo[b]fluoranthene	14		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 19:09	1
Benzo[k]fluoranthene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 19:09	1
Benzo[a]pyrene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 19:09	1
Indeno[1,2,3-cd]pyrene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 19:09	1
Dibenz(a,h)anthracene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 19:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	100		61 - 136	07/02/19 11:58	07/02/19 19:09	1
Nitrobenzene-d5	74		31 - 120	07/02/19 11:58	07/02/19 19:09	1
2-Fluorobiphenyl (Surr)	79		46 - 120	07/02/19 11:58	07/02/19 19:09	1

Client Sample ID: MTA-B05(8-9)-20190625

Date Collected: 06/25/19 13:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-10

Matrix: Solid

Percent Solids: 99.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		9.8	9.8	ug/Kg	☼	07/02/19 11:58	07/02/19 19:36	1
Chrysene	ND		9.8	9.8	ug/Kg	☼	07/02/19 11:58	07/02/19 19:36	1
Benzo[b]fluoranthene	ND		9.8	9.8	ug/Kg	☼	07/02/19 11:58	07/02/19 19:36	1
Benzo[k]fluoranthene	ND		9.8	9.8	ug/Kg	☼	07/02/19 11:58	07/02/19 19:36	1
Benzo[a]pyrene	ND		9.8	9.8	ug/Kg	☼	07/02/19 11:58	07/02/19 19:36	1
Indeno[1,2,3-cd]pyrene	ND		9.8	9.8	ug/Kg	☼	07/02/19 11:58	07/02/19 19:36	1
Dibenz(a,h)anthracene	ND		9.8	9.8	ug/Kg	☼	07/02/19 11:58	07/02/19 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	103		61 - 136	07/02/19 11:58	07/02/19 19:36	1
Nitrobenzene-d5	82		31 - 120	07/02/19 11:58	07/02/19 19:36	1
2-Fluorobiphenyl (Surr)	89		46 - 120	07/02/19 11:58	07/02/19 19:36	1

Client Sample ID: MTA-B04(10.5-11.5)-20190625

Date Collected: 06/25/19 14:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-11

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 20:02	1
Chrysene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 20:02	1
Benzo[b]fluoranthene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 20:02	1
Benzo[k]fluoranthene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 20:02	1
Benzo[a]pyrene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 20:02	1
Indeno[1,2,3-cd]pyrene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 20:02	1
Dibenz(a,h)anthracene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 20:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	98		61 - 136	07/02/19 11:58	07/02/19 20:02	1
Nitrobenzene-d5	78		31 - 120	07/02/19 11:58	07/02/19 20:02	1
2-Fluorobiphenyl (Surr)	85		46 - 120	07/02/19 11:58	07/02/19 20:02	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Client Sample ID: MTA-B01(0-3)-20190625

Date Collected: 06/25/19 14:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-12

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		9.9	9.9	ug/Kg	☼	07/02/19 11:58	07/02/19 20:28	1
Chrysene	17		9.9	9.9	ug/Kg	☼	07/02/19 11:58	07/02/19 20:28	1
Benzo[b]fluoranthene	23		9.9	9.9	ug/Kg	☼	07/02/19 11:58	07/02/19 20:28	1
Benzo[k]fluoranthene	ND		9.9	9.9	ug/Kg	☼	07/02/19 11:58	07/02/19 20:28	1
Benzo[a]pyrene	ND		9.9	9.9	ug/Kg	☼	07/02/19 11:58	07/02/19 20:28	1
Indeno[1,2,3-cd]pyrene	ND		9.9	9.9	ug/Kg	☼	07/02/19 11:58	07/02/19 20:28	1
Dibenz(a,h)anthracene	ND		9.9	9.9	ug/Kg	☼	07/02/19 11:58	07/02/19 20:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	101		61 - 136	07/02/19 11:58	07/02/19 20:28	1
Nitrobenzene-d5	80		31 - 120	07/02/19 11:58	07/02/19 20:28	1
2-Fluorobiphenyl (Surr)	90		46 - 120	07/02/19 11:58	07/02/19 20:28	1

Client Sample ID: MTA-B01(7.3-8.3)-20190625

Date Collected: 06/25/19 14:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-13

Matrix: Solid

Percent Solids: 99.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 20:55	1
Chrysene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 20:55	1
Benzo[b]fluoranthene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 20:55	1
Benzo[k]fluoranthene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 20:55	1
Benzo[a]pyrene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 20:55	1
Indeno[1,2,3-cd]pyrene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 20:55	1
Dibenz(a,h)anthracene	ND		10	10	ug/Kg	☼	07/02/19 11:58	07/02/19 20:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	102		61 - 136	07/02/19 11:58	07/02/19 20:55	1
Nitrobenzene-d5	79		31 - 120	07/02/19 11:58	07/02/19 20:55	1
2-Fluorobiphenyl (Surr)	86		46 - 120	07/02/19 11:58	07/02/19 20:55	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Client Sample ID: TripBlank1-20190625

Date Collected: 06/25/19 00:01

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-1

Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		5.0	5.0	mg/Kg	—	07/02/19 08:50	07/02/19 13:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		50 - 150				07/02/19 08:50	07/02/19 13:35	1

Client Sample ID: TripBlank2-20190625

Date Collected: 06/25/19 00:01

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-2

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		0.25	0.25	mg/L	—		06/27/19 16:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		50 - 150					06/27/19 16:13	1
Trifluorotoluene (Surr)	92		50 - 150					06/27/19 16:13	1

Client Sample ID: MTA-B03(7.-10.5)-20190625

Date Collected: 06/25/19 09:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-3

Matrix: Solid

Percent Solids: 97.7

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		4.7	4.7	mg/Kg	☼	07/02/19 08:50	07/02/19 16:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		50 - 150				07/02/19 08:50	07/02/19 16:16	1

Client Sample ID: MTA-B08(0-2.5)-20190625

Date Collected: 06/25/19 10:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-4

Matrix: Solid

Percent Solids: 95.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		5.0	5.0	mg/Kg	☼	07/02/19 08:50	07/02/19 16:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		50 - 150				07/02/19 08:50	07/02/19 16:44	1

Client Sample ID: MTA-B08(7.5-8.5)-20190625

Date Collected: 06/25/19 10:20

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-5

Matrix: Solid

Percent Solids: 99.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		4.3	4.3	mg/Kg	☼	07/02/19 08:50	07/02/19 17:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		50 - 150				07/02/19 08:50	07/02/19 17:11	1

Client Sample ID: MTA-B08-14-20190625

Date Collected: 06/25/19 11:09

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-6

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.25	0.25	mg/L	—		06/28/19 20:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		50 - 150					06/28/19 20:25	1
Trifluorotoluene (Surr)	111		50 - 150					06/28/19 20:25	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Client Sample ID: MTA-B03(0-3)-20190625

Date Collected: 06/25/19 11:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-7

Matrix: Solid

Percent Solids: 97.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		4.8	4.8	mg/Kg	☼	07/02/19 08:50	07/02/19 17:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		50 - 150				07/02/19 08:50	07/02/19 17:38	1

Client Sample ID: MTA-B06(7.5-8.5)-20190625

Date Collected: 06/25/19 12:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-8

Matrix: Solid

Percent Solids: 99.9

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		4.4	4.4	mg/Kg	☼	07/02/19 08:50	07/02/19 18:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		50 - 150				07/02/19 08:50	07/02/19 18:05	1

Client Sample ID: MTA-B05(0-2.4)-20190625

Date Collected: 06/25/19 13:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-9

Matrix: Solid

Percent Solids: 99.0

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		4.9	4.9	mg/Kg	☼	07/02/19 08:50	07/02/19 18:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		50 - 150				07/02/19 08:50	07/02/19 18:32	1

Client Sample ID: MTA-B05(8-9)-20190625

Date Collected: 06/25/19 13:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-10

Matrix: Solid

Percent Solids: 99.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		4.2	4.2	mg/Kg	☼	07/02/19 08:50	07/02/19 18:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		50 - 150				07/02/19 08:50	07/02/19 18:59	1

Client Sample ID: MTA-B04(10.5-11.5)-20190625

Date Collected: 06/25/19 14:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-11

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		4.2	4.2	mg/Kg	☼	07/02/19 08:50	07/02/19 19:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		50 - 150				07/02/19 08:50	07/02/19 19:54	1

Client Sample ID: MTA-B01(0-3)-20190625

Date Collected: 06/25/19 14:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-12

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		4.5	4.5	mg/Kg	☼	07/02/19 08:50	07/02/19 20:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		50 - 150				07/02/19 08:50	07/02/19 20:21	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Client Sample ID: MTA-B01(7.3-8.3)-20190625

Date Collected: 06/25/19 14:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-13

Matrix: Solid

Percent Solids: 99.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		4.4	4.4	mg/Kg	☼	07/02/19 08:50	07/02/19 20:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		50 - 150				07/02/19 08:50	07/02/19 20:48	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Client Sample ID: MTA-B08-14-20190625

Date Collected: 06/25/19 11:09

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-6

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.0099	0.0099	ug/L		07/09/19 14:57	07/10/19 19:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dibromopropane	94		60 - 140				07/09/19 14:57	07/10/19 19:26	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: MTA-B03(7.-10.5)-20190625

Date Collected: 06/25/19 09:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-3

Matrix: Solid

Percent Solids: 97.7

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		9.7	9.7	ug/Kg	☼	07/10/19 09:18	07/10/19 15:54	1
PCB-1221	ND		9.7	9.7	ug/Kg	☼	07/10/19 09:18	07/10/19 15:54	1
PCB-1232	ND		9.7	9.7	ug/Kg	☼	07/10/19 09:18	07/10/19 15:54	1
PCB-1242	ND		9.7	9.7	ug/Kg	☼	07/10/19 09:18	07/10/19 15:54	1
PCB-1248	ND		9.7	9.7	ug/Kg	☼	07/10/19 09:18	07/10/19 15:54	1
PCB-1254	ND		9.7	9.7	ug/Kg	☼	07/10/19 09:18	07/10/19 15:54	1
PCB-1260	ND		9.7	9.7	ug/Kg	☼	07/10/19 09:18	07/10/19 15:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		31 - 142	07/10/19 09:18	07/10/19 15:54	1
DCB Decachlorobiphenyl (Surr)	81		20 - 150	07/10/19 09:18	07/10/19 15:54	1

Client Sample ID: MTA-B08(0-2.5)-20190625

Date Collected: 06/25/19 10:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-4

Matrix: Solid

Percent Solids: 95.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 16:15	1
PCB-1221	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 16:15	1
PCB-1232	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 16:15	1
PCB-1242	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 16:15	1
PCB-1248	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 16:15	1
PCB-1254	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 16:15	1
PCB-1260	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 16:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		31 - 142	07/10/19 09:18	07/10/19 16:15	1
DCB Decachlorobiphenyl (Surr)	63		20 - 150	07/10/19 09:18	07/10/19 16:15	1

Client Sample ID: MTA-B08(7.5-8.5)-20190625

Date Collected: 06/25/19 10:20

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-5

Matrix: Solid

Percent Solids: 99.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		9.8	9.8	ug/Kg	☼	07/10/19 09:18	07/10/19 17:16	1
PCB-1221	ND		9.8	9.8	ug/Kg	☼	07/10/19 09:18	07/10/19 17:16	1
PCB-1232	ND		9.8	9.8	ug/Kg	☼	07/10/19 09:18	07/10/19 17:16	1
PCB-1242	ND		9.8	9.8	ug/Kg	☼	07/10/19 09:18	07/10/19 17:16	1
PCB-1248	ND		9.8	9.8	ug/Kg	☼	07/10/19 09:18	07/10/19 17:16	1
PCB-1254	ND		9.8	9.8	ug/Kg	☼	07/10/19 09:18	07/10/19 17:16	1
PCB-1260	ND		9.8	9.8	ug/Kg	☼	07/10/19 09:18	07/10/19 17:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	80		31 - 142	07/10/19 09:18	07/10/19 17:16	1
DCB Decachlorobiphenyl (Surr)	65		20 - 150	07/10/19 09:18	07/10/19 17:16	1

Client Sample ID: MTA-B08-14-20190625

Date Collected: 06/25/19 11:09

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.10	0.064	ug/L	—	07/11/19 10:34	07/11/19 14:47	1
PCB-1221	ND		0.10	0.064	ug/L	—	07/11/19 10:34	07/11/19 14:47	1
PCB-1232	ND		0.10	0.064	ug/L	—	07/11/19 10:34	07/11/19 14:47	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Client Sample ID: MTA-B08-14-20190625

Date Collected: 06/25/19 11:09

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	ND		0.10	0.064	ug/L		07/11/19 10:34	07/11/19 14:47	1
PCB-1248	ND		0.10	0.064	ug/L		07/11/19 10:34	07/11/19 14:47	1
PCB-1254	ND		0.10	0.064	ug/L		07/11/19 10:34	07/11/19 14:47	1
PCB-1260	ND		0.10	0.045	ug/L		07/11/19 10:34	07/11/19 14:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		20 - 126	07/11/19 10:34	07/11/19 14:47	1
DCB Decachlorobiphenyl (Surr)	76		23 - 138	07/11/19 10:34	07/11/19 14:47	1

Client Sample ID: MTA-B03(0-3)-20190625

Date Collected: 06/25/19 11:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-7

Matrix: Solid

Percent Solids: 97.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 17:37	1
PCB-1221	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 17:37	1
PCB-1232	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 17:37	1
PCB-1242	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 17:37	1
PCB-1248	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 17:37	1
PCB-1254	21		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 17:37	1
PCB-1260	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 17:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		31 - 142	07/10/19 09:18	07/10/19 17:37	1
DCB Decachlorobiphenyl (Surr)	85		20 - 150	07/10/19 09:18	07/10/19 17:37	1

Client Sample ID: MTA-B06(7.5-8.5)-20190625

Date Collected: 06/25/19 12:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-8

Matrix: Solid

Percent Solids: 99.9

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		9.7	9.7	ug/Kg	☼	07/10/19 09:18	07/10/19 17:57	1
PCB-1221	ND		9.7	9.7	ug/Kg	☼	07/10/19 09:18	07/10/19 17:57	1
PCB-1232	ND		9.7	9.7	ug/Kg	☼	07/10/19 09:18	07/10/19 17:57	1
PCB-1242	ND		9.7	9.7	ug/Kg	☼	07/10/19 09:18	07/10/19 17:57	1
PCB-1248	ND		9.7	9.7	ug/Kg	☼	07/10/19 09:18	07/10/19 17:57	1
PCB-1254	ND		9.7	9.7	ug/Kg	☼	07/10/19 09:18	07/10/19 17:57	1
PCB-1260	ND		9.7	9.7	ug/Kg	☼	07/10/19 09:18	07/10/19 17:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		31 - 142	07/10/19 09:18	07/10/19 17:57	1
DCB Decachlorobiphenyl (Surr)	72		20 - 150	07/10/19 09:18	07/10/19 17:57	1

Client Sample ID: MTA-B05(0-2.4)-20190625

Date Collected: 06/25/19 13:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-9

Matrix: Solid

Percent Solids: 99.0

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 18:18	1
PCB-1221	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 18:18	1
PCB-1232	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 18:18	1
PCB-1242	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 18:18	1
PCB-1248	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 18:18	1
PCB-1254	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 18:18	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Client Sample ID: MTA-B05(0-2.4)-20190625

Date Collected: 06/25/19 13:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-9

Matrix: Solid

Percent Solids: 99.0

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 18:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	86		31 - 142				07/10/19 09:18	07/10/19 18:18	1
DCB Decachlorobiphenyl (Surr)	75		20 - 150				07/10/19 09:18	07/10/19 18:18	1

Client Sample ID: MTA-B05(8-9)-20190625

Date Collected: 06/25/19 13:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-10

Matrix: Solid

Percent Solids: 99.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		9.6	9.6	ug/Kg	☼	07/10/19 09:18	07/10/19 18:38	1
PCB-1221	ND		9.6	9.6	ug/Kg	☼	07/10/19 09:18	07/10/19 18:38	1
PCB-1232	ND		9.6	9.6	ug/Kg	☼	07/10/19 09:18	07/10/19 18:38	1
PCB-1242	ND		9.6	9.6	ug/Kg	☼	07/10/19 09:18	07/10/19 18:38	1
PCB-1248	ND		9.6	9.6	ug/Kg	☼	07/10/19 09:18	07/10/19 18:38	1
PCB-1254	ND		9.6	9.6	ug/Kg	☼	07/10/19 09:18	07/10/19 18:38	1
PCB-1260	ND		9.6	9.6	ug/Kg	☼	07/10/19 09:18	07/10/19 18:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		31 - 142				07/10/19 09:18	07/10/19 18:38	1
DCB Decachlorobiphenyl (Surr)	79		20 - 150				07/10/19 09:18	07/10/19 18:38	1

Client Sample ID: MTA-B04(10.5-11.5)-20190625

Date Collected: 06/25/19 14:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-11

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 18:59	1
PCB-1221	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 18:59	1
PCB-1232	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 18:59	1
PCB-1242	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 18:59	1
PCB-1248	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 18:59	1
PCB-1254	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 18:59	1
PCB-1260	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 18:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	88		31 - 142				07/10/19 09:18	07/10/19 18:59	1
DCB Decachlorobiphenyl (Surr)	87		20 - 150				07/10/19 09:18	07/10/19 18:59	1

Client Sample ID: MTA-B01(0-3)-20190625

Date Collected: 06/25/19 14:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-12

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		9.6	9.6	ug/Kg	☼	07/10/19 09:18	07/10/19 19:19	1
PCB-1221	ND		9.6	9.6	ug/Kg	☼	07/10/19 09:18	07/10/19 19:19	1
PCB-1232	ND		9.6	9.6	ug/Kg	☼	07/10/19 09:18	07/10/19 19:19	1
PCB-1242	ND		9.6	9.6	ug/Kg	☼	07/10/19 09:18	07/10/19 19:19	1
PCB-1248	ND		9.6	9.6	ug/Kg	☼	07/10/19 09:18	07/10/19 19:19	1
PCB-1254	10		9.6	9.6	ug/Kg	☼	07/10/19 09:18	07/10/19 19:19	1
PCB-1260	ND		9.6	9.6	ug/Kg	☼	07/10/19 09:18	07/10/19 19:19	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	95		31 - 142	07/10/19 09:18	07/10/19 19:19	1
DCB Decachlorobiphenyl (Surr)	93		20 - 150	07/10/19 09:18	07/10/19 19:19	1

Client Sample ID: MTA-B01(7.3-8.3)-20190625

Date Collected: 06/25/19 14:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-13

Matrix: Solid

Percent Solids: 99.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 19:40	1
PCB-1221	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 19:40	1
PCB-1232	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 19:40	1
PCB-1242	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 19:40	1
PCB-1248	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 19:40	1
PCB-1254	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 19:40	1
PCB-1260	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		31 - 142	07/10/19 09:18	07/10/19 19:40	1
DCB Decachlorobiphenyl (Surr)	78		20 - 150	07/10/19 09:18	07/10/19 19:40	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Client Sample ID: MTA-B03(7.-10.5)-20190625

Date Collected: 06/25/19 09:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-3

Matrix: Solid

Percent Solids: 97.7

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		10	10	mg/Kg	☼	07/09/19 10:00	07/10/19 01:08	1
Residual Range Organics (RRO) (C25-C36)	ND		25	25	mg/Kg	☼	07/09/19 10:00	07/10/19 01:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				07/09/19 10:00	07/10/19 01:08	1
<i>n</i> -Triacontane-d62	71		50 - 150				07/09/19 10:00	07/10/19 01:08	1

Client Sample ID: MTA-B08(0-2.5)-20190625

Date Collected: 06/25/19 10:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-4

Matrix: Solid

Percent Solids: 95.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	87		10	10	mg/Kg	☼	07/09/19 10:00	07/10/19 01:28	1
Residual Range Organics (RRO) (C25-C36)	480		26	26	mg/Kg	☼	07/09/19 10:00	07/10/19 01:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				07/09/19 10:00	07/10/19 01:28	1
<i>n</i> -Triacontane-d62	91		50 - 150				07/09/19 10:00	07/10/19 01:28	1

Client Sample ID: MTA-B08(7.5-8.5)-20190625

Date Collected: 06/25/19 10:20

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-5

Matrix: Solid

Percent Solids: 99.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		9.9	9.9	mg/Kg	☼	07/09/19 10:00	07/10/19 01:48	1
Residual Range Organics (RRO) (C25-C36)	ND		25	25	mg/Kg	☼	07/09/19 10:00	07/10/19 01:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				07/09/19 10:00	07/10/19 01:48	1
<i>n</i> -Triacontane-d62	83		50 - 150				07/09/19 10:00	07/10/19 01:48	1

Client Sample ID: MTA-B08-14-20190625

Date Collected: 06/25/19 11:09

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-6

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		0.24	0.24	mg/L	—	07/09/19 15:19	07/10/19 11:24	1
Residual Range Organics (RRO) (C25-C36)	ND		0.40	0.40	mg/L	—	07/09/19 15:19	07/10/19 11:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				07/09/19 15:19	07/10/19 11:24	1
<i>n</i> -Triacontane-d62	86		50 - 150				07/09/19 15:19	07/10/19 11:24	1

Client Sample ID: MTA-B03(0-3)-20190625

Date Collected: 06/25/19 11:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-7

Matrix: Solid

Percent Solids: 97.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	13		10	10	mg/Kg	☼	07/09/19 10:00	07/10/19 02:08	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Client Sample ID: MTA-B03(0-3)-20190625

Date Collected: 06/25/19 11:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-7

Matrix: Solid

Percent Solids: 97.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Residual Range Organics (RRO) (C25-C36)	71		25	25	mg/Kg	☼	07/09/19 10:00	07/10/19 02:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	86		50 - 150				07/09/19 10:00	07/10/19 02:08	1
<i>n</i> -Triacontane-d62	89		50 - 150				07/09/19 10:00	07/10/19 02:08	1

Client Sample ID: MTA-B06(7.5-8.5)-20190625

Date Collected: 06/25/19 12:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-8

Matrix: Solid

Percent Solids: 99.9

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		9.8	9.8	mg/Kg	☼	07/09/19 10:00	07/10/19 02:47	1
Residual Range Organics (RRO) (C25-C36)	ND		25	25	mg/Kg	☼	07/09/19 10:00	07/10/19 02:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				07/09/19 10:00	07/10/19 02:47	1
<i>n</i> -Triacontane-d62	87		50 - 150				07/09/19 10:00	07/10/19 02:47	1

Client Sample ID: MTA-B05(0-2.4)-20190625

Date Collected: 06/25/19 13:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-9

Matrix: Solid

Percent Solids: 99.0

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		9.8	9.8	mg/Kg	☼	07/09/19 10:00	07/10/19 03:07	1
Residual Range Organics (RRO) (C25-C36)	35		25	25	mg/Kg	☼	07/09/19 10:00	07/10/19 03:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		50 - 150				07/09/19 10:00	07/10/19 03:07	1
<i>n</i> -Triacontane-d62	100		50 - 150				07/09/19 10:00	07/10/19 03:07	1

Client Sample ID: MTA-B05(8-9)-20190625

Date Collected: 06/25/19 13:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-10

Matrix: Solid

Percent Solids: 99.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		9.9	9.9	mg/Kg	☼	07/09/19 10:00	07/10/19 03:27	1
Residual Range Organics (RRO) (C25-C36)	ND		25	25	mg/Kg	☼	07/09/19 10:00	07/10/19 03:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150				07/09/19 10:00	07/10/19 03:27	1
<i>n</i> -Triacontane-d62	81		50 - 150				07/09/19 10:00	07/10/19 03:27	1

Client Sample ID: MTA-B04(10.5-11.5)-20190625

Date Collected: 06/25/19 14:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-11

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		9.9	9.9	mg/Kg	☼	07/09/19 10:00	07/10/19 04:07	1
Residual Range Organics (RRO) (C25-C36)	ND		25	25	mg/Kg	☼	07/09/19 10:00	07/10/19 04:07	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150	07/09/19 10:00	07/10/19 04:07	1
<i>n</i> -Triacontane-d62	77		50 - 150	07/09/19 10:00	07/10/19 04:07	1

Client Sample ID: MTA-B01(0-3)-20190625

Date Collected: 06/25/19 14:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-12

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	10		10	10	mg/Kg	☼	07/09/19 10:00	07/10/19 04:26	1
Residual Range Organics (RRO) (C25-C36)	69		25	25	mg/Kg	☼	07/09/19 10:00	07/10/19 04:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	89		50 - 150	07/09/19 10:00	07/10/19 04:26	1
<i>n</i> -Triacontane-d62	93		50 - 150	07/09/19 10:00	07/10/19 04:26	1

Client Sample ID: MTA-B01(7.3-8.3)-20190625

Date Collected: 06/25/19 14:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-13

Matrix: Solid

Percent Solids: 99.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		10	10	mg/Kg	☼	07/09/19 10:00	07/10/19 04:46	1
Residual Range Organics (RRO) (C25-C36)	ND		25	25	mg/Kg	☼	07/09/19 10:00	07/10/19 04:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150	07/09/19 10:00	07/10/19 04:46	1
<i>n</i> -Triacontane-d62	76		50 - 150	07/09/19 10:00	07/10/19 04:46	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 6010C - Metals (ICP)

Client Sample ID: MTA-B03(7.-10.5)-20190625

Date Collected: 06/25/19 09:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-3

Matrix: Solid

Percent Solids: 97.7

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.3	2.3	mg/Kg	☼	07/02/19 11:41	07/03/19 10:56	1
Barium	22		0.38	0.38	mg/Kg	☼	07/02/19 11:41	07/03/19 10:56	1
Cadmium	0.76		0.76	0.76	mg/Kg	☼	07/02/19 11:41	07/03/19 10:56	1
Chromium	33		0.99	0.99	mg/Kg	☼	07/02/19 11:41	07/03/19 10:56	1
Lead	2.2		1.1	1.1	mg/Kg	☼	07/02/19 11:41	07/03/19 10:56	1
Selenium	ND		3.8	3.8	mg/Kg	☼	07/02/19 11:41	07/03/19 10:56	1
Silver	ND		1.9	1.9	mg/Kg	☼	07/02/19 11:41	07/03/19 10:56	1

Client Sample ID: MTA-B08(0-2.5)-20190625

Date Collected: 06/25/19 10:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-4

Matrix: Solid

Percent Solids: 95.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.2	2.2	mg/Kg	☼	07/02/19 11:41	07/03/19 10:59	1
Barium	64		0.36	0.36	mg/Kg	☼	07/02/19 11:41	07/03/19 10:59	1
Cadmium	0.79		0.72	0.72	mg/Kg	☼	07/02/19 11:41	07/03/19 10:59	1
Chromium	60		0.94	0.94	mg/Kg	☼	07/02/19 11:41	07/03/19 10:59	1
Lead	100		1.1	1.1	mg/Kg	☼	07/02/19 11:41	07/03/19 10:59	1
Selenium	ND		3.6	3.6	mg/Kg	☼	07/02/19 11:41	07/03/19 10:59	1
Silver	ND		1.8	1.8	mg/Kg	☼	07/02/19 11:41	07/03/19 10:59	1

Client Sample ID: MTA-B08(7.5-8.5)-20190625

Date Collected: 06/25/19 10:20

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-5

Matrix: Solid

Percent Solids: 99.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.2	2.2	mg/Kg	☼	07/02/19 11:41	07/03/19 11:03	1
Barium	21		0.37	0.37	mg/Kg	☼	07/02/19 11:41	07/03/19 11:03	1
Cadmium	ND		0.74	0.74	mg/Kg	☼	07/02/19 11:41	07/03/19 11:03	1
Chromium	41		0.97	0.97	mg/Kg	☼	07/02/19 11:41	07/03/19 11:03	1
Lead	ND		1.1	1.1	mg/Kg	☼	07/02/19 11:41	07/03/19 11:03	1
Selenium	ND		3.7	3.7	mg/Kg	☼	07/02/19 11:41	07/03/19 11:03	1
Silver	ND		1.9	1.9	mg/Kg	☼	07/02/19 11:41	07/03/19 11:03	1

Client Sample ID: MTA-B03(0-3)-20190625

Date Collected: 06/25/19 11:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-7

Matrix: Solid

Percent Solids: 97.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.8		2.1	2.1	mg/Kg	☼	07/02/19 11:41	07/03/19 11:06	1
Barium	64		0.36	0.36	mg/Kg	☼	07/02/19 11:41	07/03/19 11:06	1
Cadmium	0.86		0.71	0.71	mg/Kg	☼	07/02/19 11:41	07/03/19 11:06	1
Chromium	53		0.93	0.93	mg/Kg	☼	07/02/19 11:41	07/03/19 11:06	1
Lead	81		1.1	1.1	mg/Kg	☼	07/02/19 11:41	07/03/19 11:06	1
Selenium	ND		3.6	3.6	mg/Kg	☼	07/02/19 11:41	07/03/19 11:06	1
Silver	ND		1.8	1.8	mg/Kg	☼	07/02/19 11:41	07/03/19 11:06	1

Client Sample ID: MTA-B06(7.5-8.5)-20190625

Date Collected: 06/25/19 12:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-8

Matrix: Solid

Percent Solids: 99.9

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.5		2.4	2.4	mg/Kg	☼	07/02/19 11:41	07/03/19 11:09	1
Barium	24		0.41	0.41	mg/Kg	☼	07/02/19 11:41	07/03/19 11:09	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 6010C - Metals (ICP) (Continued)

Client Sample ID: MTA-B06(7.5-8.5)-20190625

Date Collected: 06/25/19 12:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-8

Matrix: Solid

Percent Solids: 99.9

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.81	0.81	mg/Kg	☼	07/02/19 11:41	07/03/19 11:09	1
Chromium	42		1.1	1.1	mg/Kg	☼	07/02/19 11:41	07/03/19 11:09	1
Lead	ND		1.2	1.2	mg/Kg	☼	07/02/19 11:41	07/03/19 11:09	1
Selenium	ND		4.1	4.1	mg/Kg	☼	07/02/19 11:41	07/03/19 11:09	1
Silver	ND		2.0	2.0	mg/Kg	☼	07/02/19 11:41	07/03/19 11:09	1

Client Sample ID: MTA-B05(0-2.4)-20190625

Date Collected: 06/25/19 13:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-9

Matrix: Solid

Percent Solids: 99.0

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.2	2.2	mg/Kg	☼	07/02/19 11:41	07/03/19 11:22	1
Barium	36		0.36	0.36	mg/Kg	☼	07/02/19 11:41	07/03/19 11:22	1
Cadmium	0.92		0.72	0.72	mg/Kg	☼	07/02/19 11:41	07/03/19 11:22	1
Chromium	57		0.94	0.94	mg/Kg	☼	07/02/19 11:41	07/03/19 11:22	1
Lead	50		1.1	1.1	mg/Kg	☼	07/02/19 11:41	07/03/19 11:22	1
Selenium	ND		3.6	3.6	mg/Kg	☼	07/02/19 11:41	07/03/19 11:22	1
Silver	ND		1.8	1.8	mg/Kg	☼	07/02/19 11:41	07/03/19 11:22	1

Client Sample ID: MTA-B05(8-9)-20190625

Date Collected: 06/25/19 13:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-10

Matrix: Solid

Percent Solids: 99.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.7		2.0	2.0	mg/Kg	☼	07/02/19 11:41	07/03/19 11:26	1
Barium	21		0.34	0.34	mg/Kg	☼	07/02/19 11:41	07/03/19 11:26	1
Cadmium	ND		0.68	0.68	mg/Kg	☼	07/02/19 11:41	07/03/19 11:26	1
Chromium	35		0.88	0.88	mg/Kg	☼	07/02/19 11:41	07/03/19 11:26	1
Lead	1.2		1.0	1.0	mg/Kg	☼	07/02/19 11:41	07/03/19 11:26	1
Selenium	ND		3.4	3.4	mg/Kg	☼	07/02/19 11:41	07/03/19 11:26	1
Silver	ND		1.7	1.7	mg/Kg	☼	07/02/19 11:41	07/03/19 11:26	1

Client Sample ID: MTA-B04(10.5-11.5)-20190625

Date Collected: 06/25/19 14:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-11

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.2	2.2	mg/Kg	☼	07/02/19 11:41	07/03/19 11:29	1
Barium	22		0.36	0.36	mg/Kg	☼	07/02/19 11:41	07/03/19 11:29	1
Cadmium	0.73		0.72	0.72	mg/Kg	☼	07/02/19 11:41	07/03/19 11:29	1
Chromium	39		0.94	0.94	mg/Kg	☼	07/02/19 11:41	07/03/19 11:29	1
Lead	ND		1.1	1.1	mg/Kg	☼	07/02/19 11:41	07/03/19 11:29	1
Selenium	ND		3.6	3.6	mg/Kg	☼	07/02/19 11:41	07/03/19 11:29	1
Silver	ND		1.8	1.8	mg/Kg	☼	07/02/19 11:41	07/03/19 11:29	1

Client Sample ID: MTA-B01(0-3)-20190625

Date Collected: 06/25/19 14:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-12

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.2	2.2	mg/Kg	☼	07/02/19 11:41	07/03/19 11:32	1
Barium	45		0.37	0.37	mg/Kg	☼	07/02/19 11:41	07/03/19 11:32	1
Cadmium	0.83		0.74	0.74	mg/Kg	☼	07/02/19 11:41	07/03/19 11:32	1
Chromium	56		0.96	0.96	mg/Kg	☼	07/02/19 11:41	07/03/19 11:32	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 6010C - Metals (ICP) (Continued)

Client Sample ID: MTA-B01(0-3)-20190625

Date Collected: 06/25/19 14:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-12

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	41		1.1	1.1	mg/Kg	☼	07/02/19 11:41	07/03/19 11:32	1
Selenium	ND		3.7	3.7	mg/Kg	☼	07/02/19 11:41	07/03/19 11:32	1
Silver	ND		1.9	1.9	mg/Kg	☼	07/02/19 11:41	07/03/19 11:32	1

Client Sample ID: MTA-B01(7.3-8.3)-20190625

Date Collected: 06/25/19 14:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-13

Matrix: Solid

Percent Solids: 99.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.1	2.1	mg/Kg	☼	07/02/19 11:41	07/03/19 11:35	1
Barium	23		0.35	0.35	mg/Kg	☼	07/02/19 11:41	07/03/19 11:35	1
Cadmium	ND		0.71	0.71	mg/Kg	☼	07/02/19 11:41	07/03/19 11:35	1
Chromium	36		0.92	0.92	mg/Kg	☼	07/02/19 11:41	07/03/19 11:35	1
Lead	1.1		1.1	1.1	mg/Kg	☼	07/02/19 11:41	07/03/19 11:35	1
Selenium	ND		3.5	3.5	mg/Kg	☼	07/02/19 11:41	07/03/19 11:35	1
Silver	ND		1.8	1.8	mg/Kg	☼	07/02/19 11:41	07/03/19 11:35	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 6020A - Metals (ICP/MS) - Dissolved

Client Sample ID: MTA-B08-14-20190625

Date Collected: 06/25/19 11:09

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-6

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050	0.0050	mg/L		07/08/19 15:52	07/10/19 17:13	5
Barium	ND		0.0060	0.0060	mg/L		07/08/19 15:52	07/10/19 17:13	5
Cadmium	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 17:13	5
Chromium	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 17:13	5
Lead	ND		0.0040	0.0040	mg/L		07/08/19 15:52	07/10/19 17:13	5
Selenium	ND		0.040	0.040	mg/L		07/08/19 15:52	07/10/19 17:13	5
Silver	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 17:13	5

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 7470A - Mercury (CVAA) - Dissolved

Client Sample ID: MTA-B08-14-20190625

Date Collected: 06/25/19 11:09

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-6

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00030	0.00030	mg/L		07/08/19 08:39	07/08/19 17:00	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: MTA-B03(7.-10.5)-20190625

Date Collected: 06/25/19 09:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-3

Matrix: Solid

Percent Solids: 97.7

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.025	0.025	mg/Kg	☼	07/10/19 11:46	07/10/19 16:17	1

Client Sample ID: MTA-B08(0-2.5)-20190625

Date Collected: 06/25/19 10:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-4

Matrix: Solid

Percent Solids: 95.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040		0.025	0.025	mg/Kg	☼	07/10/19 11:46	07/10/19 16:24	1

Client Sample ID: MTA-B08(7.5-8.5)-20190625

Date Collected: 06/25/19 10:20

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-5

Matrix: Solid

Percent Solids: 99.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.020	mg/Kg	☼	07/10/19 11:46	07/10/19 16:26	1

Client Sample ID: MTA-B03(0-3)-20190625

Date Collected: 06/25/19 11:45

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-7

Matrix: Solid

Percent Solids: 97.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.022	0.022	mg/Kg	☼	07/10/19 11:46	07/10/19 16:28	1

Client Sample ID: MTA-B06(7.5-8.5)-20190625

Date Collected: 06/25/19 12:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-8

Matrix: Solid

Percent Solids: 99.9

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.024	0.024	mg/Kg	☼	07/10/19 11:46	07/10/19 16:31	1

Client Sample ID: MTA-B05(0-2.4)-20190625

Date Collected: 06/25/19 13:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-9

Matrix: Solid

Percent Solids: 99.0

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.025	0.025	mg/Kg	☼	07/10/19 11:46	07/10/19 16:33	1

Client Sample ID: MTA-B05(8-9)-20190625

Date Collected: 06/25/19 13:15

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-10

Matrix: Solid

Percent Solids: 99.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.019	mg/Kg	☼	07/10/19 11:46	07/10/19 16:35	1

Client Sample ID: MTA-B04(10.5-11.5)-20190625

Date Collected: 06/25/19 14:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-11

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.019	mg/Kg	☼	07/10/19 11:46	07/10/19 16:37	1

Client Sample ID: MTA-B01(0-3)-20190625

Date Collected: 06/25/19 14:35

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-12

Matrix: Solid

Percent Solids: 98.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.022	0.022	mg/Kg	☼	07/10/19 11:46	07/10/19 16:40	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-304262/7

Matrix: Water

Analysis Batch: 304262

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.20	0.20	ug/L			06/27/19 23:48	1
Benzene	ND		0.20	0.20	ug/L			06/27/19 23:48	1
Ethylbenzene	ND		0.20	0.20	ug/L			06/27/19 23:48	1
Methyl tert-butyl ether	ND		0.30	0.30	ug/L			06/27/19 23:48	1
m-Xylene & p-Xylene	ND		0.50	0.50	ug/L			06/27/19 23:48	1
o-Xylene	ND		0.50	0.50	ug/L			06/27/19 23:48	1
Toluene	ND		0.20	0.20	ug/L			06/27/19 23:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		80 - 120		06/27/19 23:48	1
4-Bromofluorobenzene (Surr)	100		80 - 120		06/27/19 23:48	1
Dibromofluoromethane (Surr)	105		80 - 120		06/27/19 23:48	1
Toluene-d8 (Surr)	103		80 - 120		06/27/19 23:48	1
Trifluorotoluene (Surr)	100		80 - 120		06/27/19 23:48	1

Lab Sample ID: LCS 580-304262/4

Matrix: Water

Analysis Batch: 304262

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	5.00	4.82		ug/L		96	74 - 130
Benzene	5.00	4.80		ug/L		96	73 - 133
Ethylbenzene	5.00	4.62		ug/L		92	80 - 130
Methyl tert-butyl ether	5.00	5.06		ug/L		101	60 - 150
m-Xylene & p-Xylene	5.00	4.66		ug/L		93	78 - 130
o-Xylene	5.00	4.69		ug/L		94	80 - 139
Toluene	5.00	4.74		ug/L		95	80 - 126

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	101		80 - 120
Trifluorotoluene (Surr)	102		80 - 120

Lab Sample ID: LCSD 580-304262/5

Matrix: Water

Analysis Batch: 304262

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane	5.00	4.97		ug/L		99	74 - 130	3	15
Benzene	5.00	4.95		ug/L		99	73 - 133	3	20
Ethylbenzene	5.00	4.68		ug/L		94	80 - 130	1	20
Methyl tert-butyl ether	5.00	5.48		ug/L		110	60 - 150	8	25
m-Xylene & p-Xylene	5.00	4.74		ug/L		95	78 - 130	2	20
o-Xylene	5.00	4.73		ug/L		95	80 - 139	1	20
Toluene	5.00	4.80		ug/L		96	80 - 126	1	20

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-304262/5

Matrix: Water

Analysis Batch: 304262

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	99		80 - 120
Trifluorotoluene (Surr)	97		80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-304247/1-A

Matrix: Solid

Analysis Batch: 304251

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 304247

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0	1.0	ug/Kg		06/27/19 16:57	06/27/19 18:47	1
Benzene	ND		2.0	2.0	ug/Kg		06/27/19 16:57	06/27/19 18:47	1
Ethylbenzene	ND		2.0	2.0	ug/Kg		06/27/19 16:57	06/27/19 18:47	1
Ethylene Dibromide	ND		1.0	1.0	ug/Kg		06/27/19 16:57	06/27/19 18:47	1
Methyl tert-butyl ether	ND		2.0	2.0	ug/Kg		06/27/19 16:57	06/27/19 18:47	1
m-Xylene & p-Xylene	ND		10	10	ug/Kg		06/27/19 16:57	06/27/19 18:47	1
o-Xylene	ND		5.0	5.0	ug/Kg		06/27/19 16:57	06/27/19 18:47	1
Toluene	ND		10	10	ug/Kg		06/27/19 16:57	06/27/19 18:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		80 - 121	06/27/19 16:57	06/27/19 18:47	1
4-Bromofluorobenzene (Surr)	107		80 - 120	06/27/19 16:57	06/27/19 18:47	1
Dibromofluoromethane (Surr)	114		80 - 120	06/27/19 16:57	06/27/19 18:47	1
Toluene-d8 (Surr)	103		80 - 120	06/27/19 16:57	06/27/19 18:47	1
Trifluorotoluene (Surr)	107		80 - 120	06/27/19 16:57	06/27/19 18:47	1

Lab Sample ID: LCS 580-304247/2-A

Matrix: Solid

Analysis Batch: 304251

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 304247

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,2-Dichloroethane	20.0	21.9		ug/Kg		110	68 - 132
Benzene	20.0	20.0		ug/Kg		100	72 - 135
Ethylbenzene	20.0	20.1		ug/Kg		100	80 - 135
Ethylene Dibromide	20.0	20.7		ug/Kg		103	77 - 123
Methyl tert-butyl ether	20.0	19.8		ug/Kg		99	68 - 132
m-Xylene & p-Xylene	20.0	19.8		ug/Kg		99	80 - 132
o-Xylene	20.0	19.8		ug/Kg		99	80 - 125
Toluene	20.0	18.9		ug/Kg		95	75 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	109		80 - 121
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	105		80 - 120
Toluene-d8 (Surr)	98		80 - 120

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-304247/2-A

Matrix: Solid

Analysis Batch: 304251

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 304247

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Trifluorotoluene (Surr)	100		80 - 120

Lab Sample ID: LCSD 580-304247/3-A

Matrix: Solid

Analysis Batch: 304251

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 304247

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,2-Dichloroethane	20.0	22.6		ug/Kg		113	68 - 132	3	17
Benzene	20.0	20.5		ug/Kg		102	72 - 135	2	15
Ethylbenzene	20.0	20.2		ug/Kg		101	80 - 135	1	16
Ethylene Dibromide	20.0	20.5		ug/Kg		102	77 - 123	1	20
Methyl tert-butyl ether	20.0	22.9		ug/Kg		115	68 - 132	14	25
m-Xylene & p-Xylene	20.0	20.0		ug/Kg		100	80 - 132	1	20
o-Xylene	20.0	21.1		ug/Kg		105	80 - 125	6	14
Toluene	20.0	18.9		ug/Kg		95	75 - 137	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	110		80 - 121
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	113		80 - 120
Toluene-d8 (Surr)	99		80 - 120
Trifluorotoluene (Surr)	102		80 - 120

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 590-22845/1-A

Matrix: Water

Analysis Batch: 22857

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22845

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.090	0.090	ug/L		07/02/19 10:14	07/02/19 22:24	1
Chrysene	ND		0.090	0.090	ug/L		07/02/19 10:14	07/02/19 22:24	1
Benzo[b]fluoranthene	ND		0.090	0.090	ug/L		07/02/19 10:14	07/02/19 22:24	1
Benzo[k]fluoranthene	ND		0.090	0.090	ug/L		07/02/19 10:14	07/02/19 22:24	1
Benzo[a]pyrene	ND		0.090	0.090	ug/L		07/02/19 10:14	07/02/19 22:24	1
Indeno[1,2,3-cd]pyrene	ND		0.090	0.090	ug/L		07/02/19 10:14	07/02/19 22:24	1
Dibenz(a,h)anthracene	ND		0.090	0.090	ug/L		07/02/19 10:14	07/02/19 22:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	114		51 - 121	07/02/19 10:14	07/02/19 22:24	1
Nitrobenzene-d5	102		36 - 126	07/02/19 10:14	07/02/19 22:24	1
2-Fluorobiphenyl (Surr)	88		44 - 120	07/02/19 10:14	07/02/19 22:24	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 590-22845/2-A

Matrix: Water

Analysis Batch: 22857

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	1.60	1.33		ug/L		83	68 - 120
Chrysene	1.60	1.36		ug/L		85	69 - 120
Benzo[b]fluoranthene	1.60	1.23		ug/L		77	63 - 120
Benzo[k]fluoranthene	1.60	1.44		ug/L		90	67 - 120
Benzo[a]pyrene	1.60	1.31		ug/L		82	70 - 120
Indeno[1,2,3-cd]pyrene	1.60	1.28		ug/L		80	58 - 120
Dibenz(a,h)anthracene	1.60	1.24		ug/L		78	58 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl-d14	97		51 - 121
Nitrobenzene-d5	91		36 - 126
2-Fluorobiphenyl (Surr)	74		44 - 120

Lab Sample ID: LCSD 590-22845/3-A

Matrix: Water

Analysis Batch: 22857

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22845

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzo[a]anthracene	1.60	1.31		ug/L		82	68 - 120	2	30
Chrysene	1.60	1.33		ug/L		83	69 - 120	2	24
Benzo[b]fluoranthene	1.60	1.17		ug/L		73	63 - 120	5	30
Benzo[k]fluoranthene	1.60	1.40		ug/L		87	67 - 120	3	30
Benzo[a]pyrene	1.60	1.26		ug/L		79	70 - 120	4	30
Indeno[1,2,3-cd]pyrene	1.60	1.22		ug/L		76	58 - 120	5	30
Dibenz(a,h)anthracene	1.60	1.24		ug/L		77	58 - 120	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
p-Terphenyl-d14	88		51 - 121
Nitrobenzene-d5	83		36 - 126
2-Fluorobiphenyl (Surr)	68		44 - 120

Lab Sample ID: MB 590-22851/1-A

Matrix: Solid

Analysis Batch: 22842

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22851

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		10	10	ug/Kg		07/02/19 11:58	07/02/19 13:54	1
Chrysene	ND		10	10	ug/Kg		07/02/19 11:58	07/02/19 13:54	1
Benzo[b]fluoranthene	ND		10	10	ug/Kg		07/02/19 11:58	07/02/19 13:54	1
Benzo[k]fluoranthene	ND		10	10	ug/Kg		07/02/19 11:58	07/02/19 13:54	1
Benzo[a]pyrene	ND		10	10	ug/Kg		07/02/19 11:58	07/02/19 13:54	1
Indeno[1,2,3-cd]pyrene	ND		10	10	ug/Kg		07/02/19 11:58	07/02/19 13:54	1
Dibenz(a,h)anthracene	ND		10	10	ug/Kg		07/02/19 11:58	07/02/19 13:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	106		61 - 136	07/02/19 11:58	07/02/19 13:54	1
Nitrobenzene-d5	79		31 - 120	07/02/19 11:58	07/02/19 13:54	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 590-22851/1-A

Matrix: Solid

Analysis Batch: 22842

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22851

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	84		46 - 120	07/02/19 11:58	07/02/19 13:54	1

Lab Sample ID: LCS 590-22851/2-A

Matrix: Solid

Analysis Batch: 22842

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22851

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	267	256		ug/Kg		96	61 - 125
Chrysene	267	254		ug/Kg		95	57 - 127
Benzo[b]fluoranthene	267	255		ug/Kg		96	59 - 127
Benzo[k]fluoranthene	267	256		ug/Kg		96	63 - 127
Benzo[a]pyrene	267	250		ug/Kg		94	60 - 120
Indeno[1,2,3-cd]pyrene	267	255		ug/Kg		96	55 - 128
Dibenz(a,h)anthracene	267	255		ug/Kg		96	60 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl-d14	108		61 - 136
Nitrobenzene-d5	88		31 - 120
2-Fluorobiphenyl (Surr)	92		46 - 120

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-304165/6

Matrix: Water

Analysis Batch: 304165

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		0.25	0.25	mg/L			06/27/19 11:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		50 - 150		06/27/19 11:49	1
Trifluorotoluene (Surr)	113		50 - 150		06/27/19 11:49	1

Lab Sample ID: LCS 580-304165/7

Matrix: Water

Analysis Batch: 304165

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics C6-C12	1.00	0.819		mg/L		82	79 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		50 - 150
Trifluorotoluene (Surr)	116		50 - 150

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCSD 580-304165/8

Matrix: Water

Analysis Batch: 304165

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics C6-C12	1.00	0.888		mg/L	-	89	79 - 120	8	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	103		50 - 150						
Trifluorotoluene (Surr)	110		50 - 150						

Lab Sample ID: MB 580-304451/12

Matrix: Water

Analysis Batch: 304451

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.25	0.25	mg/L	-		06/28/19 14:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		50 - 150					06/28/19 14:07	1
Trifluorotoluene (Surr)	115		50 - 150					06/28/19 14:07	1

Lab Sample ID: LCS 580-304451/13

Matrix: Water

Analysis Batch: 304451

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline			1.00	0.905		mg/L	-	90	79 - 120		
Surrogate	LCS	LCS									
	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	107		50 - 150								
Trifluorotoluene (Surr)	112		50 - 150								

Lab Sample ID: LCSD 580-304451/14

Matrix: Water

Analysis Batch: 304451

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline	1.00	0.879		mg/L	-	88	79 - 120	3	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	107		50 - 150						
Trifluorotoluene (Surr)	111		50 - 150						

Lab Sample ID: MB 580-304581/1-A

Matrix: Solid

Analysis Batch: 304584

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 304581

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		5.0	5.0	mg/Kg	-	07/02/19 08:50	07/02/19 09:59	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: MB 580-304581/1-A

Matrix: Solid

Analysis Batch: 304584

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 304581

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		50 - 150	07/02/19 08:50	07/02/19 09:59	1

Lab Sample ID: LCS 580-304581/2-A

Matrix: Solid

Analysis Batch: 304584

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 304581

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics			40.0	35.6		mg/Kg	-	89	80 - 120		
C6-C12											
Surrogate	LCS	LCS									
	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	108		50 - 150								

Lab Sample ID: LCSD 580-304581/3-A

Matrix: Solid

Analysis Batch: 304584

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 304581

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics C6-C12			40.0	35.9		mg/Kg	-	90	80 - 120	1	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	106		50 - 150								

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 580-305135/1-A

Matrix: Water

Analysis Batch: 305285

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 305135

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.010	0.010	ug/L	-	07/09/19 14:57	07/10/19 17:47	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dibromopropane	86		60 - 140				07/09/19 14:57	07/10/19 17:47	1

Lab Sample ID: LCS 580-305135/2-A

Matrix: Water

Analysis Batch: 305285

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 305135

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Ethylene Dibromide			0.0587	0.0627		ug/L	-	107	60 - 140		
Surrogate	LCS	LCS									
	%Recovery	Qualifier	Limits								
1,2-Dibromopropane	82		60 - 140								

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 580-305135/3-A

Matrix: Water

Analysis Batch: 305285

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 305135

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylene Dibromide	0.0578	0.0561		ug/L		97	60 - 140	11	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1,2-Dibromopropane	87		60 - 140						

Lab Sample ID: LLCS 580-305135/28-A

Matrix: Water

Analysis Batch: 305285

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 305135

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethylene Dibromide			0.0117	ND		ug/L	-	85	60 - 140		
Surrogate	LLCS %Recovery	LLCS Qualifier	Limits								
1,2-Dibromopropane	110		60 - 140								

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 590-22942/1-A

Matrix: Solid

Analysis Batch: 22957

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22942

Analyte	MB	MB	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	ND		10	10	ug/Kg		07/10/19 09:18	07/10/19 15:13	1
PCB-1221	ND		10	10	ug/Kg		07/10/19 09:18	07/10/19 15:13	1
PCB-1232	ND		10	10	ug/Kg		07/10/19 09:18	07/10/19 15:13	1
PCB-1242	ND		10	10	ug/Kg		07/10/19 09:18	07/10/19 15:13	1
PCB-1248	ND		10	10	ug/Kg		07/10/19 09:18	07/10/19 15:13	1
PCB-1254	ND		10	10	ug/Kg		07/10/19 09:18	07/10/19 15:13	1
PCB-1260	ND		10	10	ug/Kg		07/10/19 09:18	07/10/19 15:13	1
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
Tetrachloro-m-xylene	93		31 - 142				07/10/19 09:18	07/10/19 15:13	1
DCB Decachlorobiphenyl (Surr)	103		20 - 150				07/10/19 09:18	07/10/19 15:13	1

Lab Sample ID: LCS 590-22942/2-A

Matrix: Solid

Analysis Batch: 22957

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22942

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
PCB-1016			66.7	65.1		ug/Kg		98	63 - 127		
PCB-1260			66.7	67.1		ug/Kg		101	63 - 128		
		LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits								
Tetrachloro-m-xylene	92		31 - 142								
DCB Decachlorobiphenyl (Surr)	90		20 - 150								

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 580-87175-4 MS

Matrix: Solid

Analysis Batch: 22957

Client Sample ID: MTA-B08(0-2.5)-20190625

Prep Type: Total/NA

Prep Batch: 22942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		69.4	50.0		ug/Kg	☼	72	63 - 127
PCB-1260	ND		69.4	49.9		ug/Kg	☼	72	63 - 128

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	76		31 - 142
DCB Decachlorobiphenyl (Surr)	68		20 - 150

Lab Sample ID: 580-87175-4 MSD

Matrix: Solid

Analysis Batch: 22957

Client Sample ID: MTA-B08(0-2.5)-20190625

Prep Type: Total/NA

Prep Batch: 22942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		67.8	48.1		ug/Kg	☼	71	63 - 127	4	17
PCB-1260	ND		67.8	48.1		ug/Kg	☼	71	63 - 128	4	11

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	73		31 - 142
DCB Decachlorobiphenyl (Surr)	65		20 - 150

Lab Sample ID: MB 590-22976/1-A

Matrix: Water

Analysis Batch: 22973

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22976

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 13:47	1
PCB-1221	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 13:47	1
PCB-1232	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 13:47	1
PCB-1242	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 13:47	1
PCB-1248	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 13:47	1
PCB-1254	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 13:47	1
PCB-1260	ND		0.10	0.043	ug/L		07/11/19 10:34	07/11/19 13:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	57		20 - 126	07/11/19 10:34	07/11/19 13:47	1
DCB Decachlorobiphenyl (Surr)	76		23 - 138	07/11/19 10:34	07/11/19 13:47	1

Lab Sample ID: LCS 590-22976/2-A

Matrix: Water

Analysis Batch: 22973

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22976

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1.60	1.30		ug/L		81	51 - 120
PCB-1260	1.60	1.17		ug/L		73	42 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	58		20 - 126
DCB Decachlorobiphenyl (Surr)	87		23 - 138

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCSD 590-22976/3-A

Matrix: Water

Analysis Batch: 22973

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22976

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	1.60	1.20		ug/L		75	51 - 120	8	20
PCB-1260	1.60	1.14		ug/L		71	42 - 120	2	28
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
Tetrachloro-m-xylene	49		20 - 126						
DCB Decachlorobiphenyl (Surr)	78		23 - 138						

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 590-22922/1-A

Matrix: Solid

Analysis Batch: 22915

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22922

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		10	10	mg/Kg		07/09/19 10:00	07/10/19 00:28	1
Residual Range Organics (RRO) (C25-C36)	ND		25	25	mg/Kg		07/09/19 10:00	07/10/19 00:28	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	85		50 - 150				07/09/19 10:00	07/10/19 00:28	1
n-Triacontane-d62	75		50 - 150				07/09/19 10:00	07/10/19 00:28	1

Lab Sample ID: LCS 590-22922/2-A

Matrix: Solid

Analysis Batch: 22915

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22922

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (DRO) (C10-C25)	66.7	60.2		mg/Kg		90	50 - 150		
Residual Range Organics (RRO) (C25-C36)	66.7	67.3		mg/Kg		101	50 - 150		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
o-Terphenyl	98		50 - 150						
n-Triacontane-d62	99		50 - 150						

Lab Sample ID: 580-87175-7 DU

Matrix: Solid

Analysis Batch: 22915

Client Sample ID: MTA-B03(0-3)-20190625

Prep Type: Total/NA

Prep Batch: 22922

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D		RPD	RPD Limit
Diesel Range Organics (DRO) (C10-C25)	13		ND		mg/Kg	☼		NC	40
Residual Range Organics (RRO) (C25-C36)	71		60.0		mg/Kg	☼		17	40
Surrogate	DU %Recovery	DU Qualifier	Limits						
o-Terphenyl	82		50 - 150						

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 580-87175-7 DU

Matrix: Solid

Analysis Batch: 22915

Client Sample ID: MTA-B03(0-3)-20190625

Prep Type: Total/NA

Prep Batch: 22922

	DU	DU	
Surrogate	%Recovery	Qualifier	Limits
n-Triacontane-d62	84		50 - 150

Lab Sample ID: 580-87175-13 DU

Matrix: Solid

Analysis Batch: 22915

Client Sample ID: MTA-B01(7.3-8.3)-20190625

Prep Type: Total/NA

Prep Batch: 22922

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Diesel Range Organics (DRO) (C10-C25)	ND		ND		mg/Kg	☼	NC	40
Residual Range Organics (RRO) (C25-C36)	ND		ND		mg/Kg	☼	NC	40

	DU	DU	
Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	88		50 - 150
n-Triacontane-d62	86		50 - 150

Lab Sample ID: MB 590-22937/1-A

Matrix: Water

Analysis Batch: 22943

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22937

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		0.24	0.24	mg/L		07/09/19 15:19	07/10/19 10:23	1
Residual Range Organics (RRO) (C25-C36)	ND		0.40	0.40	mg/L		07/09/19 15:19	07/10/19 10:23	1

	MB	MB					Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits						
o-Terphenyl	81		50 - 150				07/09/19 15:19	07/10/19 10:23	1
n-Triacontane-d62	80		50 - 150				07/09/19 15:19	07/10/19 10:23	1

Lab Sample ID: LCS 590-22937/2-A

Matrix: Water

Analysis Batch: 22943

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22937

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (DRO) (C10-C25)	1.60	1.10		mg/L		69	50 - 150
Residual Range Organics (RRO) (C25-C36)	1.60	1.49		mg/L		93	50 - 150

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	91		50 - 150
n-Triacontane-d62	101		50 - 150

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCSD 590-22937/3-A

Matrix: Water

Analysis Batch: 22943

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22937

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (DRO) (C10-C25)	1.60	1.23		mg/L		77	50 - 150	11	25
Residual Range Organics (RRO) (C25-C36)	1.60	1.59		mg/L		100	50 - 150	7	25
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o-Terphenyl	98		50 - 150						
n-Triacontane-d62	103		50 - 150						

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 580-304620/22-A

Matrix: Solid

Analysis Batch: 304787

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 304620

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0	3.0	mg/Kg		07/02/19 11:41	07/03/19 10:04	1
Barium	ND		0.50	0.50	mg/Kg		07/02/19 11:41	07/03/19 10:04	1
Cadmium	ND		1.0	1.0	mg/Kg		07/02/19 11:41	07/03/19 10:04	1
Chromium	ND		1.3	1.3	mg/Kg		07/02/19 11:41	07/03/19 10:04	1
Lead	ND		1.5	1.5	mg/Kg		07/02/19 11:41	07/03/19 10:04	1
Selenium	ND		5.0	5.0	mg/Kg		07/02/19 11:41	07/03/19 10:04	1
Silver	ND		2.5	2.5	mg/Kg		07/02/19 11:41	07/03/19 10:04	1

Lab Sample ID: LCS 580-304620/23-A

Matrix: Solid

Analysis Batch: 304787

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 304620

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic	50.0	50.4		mg/Kg		101	80 - 120		
Barium	50.0	51.9		mg/Kg		104	80 - 120		
Cadmium	50.0	51.4		mg/Kg		103	80 - 120		
Chromium	50.0	54.9		mg/Kg		110	80 - 120		
Lead	50.0	50.7		mg/Kg		101	80 - 120		
Selenium	50.0	51.0		mg/Kg		102	80 - 120		
Silver	50.0	52.4		mg/Kg		105	80 - 120		

Lab Sample ID: LCSD 580-304620/24-A

Matrix: Solid

Analysis Batch: 304787

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 304620

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	50.0	49.7		mg/Kg		99	80 - 120	1	20
Barium	50.0	50.6		mg/Kg		101	80 - 120	2	20
Cadmium	50.0	50.5		mg/Kg		101	80 - 120	2	20
Chromium	50.0	53.8		mg/Kg		108	80 - 120	2	20
Lead	50.0	49.9		mg/Kg		100	80 - 120	2	20
Selenium	50.0	50.1		mg/Kg		100	80 - 120	2	20
Silver	50.0	50.6		mg/Kg		101	80 - 120	3	20

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 580-305019/16-A

Matrix: Water

Analysis Batch: 305308

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 305019

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050	0.0050	mg/L		07/08/19 15:52	07/10/19 16:12	5
Barium	ND		0.0060	0.0060	mg/L		07/08/19 15:52	07/10/19 16:12	5
Cadmium	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 16:12	5
Chromium	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 16:12	5
Lead	ND		0.0040	0.0040	mg/L		07/08/19 15:52	07/10/19 16:12	5
Selenium	ND		0.040	0.040	mg/L		07/08/19 15:52	07/10/19 16:12	5
Silver	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 16:12	5

Lab Sample ID: LCS 580-305019/17-A

Matrix: Water

Analysis Batch: 305308

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 305019

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	1.01		mg/L		101	80 - 120
Barium	1.00	1.03		mg/L		103	80 - 120
Cadmium	1.00	1.02		mg/L		102	80 - 120
Chromium	1.00	0.989		mg/L		99	80 - 120
Lead	1.00	1.01		mg/L		101	80 - 120
Selenium	1.00	1.02		mg/L		102	80 - 120
Silver	1.00	0.991		mg/L		99	80 - 120

Lab Sample ID: LCSD 580-305019/18-A

Matrix: Water

Analysis Batch: 305308

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 305019

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1.00	1.02		mg/L		102	80 - 120	1	20
Barium	1.00	1.04		mg/L		104	80 - 120	1	20
Cadmium	1.00	1.01		mg/L		101	80 - 120	1	20
Chromium	1.00	0.985		mg/L		99	80 - 120	0	20
Lead	1.00	0.995		mg/L		99	80 - 120	1	20
Selenium	1.00	1.03		mg/L		103	80 - 120	1	20
Silver	1.00	0.972		mg/L		97	80 - 120	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-304931/22-A

Matrix: Water

Analysis Batch: 305055

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 304931

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00030	0.00030	mg/L		07/08/19 08:39	07/08/19 16:22	1

Lab Sample ID: LCS 580-304931/23-A

Matrix: Water

Analysis Batch: 305055

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 304931

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00195		mg/L		97	80 - 120

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 580-304931/24-A

Matrix: Water

Analysis Batch: 305055

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 304931

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00200	0.00189		mg/L		94	80 - 120	3	20

Lab Sample ID: 580-87175-6 MS

Matrix: Water

Analysis Batch: 305055

Client Sample ID: MTA-B08-14-20190625

Prep Type: Dissolved

Prep Batch: 304931

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00200	0.00191		mg/L		95	80 - 120		

Lab Sample ID: 580-87175-6 MSD

Matrix: Water

Analysis Batch: 305055

Client Sample ID: MTA-B08-14-20190625

Prep Type: Dissolved

Prep Batch: 304931

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00200	0.00185		mg/L		93	80 - 120	3	20

Lab Sample ID: 580-87175-6 DU

Matrix: Water

Analysis Batch: 305055

Client Sample ID: MTA-B08-14-20190625

Prep Type: Dissolved

Prep Batch: 304931

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		mg/L		NC	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 580-305241/22-A

Matrix: Solid

Analysis Batch: 305319

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 305241

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.030	0.030	mg/Kg		07/10/19 11:46	07/10/19 15:55	1

Lab Sample ID: LCS 580-305241/23-A

Matrix: Solid

Analysis Batch: 305319

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 305241

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.167	0.164		mg/Kg		99	80 - 120		

Lab Sample ID: LCSD 580-305241/24-A

Matrix: Solid

Analysis Batch: 305319

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 305241

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.167	0.148		mg/Kg		89	80 - 120	10	20

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Client Sample ID: TripBlank1-20190625

Lab Sample ID: 580-87175-1

Date Collected: 06/25/19 00:01

Matrix: Solid

Date Received: 06/25/19 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304247	06/25/19 17:00	APR	TAL SEA
Total/NA	Analysis	8260C		1	304251	06/27/19 19:37	CJ	TAL SEA
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 13:35	DCV	TAL SEA

Client Sample ID: TripBlank2-20190625

Lab Sample ID: 580-87175-2

Date Collected: 06/25/19 00:01

Matrix: Water

Date Received: 06/25/19 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	304262	06/28/19 01:08	DSO	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304165	06/27/19 16:13	DCV	TAL SEA

Client Sample ID: MTA-B03(7.-10.5)-20190625

Lab Sample ID: 580-87175-3

Date Collected: 06/25/19 09:15

Matrix: Solid

Date Received: 06/25/19 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	304477	07/01/19 10:47	MLT	TAL SEA

Client Sample ID: MTA-B03(7.-10.5)-20190625

Lab Sample ID: 580-87175-3

Date Collected: 06/25/19 09:15

Matrix: Solid

Date Received: 06/25/19 16:55

Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304247	06/25/19 17:00	APR	TAL SEA
Total/NA	Analysis	8260C		1	304251	06/27/19 21:41	CJ	TAL SEA
Total/NA	Prep	3550C			22851	07/02/19 11:58	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22842	07/02/19 16:58	NMI	TAL SPK
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 16:16	DCV	TAL SEA
Total/NA	Prep	3550C			22942	07/10/19 09:18	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22957	07/10/19 15:54	NMI	TAL SPK
Total/NA	Prep	3550C			22922	07/09/19 10:00	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22915	07/10/19 01:08	NMI	TAL SPK
Total/NA	Prep	3050B			304620	07/02/19 11:41	JCP	TAL SEA
Total/NA	Analysis	6010C		1	304787	07/03/19 10:56	SPP	TAL SEA
Total/NA	Prep	7471A			305241	07/10/19 11:46	ART	TAL SEA
Total/NA	Analysis	7471A		1	305319	07/10/19 16:17	T1H	TAL SEA

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Client Sample ID: MTA-B08(0-2.5)-20190625

Lab Sample ID: 580-87175-4

Date Collected: 06/25/19 10:00

Matrix: Solid

Date Received: 06/25/19 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	304477	07/01/19 10:47	MLT	TAL SEA

Client Sample ID: MTA-B08(0-2.5)-20190625

Lab Sample ID: 580-87175-4

Date Collected: 06/25/19 10:00

Matrix: Solid

Date Received: 06/25/19 16:55

Percent Solids: 95.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304247	06/25/19 17:00	APR	TAL SEA
Total/NA	Analysis	8260C		1	304251	06/27/19 22:05	CJ	TAL SEA
Total/NA	Prep	3550C			22851	07/02/19 11:58	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22842	07/02/19 17:24	NMI	TAL SPK
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 16:44	DCV	TAL SEA
Total/NA	Prep	3550C			22942	07/10/19 09:18	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22957	07/10/19 16:15	NMI	TAL SPK
Total/NA	Prep	3550C			22922	07/09/19 10:00	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22915	07/10/19 01:28	NMI	TAL SPK
Total/NA	Prep	3050B			304620	07/02/19 11:41	JCP	TAL SEA
Total/NA	Analysis	6010C		1	304787	07/03/19 10:59	SPP	TAL SEA
Total/NA	Prep	7471A			305241	07/10/19 11:46	ART	TAL SEA
Total/NA	Analysis	7471A		1	305319	07/10/19 16:24	T1H	TAL SEA

Client Sample ID: MTA-B08(7.5-8.5)-20190625

Lab Sample ID: 580-87175-5

Date Collected: 06/25/19 10:20

Matrix: Solid

Date Received: 06/25/19 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	304477	07/01/19 10:47	MLT	TAL SEA

Client Sample ID: MTA-B08(7.5-8.5)-20190625

Lab Sample ID: 580-87175-5

Date Collected: 06/25/19 10:20

Matrix: Solid

Date Received: 06/25/19 16:55

Percent Solids: 99.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304247	06/25/19 17:00	APR	TAL SEA
Total/NA	Analysis	8260C		1	304251	06/27/19 22:30	CJ	TAL SEA
Total/NA	Prep	3550C			22851	07/02/19 11:58	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22842	07/02/19 17:50	NMI	TAL SPK
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 17:11	DCV	TAL SEA
Total/NA	Prep	3550C			22942	07/10/19 09:18	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22957	07/10/19 17:16	NMI	TAL SPK
Total/NA	Prep	3550C			22922	07/09/19 10:00	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22915	07/10/19 01:48	NMI	TAL SPK

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Client Sample ID: MTA-B08(7.5-8.5)-20190625

Lab Sample ID: 580-87175-5

Date Collected: 06/25/19 10:20

Matrix: Solid

Date Received: 06/25/19 16:55

Percent Solids: 99.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			304620	07/02/19 11:41	JCP	TAL SEA
Total/NA	Analysis	6010C		1	304787	07/03/19 11:03	SPP	TAL SEA
Total/NA	Prep	7471A			305241	07/10/19 11:46	ART	TAL SEA
Total/NA	Analysis	7471A		1	305319	07/10/19 16:26	T1H	TAL SEA

Client Sample ID: MTA-B08-14-20190625

Lab Sample ID: 580-87175-6

Date Collected: 06/25/19 11:09

Matrix: Water

Date Received: 06/25/19 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	304262	06/28/19 06:53	DSO	TAL SEA
Total/NA	Prep	3510C			22845	07/02/19 10:14	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22857	07/02/19 23:44	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	304451	06/28/19 20:25	DCV	TAL SEA
Total/NA	Prep	8011			305135	07/09/19 14:57	K1H	TAL SEA
Total/NA	Analysis	8011		1	305285	07/10/19 19:26	TL1	TAL SEA
Total/NA	Prep	3510C			22976	07/11/19 10:34	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22973	07/11/19 14:47	NMI	TAL SPK
Total/NA	Prep	3510C			22937	07/09/19 15:19	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22943	07/10/19 11:24	NMI	TAL SPK
Dissolved	Prep	3005A			305019	07/08/19 15:52	ART	TAL SEA
Dissolved	Analysis	6020A		5	305308	07/10/19 17:13	RM	TAL SEA
Dissolved	Prep	7470A			304931	07/08/19 08:39	T1H	TAL SEA
Dissolved	Analysis	7470A		1	305055	07/08/19 17:00	T1H	TAL SEA

Client Sample ID: MTA-B03(0-3)-20190625

Lab Sample ID: 580-87175-7

Date Collected: 06/25/19 11:45

Matrix: Solid

Date Received: 06/25/19 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	304477	07/01/19 10:47	MLT	TAL SEA

Client Sample ID: MTA-B03(0-3)-20190625

Lab Sample ID: 580-87175-7

Date Collected: 06/25/19 11:45

Matrix: Solid

Date Received: 06/25/19 16:55

Percent Solids: 97.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304247	06/25/19 17:00	APR	TAL SEA
Total/NA	Analysis	8260C		1	304251	06/27/19 22:55	CJ	TAL SEA
Total/NA	Prep	3550C			22851	07/02/19 11:58	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22842	07/02/19 18:17	NMI	TAL SPK
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 17:38	DCV	TAL SEA
Total/NA	Prep	3550C			22942	07/10/19 09:18	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22957	07/10/19 17:37	NMI	TAL SPK

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Client Sample ID: MTA-B03(0-3)-20190625

Lab Sample ID: 580-87175-7

Date Collected: 06/25/19 11:45

Matrix: Solid

Date Received: 06/25/19 16:55

Percent Solids: 97.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			22922	07/09/19 10:00	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22915	07/10/19 02:08	NMI	TAL SPK
Total/NA	Prep	3050B			304620	07/02/19 11:41	JCP	TAL SEA
Total/NA	Analysis	6010C		1	304787	07/03/19 11:06	SPP	TAL SEA
Total/NA	Prep	7471A			305241	07/10/19 11:46	ART	TAL SEA
Total/NA	Analysis	7471A		1	305319	07/10/19 16:28	T1H	TAL SEA

Client Sample ID: MTA-B06(7.5-8.5)-20190625

Lab Sample ID: 580-87175-8

Date Collected: 06/25/19 12:35

Matrix: Solid

Date Received: 06/25/19 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	304477	07/01/19 10:47	MLT	TAL SEA

Client Sample ID: MTA-B06(7.5-8.5)-20190625

Lab Sample ID: 580-87175-8

Date Collected: 06/25/19 12:35

Matrix: Solid

Date Received: 06/25/19 16:55

Percent Solids: 99.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304247	06/25/19 17:00	APR	TAL SEA
Total/NA	Analysis	8260C		1	304251	06/27/19 23:20	CJ	TAL SEA
Total/NA	Prep	3550C			22851	07/02/19 11:58	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22842	07/02/19 18:43	NMI	TAL SPK
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 18:05	DCV	TAL SEA
Total/NA	Prep	3550C			22942	07/10/19 09:18	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22957	07/10/19 17:57	NMI	TAL SPK
Total/NA	Prep	3550C			22922	07/09/19 10:00	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22915	07/10/19 02:47	NMI	TAL SPK
Total/NA	Prep	3050B			304620	07/02/19 11:41	JCP	TAL SEA
Total/NA	Analysis	6010C		1	304787	07/03/19 11:09	SPP	TAL SEA
Total/NA	Prep	7471A			305241	07/10/19 11:46	ART	TAL SEA
Total/NA	Analysis	7471A		1	305319	07/10/19 16:31	T1H	TAL SEA

Client Sample ID: MTA-B05(0-2.4)-20190625

Lab Sample ID: 580-87175-9

Date Collected: 06/25/19 13:00

Matrix: Solid

Date Received: 06/25/19 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	304477	07/01/19 10:47	MLT	TAL SEA

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Client Sample ID: MTA-B05(0-2.4)-20190625

Lab Sample ID: 580-87175-9

Date Collected: 06/25/19 13:00

Matrix: Solid

Date Received: 06/25/19 16:55

Percent Solids: 99.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304247	06/25/19 17:00	APR	TAL SEA
Total/NA	Analysis	8260C		1	304251	06/27/19 23:44	CJ	TAL SEA
Total/NA	Prep	3550C			22851	07/02/19 11:58	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22842	07/02/19 19:09	NMI	TAL SPK
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 18:32	DCV	TAL SEA
Total/NA	Prep	3550C			22942	07/10/19 09:18	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22957	07/10/19 18:18	NMI	TAL SPK
Total/NA	Prep	3550C			22922	07/09/19 10:00	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22915	07/10/19 03:07	NMI	TAL SPK
Total/NA	Prep	3050B			304620	07/02/19 11:41	JCP	TAL SEA
Total/NA	Analysis	6010C		1	304787	07/03/19 11:22	SPP	TAL SEA
Total/NA	Prep	7471A			305241	07/10/19 11:46	ART	TAL SEA
Total/NA	Analysis	7471A		1	305319	07/10/19 16:33	T1H	TAL SEA

Client Sample ID: MTA-B05(8-9)-20190625

Lab Sample ID: 580-87175-10

Date Collected: 06/25/19 13:15

Matrix: Solid

Date Received: 06/25/19 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	304477	07/01/19 10:47	MLT	TAL SEA

Client Sample ID: MTA-B05(8-9)-20190625

Lab Sample ID: 580-87175-10

Date Collected: 06/25/19 13:15

Matrix: Solid

Date Received: 06/25/19 16:55

Percent Solids: 99.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304247	06/25/19 17:00	APR	TAL SEA
Total/NA	Analysis	8260C		1	304251	06/28/19 00:09	CJ	TAL SEA
Total/NA	Prep	3550C			22851	07/02/19 11:58	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22842	07/02/19 19:36	NMI	TAL SPK
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 18:59	DCV	TAL SEA
Total/NA	Prep	3550C			22942	07/10/19 09:18	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22957	07/10/19 18:38	NMI	TAL SPK
Total/NA	Prep	3550C			22922	07/09/19 10:00	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22915	07/10/19 03:27	NMI	TAL SPK
Total/NA	Prep	3050B			304620	07/02/19 11:41	JCP	TAL SEA
Total/NA	Analysis	6010C		1	304787	07/03/19 11:26	SPP	TAL SEA
Total/NA	Prep	7471A			305241	07/10/19 11:46	ART	TAL SEA
Total/NA	Analysis	7471A		1	305319	07/10/19 16:35	T1H	TAL SEA

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Client Sample ID: MTA-B04(10.5-11.5)-20190625

Lab Sample ID: 580-87175-11

Date Collected: 06/25/19 14:00

Matrix: Solid

Date Received: 06/25/19 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	304477	07/01/19 10:47	MLT	TAL SEA

Client Sample ID: MTA-B04(10.5-11.5)-20190625

Lab Sample ID: 580-87175-11

Date Collected: 06/25/19 14:00

Matrix: Solid

Date Received: 06/25/19 16:55

Percent Solids: 98.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304247	06/25/19 17:00	APR	TAL SEA
Total/NA	Analysis	8260C		1	304251	06/28/19 00:33	CJ	TAL SEA
Total/NA	Prep	3550C			22851	07/02/19 11:58	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22842	07/02/19 20:02	NMI	TAL SPK
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 19:54	DCV	TAL SEA
Total/NA	Prep	3550C			22942	07/10/19 09:18	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22957	07/10/19 18:59	NMI	TAL SPK
Total/NA	Prep	3550C			22922	07/09/19 10:00	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22915	07/10/19 04:07	NMI	TAL SPK
Total/NA	Prep	3050B			304620	07/02/19 11:41	JCP	TAL SEA
Total/NA	Analysis	6010C		1	304787	07/03/19 11:29	SPP	TAL SEA
Total/NA	Prep	7471A			305241	07/10/19 11:46	ART	TAL SEA
Total/NA	Analysis	7471A		1	305319	07/10/19 16:37	T1H	TAL SEA

Client Sample ID: MTA-B01(0-3)-20190625

Lab Sample ID: 580-87175-12

Date Collected: 06/25/19 14:35

Matrix: Solid

Date Received: 06/25/19 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	304477	07/01/19 10:47	MLT	TAL SEA

Client Sample ID: MTA-B01(0-3)-20190625

Lab Sample ID: 580-87175-12

Date Collected: 06/25/19 14:35

Matrix: Solid

Date Received: 06/25/19 16:55

Percent Solids: 98.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304247	06/25/19 17:00	APR	TAL SEA
Total/NA	Analysis	8260C		1	304251	06/28/19 00:58	CJ	TAL SEA
Total/NA	Prep	3550C			22851	07/02/19 11:58	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22842	07/02/19 20:28	NMI	TAL SPK
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 20:21	DCV	TAL SEA
Total/NA	Prep	3550C			22942	07/10/19 09:18	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22957	07/10/19 19:19	NMI	TAL SPK
Total/NA	Prep	3550C			22922	07/09/19 10:00	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22915	07/10/19 04:26	NMI	TAL SPK

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Client Sample ID: MTA-B01(0-3)-20190625

Lab Sample ID: 580-87175-12

Date Collected: 06/25/19 14:35

Matrix: Solid

Date Received: 06/25/19 16:55

Percent Solids: 98.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			304620	07/02/19 11:41	JCP	TAL SEA
Total/NA	Analysis	6010C		1	304787	07/03/19 11:32	SPP	TAL SEA
Total/NA	Prep	7471A			305241	07/10/19 11:46	ART	TAL SEA
Total/NA	Analysis	7471A		1	305319	07/10/19 16:40	T1H	TAL SEA

Client Sample ID: MTA-B01(7.3-8.3)-20190625

Lab Sample ID: 580-87175-13

Date Collected: 06/25/19 14:45

Matrix: Solid

Date Received: 06/25/19 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	304477	07/01/19 10:47	MLT	TAL SEA

Client Sample ID: MTA-B01(7.3-8.3)-20190625

Lab Sample ID: 580-87175-13

Date Collected: 06/25/19 14:45

Matrix: Solid

Date Received: 06/25/19 16:55

Percent Solids: 99.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304247	06/25/19 17:00	APR	TAL SEA
Total/NA	Analysis	8260C		1	304251	06/28/19 01:23	CJ	TAL SEA
Total/NA	Prep	3550C			22851	07/02/19 11:58	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22842	07/02/19 20:55	NMI	TAL SPK
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 20:48	DCV	TAL SEA
Total/NA	Prep	3550C			22942	07/10/19 09:18	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22957	07/10/19 19:40	NMI	TAL SPK
Total/NA	Prep	3550C			22922	07/09/19 10:00	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22915	07/10/19 04:46	NMI	TAL SPK
Total/NA	Prep	3050B			304620	07/02/19 11:41	JCP	TAL SEA
Total/NA	Analysis	6010C		1	304787	07/03/19 11:35	SPP	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TAL SPK = Eurofins TestAmerica, Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-1

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-024	01-19-20
ANAB	Dept. of Defense ELAP		L2236	01-19-22
ANAB	DoD		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
California	State Program	9	2901	11-05-19
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-05-19
Oregon	NELAP		WA100007	11-05-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-14-00126	02-10-20
Washington	State Program	10	C553	02-17-20

Laboratory: Eurofins TestAmerica, Spokane

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-025	12-07-19
Oregon	NELAP	10	4137	12-07-19
Oregon	NELAP		4137	12-07-19
Washington	State Program	10	C569	01-06-20

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-87175-2

Client Project/Site: MTA Parking Lot, Shelton, WA

For:

Landau & Associates, Inc.
2107 South C Street
Tacoma, Washington 98402

Attn: Sierra Mott



Authorized for release by:
7/25/2019 3:54:31 PM

Kristine Allen, Manager of Project Management
(253)248-4970

kristine.allen@testamericainc.com

Designee for

Sheri Cruz, Project Manager I
(253)922-2310

sheri.cruz@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-2

Job ID: 580-87175-2

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-87175-2

Comments

7/17/19 Client revised COC to fix sample 580-87175-3.

7/17/19 Client emailed COC to activate all the soil samples for Hexachromium.

7/17/19 Client emailed COC to cancel all Hexachromium except sample 580-87175-4 (MTA-B08(0-2.5)-20190625).

Receipt

The samples were received on 6/25/2019 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.2° C and 3.7° C.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-2

Qualifiers

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-87175-4	MTA-B08(0-2.5)-20190625	Solid	06/25/19 10:00	06/25/19 16:55	

1

2

3

4

5

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8

9

10

11



Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☒ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080

Date 6/25/2019
 Page 1 of 1

Turnaround Time:
☒ Standard
☐ Accelerated

Project Name Mason Transit Authority Project No. 1817001.010.012
 Project Location/Event Shelton, WA
 Sampler's Name Katie Gauglitz
 Project Contact Sarah Fees
 Send Results To D. Jorgensen, S. Fees

Sample I.D.	Date	Time	Matrix	No. of Containers
Trip Blank 1 - 20190625	—	—	Soil	3
Trip Blank 2 - 20190625	—	—	Ag	6
MTA-B03(7-10.5)-20190625	6/25/19	915	Soil	5
MTA-B08(0-2.5)-20190625		1000	Soil	5
MTA-B04(7.5-8.5)-20190625		1020	Soil	5
MTA-B08-14-20190625		1109	Ag	15
MTA-B03(0-3)-20190625		1145	Soil	5
MTA-B06(7.5-8.5)-20190625		1235	Soil	5
MTA-B05(0-2.4)-20190625		1300	Soil	5
MTA-B05(8-9)-20190625		1315	Soil	5
MTA-B04(10.5-11.5)-20190625		1400	Soil	5
MTA-B01(0-3)-20190625		1435	Soil	5
MTA-B01(7.3-8.3)-20190625		1445	Soil	5

Testing Parameters
 PCRA 8 Metals 6020A/741B
 Hex Chromium 7190A
 BTEX, EDC, MTBE 8260CL
 TPH-G NWTPH-GX
 TPH-D, TPH-O NWTPH-DX
 CPAH 8270
 PCBs 8082A
 EDB 8260CL
 EDB 8011

Special Handling Requirements:
 Shipment Method:
 Stored on ice: ☒ Yes ☐ No

Observations/Comments

Allow water samples to settle, collect aliquot from clear portion ☐

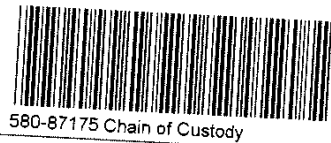
NWTPH-Dx - Acid wash cleanup ☐
 - Silica gel cleanup ☐

☒ Dissolved metal samples were field filtered

Other

Therm. ID: A2 Cor: 3.2 ° Unc: 3.5 °
 Cooler Desc: kg Blue
 Packing: bubble FedEx:
 Cust. Seal: Yes No * UPS:
 Blue Ice, ☒ Wet, Dry, None Lab Cour:
 Other:

Therm. ID: A2 Cor: 3.7 ° Unc: 4.0 °
 Cooler Desc: kg Blue
 Packing: bubble FedEx:
 Cust. Seal: Yes No * UPS:
 Blue Ice, ☒ Wet, Dry, None Lab Cour:
 Other: cf. drc



580-87175 Chain of Custody

Relinquished by
 Signature Katie Gauglitz
 Printed Name Katie Gauglitz
 Company Landau Associates
 Date 6/25/2019 Time 16:55

Received by
 Signature Tom Blankinship
 Printed Name Blankinship
 Company TA-SEA
 Date 6/25/19 Time 16:55

Relinquished by
 Signature
 Printed Name
 Company
 Date Time

Received by
 Signature
 Printed Name
 Company
 Date Time

WHITE COPY - Laboratory

YELLOW COPY - Project File

PINK COPY - Client Representative

10/2018



Chain-of-Custody Record

Seattle/Edmonds (425) 775-2500
Tacoma (253) 835-2453

Spokane (509) 327-4747
Portland (503) 342-4200

Date 7/25/2019
Page 1 of 1

Transportation Time
Accelerated

Project Name: <u>Midway Transit Authority</u>		Project No.: <u>817001.00.012</u>		Testing Parameters	
Project Location/Route: <u>Shelton, WA</u>				Special Handling Requirements:	
Sampler's Name: <u>Katie Gungite</u>				Shipping Method:	
Project Contact: <u>Sarah Fees</u>				Revised on: ☐ Yes ☒ No	
Send Results To: <u>D. Ingerson, S. Fees</u>				Observations/Comments:	
Sample ID	Date	Time	Matrix	No. of Containers	
Triphane 1-20190625			Soil	3	
Triphane 2-20190625			Ag	6	
MTA-B03(7-8.5)-20190625	7/25/2019	9:15	Soil	15	
MTA-B04(8-2.5)-20190625		10:00	Soil	16	
MTA-B04(3.5-4.5)-20190625		10:30	Soil	16	
MTA-B04(14-14)-20190625		11:04	Ag	16	
MTA-B03(10-3)-20190625		11:45	Soil	16	
MTA-B04(4.5-8.5)-20190625		12:35	Soil	16	
MTA-B05(0-2.4)-20190625		13:00	Soil	16	
MTA-B05(8-9)-20190625		13:15	Soil	16	
MTA-B04(12.5-1.5)-20190625		14:00	Soil	16	
MTA-B01(0-3)-20190625		14:35	Soil	16	
MTA-B01(4.5-1.3)-20190625		14:45	Soil	16	
					Align water samples to center, collect aliquot from clear portion ☐
					WATPH-04 - Acid wash cleanup ☐
					Glass gel cleanup ☐
					☒ Dissolved metal samples were field filtered
					Other:
					* Hex Chromium Soil Samples are on hold pending results of RCRA 8 metals analysis (SEP)
Relinquished by: Signature: <u>Katie Gungite</u> Printed Name: <u>Katie Gungite</u> Company: <u>Landam Associates</u> Date: <u>7/25/2019</u> Time: <u>16:55</u>		Received by: Signature: <u>[Signature]</u> Printed Name: <u>[Name]</u> Company: <u>[Company]</u> Date: <u>7/25/2019</u> Time: <u>16:55</u>		Relinquished by: Signature: _____ Printed Name: _____ Company: _____ Date: _____ Time: _____	
Received by: Signature: _____ Printed Name: _____ Company: _____ Date: _____ Time: _____					



Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907
☒ Tacoma (253) 926-2493

☐ **Spokane (509) 327-9737**
☐ **Portland (503) 542-1080**
☐  

Date 6/25/2019
Page 1 of 1

Turnaround Time:
Standard _____
Accelerated _____

Project Name Moson Transit Authority Project No. 1817001.010.012
Project Location/Event Shelton, WA
Sampler's Name Katie Gauglitz
Project Contact Sarah Fees
Send Results To D. Jorgensen, S. Fees

Testing Parameters

Special Handling Requirements:

Shipment Method:

Stored on ice: ☒ Yes / ☐ No

Observations/Comments
1. The patient is a 65-year-old male with a history of hypertension, hyperlipidemia, and type 2 diabetes. He has been on treatment for these conditions for several years. 2. The patient is currently taking the following medications: Lisinopril 10mg daily, Atorvastatin 20mg daily, and Metformin 500mg twice daily. 3. The patient has been experiencing symptoms of fatigue and weakness for the past few weeks, which has been attributed to his diabetes. 4. The patient has been advised to continue with his current treatment plan and to monitor his blood sugar levels closely. 5. The patient has been advised to maintain a healthy diet and to exercise regularly. 6. The patient has been advised to avoid alcohol and tobacco. 7. The patient has been advised to avoid over-the-counter medications without consulting his doctor. 8. The patient has been advised to avoid driving or operating machinery if he is feeling drowsy or dizzy. 9. The patient has been advised to avoid taking any other medications without consulting his doctor. 10. The patient has been advised to avoid taking any supplements without consulting his doctor. 11. The patient has been advised to avoid taking any herbal products without consulting his doctor. 12. The patient has been advised to avoid taking any vitamins without consulting his doctor. 13. The patient has been advised to avoid taking any minerals without consulting his doctor. 14. The patient has been advised to avoid taking any other products without consulting his doctor. 15. The patient has been advised to avoid taking any other products without consulting his doctor. 16. The patient has been advised to avoid taking any other products without consulting his doctor. 17. The patient has been advised to avoid taking any other products without consulting his doctor. 18. The patient has been advised to avoid taking any other products without consulting his doctor. 19. The patient has been advised to avoid taking any other products without consulting his doctor. 20. The patient has been advised to avoid taking any other products without consulting his doctor.

Allow water samples to settle, collect aliquot from clear portion ☐

NWTPH-Dx - Acid wash cleanup ☐
- Silica gel cleanup ☐

☒ Dissolved metal samples were field filtered

Other

* Hex Chromium Soil Samples are on hold pending results of RCRA 8 metals analysis (SEF)
6/18/19

Relinquished by
Signature *Kathleen E. Ganglitz*
Printed Name *Katie Ganglitz*
Company *Landan Associates*
Date *6/25/2011* Time *16:55*

Received by _____
Signature _____
Printed Name _____
Company _____
Date 6/25/19 Time 1655

Relinquished by
Signature _____
Printed Name _____
Company _____
Date _____ Time _____

Received by _____
Signature _____
Printed Name _____
Company _____
Date _____ **Time** _____



Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☒ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080

Date 6/25/2019
Page 1 of 1

Turnaround Time:
Standard _____
Accelerated _____

Project Name Moson Transit Authority Project No. 1817001.010.012
Project Location/Event Shelton, WA
Sampler's Name Katie Gauglitz
Project Contact Sarah Fees
Send Results To D. Jorgensen, S. Fees

Testing Parameters

Special Handling Requirements:

Shipment Method:

Stored on ice: ☒ Yes / ☐ No

Observations/Comments
1. The patient is a 65-year-old male with a history of hypertension and diabetes mellitus. He was brought to the emergency department by ambulance due to sudden onset of severe chest pain and shortness of breath. 2. On arrival, the patient was found to be tachycardic (HR 110 bpm) and hypotensive (BP 90/60 mmHg). His oxygen saturation was 92% on 2L nasal cannula. 3. Physical examination revealed clear lung fields, no crackles, and a normal heart sound. The patient was diaphoretic and appeared anxious. 4. Initial ECG showed ST-segment depression in leads II, III, and aVF, and ST-segment elevation in leads V1, V2, and V3. 5. Blood work showed elevated troponin I (0.15 ng/mL) and creatinine (1.2 mg/dL). Arterial blood gas (ABG) showed pH 7.35, PaO2 85 mmHg, PaCO2 40 mmHg, and HCO3- 24 mmol/L. 6. The patient was diagnosed with a non-ST-elevation myocardial infarction (NSTEMI) and was started on aspirin, clopidogrel, and a beta-blocker. 7. The patient was transferred to the cardiac catheterization laboratory for further evaluation and treatment.

Sample I.D.	Date	Time	Matrix	No. of Containers
Trip Blank 1 - 20190625	—	—	Soil	3
Trip Blank 2 - 20190625	—	—	Ag	6
NTA-B03(7-10.5)-20190625	6/25/19	9:15	Soil	5
NTA-B08(0-2.5)-20190625		1000	Soil	5
NTA-B09(7.5-8.5)-20190625		1020	Soil	5
NTA-B08-14-20190625		1109	Ag	15
NTA-B03(0-3)-20190625		1145	Soil	5
NTA-B06(7.5-8.5)-20190625		1235	Soil	5
NTA-B05(0-2.4)-20190625		1300	Soil	5
NTA-B05(8-9)-20190625		1315	Soil	5
NTA-B04(10.5-11.5)-20190625		1400	Soil	5
NTA-B01(0-3)-20190625		1435	Soil	5
NTA-B01(7.3-8.3)-20190625		1445	Soil	5

— Allow water samples to settle, collect aliquot from clear portion ☐

NWTPH-Dx - Acid wash cleanup ☐
- Silica gel cleanup ☐

☒ Dissolved metal samples were field filtered

Other

* Hex Chromium Soil Samples are on hold pending results of RCRA 8 metals analysis (SEF)
6/18/19

Relinquished by
Signature *Kathleen Ganglitz*
Printed Name *Katie Ganglitz*
Company *Landan Associates*
Date *6/25/2011* Time *16:55*

Received by _____
Signature _____
Printed Name _____
Company _____
Date 6/25/19 Time 1655

Relinquished by
Signature _____
Printed Name _____
Company _____
Date _____

Received by
Signature _____
Printed Name _____
Company _____
Date _____



Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☒ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080

Date 6/25/2019
Page 1 of 1

Turnaround Time:
☒ Standard
☐ Accelerated

Project Name Moson Transit Authority Project No. 1817001.010.012
Project Location/Event Shelton, WA
Sampler's Name Katie Gauglitz
Project Contact Sarah Fees
Send Results To D. Jorgensen, S. Fees

Testing Parameters

Special Handling Requirements:

Shipment Method:

Stored on ice: ☒ Yes / ☐ No

Observations/Comments

Allow water samples to settle, collect aliquot from clear portion ☐

NWTPH-Dx - Acid wash cleanup ☐
- Silica gel cleanup ☐

☒ Dissolved metal samples were field filtered

Other

* Hex Chromium Soil Samples are on hold pending results of RCRA 8 metals analysis (SEF) 6/26/19

Sample I.D.	Date	Time	Matrix	No. of Containers
Trip Blank 1 - 20190625	---	---	Soil	3
Trip Blank 2 - 20190625	---	---	Ag	6
MTA-B03(7.5-10.5)-20190625	6/25/19	9:15	Soil	5
MTA-B06(0-2.5)-20190625		10:00	Soil	5
MTA-B09(7.5-8.5)-20190625		10:20	Soil	5
MTA-B08-14-20190625		11:09	Ag	15
MTA-B03(0-3)-20190625		11:45	Soil	5
MTA-B06(7.5-8.5)-20190625		12:35	Soil	5
MTA-B05(0-2.4)-20190625		13:00	Soil	5
MTA-B05(8-9)-20190625		13:15	Soil	5
MTA-B04(10.5-11.5)-20190625		14:00	Soil	5
MTA-B01(0-3)-20190625		14:35	Soil	5
MTA-B01(7.3-8.3)-20190625		14:45	Soil	5

Relinquished by

Signature Katie Gauglitz

Printed Name Katie Gauglitz

Company Landau Associates

Date 6/25/2019 Time 16:55

Received by

Signature [Signature]

Printed Name Blair Shipley

Company TACSEA

Date 6/25/19 Time 16:55

Relinquished by

Signature

Printed Name

Company

Date Time

Received by

Signature

Printed Name

Company

Date Time

WHITE COPY - Laboratory

YELLOW COPY - Project File

PINK COPY - Client Representative

10/2018

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-87175-2

Login Number: 87175

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Vallelunga, Diana L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-2

General Chemistry

Client Sample ID: MTA-B08(0-2.5)-20190625

Date Collected: 06/25/19 10:00

Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-4

Matrix: Solid

Percent Solids: 95.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hex	ND	F1	5.1	5.1	mg/Kg	☼	07/21/19 20:35	07/24/19 14:11	1

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-2

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 490-607347/1-A

Matrix: Solid

Analysis Batch: 607717

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 607347

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hex	ND		5.0	5.0	mg/Kg		07/21/19 20:34	07/24/19 14:11	1

Lab Sample ID: LCSi 490-607347/3-A

Matrix: Solid

Analysis Batch: 607717

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 607347

Analyte	Spike Added	LCSi Result	LCSi Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hex	63.3	53.0		mg/Kg		84	80 - 120

Lab Sample ID: LCSS 490-607347/2-A

Matrix: Solid

Analysis Batch: 607717

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 607347

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hex	40.0	31.8		mg/Kg		80	80 - 120

Lab Sample ID: 580-87175-4 MSI

Matrix: Solid

Analysis Batch: 607717

Client Sample ID: MTA-B08(0-2.5)-20190625

Prep Type: Total/NA

Prep Batch: 607347

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hex	ND	F1	67.9	54.5		mg/Kg	⚠	80	75 - 125

Lab Sample ID: 580-87175-4 MSS

Matrix: Solid

Analysis Batch: 607717

Client Sample ID: MTA-B08(0-2.5)-20190625

Prep Type: Total/NA

Prep Batch: 607347

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hex	ND	F1	41.7	26.1	F1	mg/Kg	⚠	62	75 - 125

Lab Sample ID: 580-87175-4 DU

Matrix: Solid

Analysis Batch: 607717

Client Sample ID: MTA-B08(0-2.5)-20190625

Prep Type: Total/NA

Prep Batch: 607347

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hex	ND	F1	ND		mg/Kg	⚠	NC	20

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-2

Client Sample ID: MTA-B08(0-2.5)-20190625
Date Collected: 06/25/19 10:00
Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-4
Matrix: Solid
Percent Solids: 95.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			607347	07/21/19 20:35	MSP	TAL NSH
Total/NA	Analysis	7196A		1	607717	07/24/19 14:11	BMC	TAL NSH

Laboratory References:
TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-2

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-024	01-19-20
ANAB	Dept. of Defense ELAP		L2236	01-19-22
ANAB	DoD		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
California	State Program	9	2901	11-05-19
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-05-19
Oregon	NELAP		WA100007	11-05-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-14-00126	02-10-20
Washington	State Program	10	C553	02-17-20

Laboratory: Eurofins TestAmerica, Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	09-30-19
Arizona	State Program	9	AZ0473	05-05-20
Arkansas DEQ	State Program	6	88-0737	04-25-20
California	State Program	9	2938	06-30-20
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-20
Georgia	State Program	4	E87358(FL)/453.07(A2L A)	06-30-20
Illinois	NELAP	5	200010	12-09-19
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-20
Kentucky (WW)	State Program	4	90038	12-31-19
Louisiana	NELAP	6	30613	06-30-20
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-20
Massachusetts	State Program	1	M-TN032	06-30-20
Minnesota	NELAP	5	047-999-345	12-31-19
Mississippi	State Program	4	N/A	06-30-19 *
Nevada	State Program	9	TN00032	07-31-19 *
New Hampshire	NELAP	1	2963	10-09-19
New Jersey	NELAP	2	TN965	06-30-20
New York	NELAP	2	11342	03-31-20
North Carolina (WW/SW)	State Program	4	387	12-31-19
North Dakota	State Program	8	R-146	06-30-19 *
Oklahoma	State Program	6	9412	08-31-19 *
Oregon	NELAP	10	TN200001	04-26-20
Pennsylvania	NELAP	3	68-00585	07-31-19 *
Rhode Island	State Program	1	LAO00268	12-30-19
South Carolina	State Program	4	84009 (001)	02-28-19 *
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Seattle

Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87175-2

Laboratory: Eurofins TestAmerica, Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
USDA	Federal		P330-13-00306	04-10-20
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-20
Washington	State Program	10	C789	07-19-19 *
West Virginia DEP	State Program	3	219	02-28-20
Wisconsin	State Program	5	998020430	08-31-19 *
Wyoming (UST)	A2LA	8	453.07	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Seattle

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

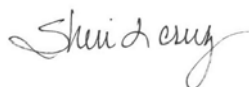
Laboratory Job ID: 580-87205-1

Client Project/Site: MTA Parking Lot, Shelton, WA

For:

Landau & Associates, Inc.
2107 South C Street
Tacoma, Washington 98402

Attn: Sierra Mott



Authorized for release by:
7/15/2019 2:51:42 PM

Sheri Cruz, Project Manager I
(253)922-2310
sheri.cruz@testamericainc.com

LINKS

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results through
TotalAccess

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Job ID: 580-87205-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-87205-1

Comments

No additional comments.

Receipt

The samples were received on 6/26/2019 2:14 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.9° C and 3.3° C.

GC/MS VOA

Method(s) 8260C: Surrogate recovery for the following samples were outside the upper control limit: TripBlank1-20190626 (580-87205-1), MTA-B06(0-3)-20190626 (580-87205-3) and MTA-B02(0-3)-20190626 (580-87205-4). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8011: The continuing calibration verification (CCV) associated with 580-305285 recovered outside the control limits for 1,2-Dibromopropane on one column. Results are confirmed on both columns and reported from the passing column. The following samples are impacted: MTA-B02-14-20190626 (580-87205-6), MTA-B99-20190626 (580-87205-7), MTA-B07-14-20190626 (580-87205-9) and (CCV 580-305243/1-A).

Method(s) NWTPH-Dx: Detected hydrocarbons appear to be due to creosote or similar product. MTA-B06(0-3)-20190626 (580-87205-3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep

Method(s) 5035: The following sample(s) was provided to the laboratory with a significantly different initial weight than that required by the reference method: 580-87205-C-3 (6.214g), 580-87205-C-4 (6.204g), and 580-87205-C-8 (6.054g). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 5g. The amount provided was above this range.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-87205-1	TripBlank1-20190626	Solid	06/26/19 00:01	06/26/19 14:14	
580-87205-2	TripBlank2-20190626	Water	06/26/19 00:01	06/26/19 14:14	
580-87205-3	MTA-B06(0-3)-20190626	Solid	06/26/19 08:20	06/26/19 14:14	
580-87205-4	MTA-B02(0-3)-20190626	Solid	06/26/19 08:45	06/26/19 14:14	
580-87205-5	MTA-B02(5.5-6.5)-20190626	Solid	06/26/19 09:30	06/26/19 14:14	
580-87205-6	MTA-B02-14-20190626	Water	06/26/19 09:40	06/26/19 14:14	
580-87205-7	MTA-B99-20190626	Water	06/26/19 09:45	06/26/19 14:14	
580-87205-8	MTA-B07(6.5-7.5)-20190626	Solid	06/26/19 10:55	06/26/19 14:14	
580-87205-9	MTA-B07-14-20190626	Water	06/26/19 11:33	06/26/19 14:14	



Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☒ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080

Date 6/26/2019
Page 1 of 1

Turnaround Time:
☒ Standard
☐ Accelerated

Project Name Mason Transit Authority Project No. 1817001.010.012
Project Location/Event Shelton, WA /drilling
Sampler's Name Katie Gaughite
Project Contact S. Fees
Send Results To D. Jorgensen, S. Fees

Testing Parameters

87205

Special Handling Requirements:

Shipment Method:

Stored on ice: ☒ Yes / ☐ No

Sample I.D.

Date

Time

Matrix

No. of
Containers

RCRA 8 Metals 6010C 7414
Hex. Chromium 7196A 7414
BTEX, EDC, MTBE 8260C 4
TPH-G NWT PH-GX
TPH-D, TPH-O, NWT PH-DX
CPAH 8270
PCBs 8082A
EDB 8260C 4
EDB 8011
TCLP Metals *

Observations/Comments

1	Trip Blank 1 - 20190626	6/26/19	820	Soil	3
	Trip Blank 2 - 20190626			Aq	6
-3	MTA-B06(0-3)-20190626	6/26/19	820	Soil	5
	MTA-B02(0-3)-20190626		845	Soil	5
-5	MTA-B02(5.5-6.5)-20190626		930	Soil	5
	MTA-B02-14-20190626		940	Aq	15
-7	MTA-B09-20190626		945	Aq	15
	MTA-B07(6.5-7.5)-20190626		1055	Soil	5
-9	MTA-B07-14-20190626		1133	Aq	15
	MTA-IDW-20190626	6/26/19	1115	Soil	2

Allow water samples to settle, collect aliquot from clear portion ☐

NWTPH-Dx - Acid wash cleanup ☐

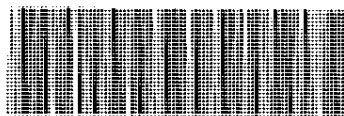
- Silica gel cleanup ☐

X Dissolved metal samples were field filtered
0.45um filter

Other

* Hex. chromium soil samples
are on hold pending
results of RCRA 8 analysis

* TCLP Metals on hold
pending RCRA 8 metals
results



580-87205 Chain of Custody

Therm. ID: A2 Cor: 0.9C Unc: 1.2C
Cooler Dsc: Ly Blue
Packing: Bubble FedEx: _____
Cust. Seal: Yes No X UPS: _____
Blue Ice, Yes Dry, None Lab Cour: _____
Other: clean

Therm. ID: A2 Cor: 3.3C Unc: 3.6C
Cooler Dsc: Ly Blue
Packing: bubble FedEx: _____
Cust. Seal: Yes No X UPS: _____
Blue Ice, Yes Dry, None Lab Cour: _____
Other: clean

Relinquished by

Signature Katie Gaughite
Printed Name Katie Gaughite
Company Landau Associates
Date 6/26/19 Time 14:15

Received by

Signature Terrence Harris
Printed Name Terrence Harris
Company T.A.
Date 6/26/19 Time 14:14

Relinquished by

Signature _____
Printed Name _____
Company _____
Date _____ Time _____

Received by

Signature _____
Printed Name _____
Company _____
Date _____ Time _____

COOLER RECEIPT FORM



580-87205 Chain of Custody

Cooler Received/Opened On 6/28/2019 @ 9:55

Time Samples Removed From Cooler _____ Time Samples Placed In Storage _____ (2 Hour Window)

1. Tracking # 0523 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960358 pH Strip Lot N/A Chlorine Strip Lot N/A

2. Temperature of rep. sample or temp blank when opened: 5.9 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? 1 side YES NO...NO...NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES NO...NO...NA

6. Were custody papers inside cooler? YES NO...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) _____

7. Were custody seals on containers: YES NO and intact YES...NO...NA

Were these signed and dated correctly? YES NO...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO...NO...NA

12. Did all container labels and tags agree with custody papers? YES NO...NO...NA

13a. Were VOA vials received? YES NO...NO...NA

b. Was there any observable headspace present in any VOA vial? YES NO...NO...NA



Larger than this.

14. Was there a Trip Blank in this cooler? YES NO...NO If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO...NO...NA

16. Was residual chlorine present? YES NO...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) _____

17. Were custody papers properly filled out (ink, signed, etc)? YES NO...NO...NA

18. Did you sign the custody papers in the appropriate place? YES NO...NO...NA

19. Were correct containers used for the analysis requested? YES NO...NO...NA

20. Was sufficient amount of sample sent in each container? YES NO...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) _____

I certify that I attached a label with the unique LIMS number to each container (initial) _____

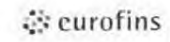
21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO...# _____

Client Information (Sub Contract Lab)		Lab PM: Cruz, Sheri L	COC No: 580-87453.1
Client Contact: Shipping/Receiving		Phone: Sheri.cruz@testamericainc.com	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): Washington	
Address: 29960 Foster Creighton Drive, City: Nashville State, Zip: TN, 37204 Phone: 615-728-0177(Tel) 615-728-3404(Fax) Email: Project Name: Mason Transit Authority, Shelton, WA Site:		Job #: 580-87205-1 Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Due Date Requested: 7/9/2019 TAT Requested (days):		Analysis Requested	
PO #: WTO #: Project #: 58013965 SSOW#:		Loc: 580 87205	
Sample Identification - Client ID (Lab ID)		Total Number of containers	
Sample Date		7196A/3060A Hexavalent Chromium (CrVI) (Hold)	
Sample Time		Perform MS/MS (Yes or No)	
Sample Type (C=Comp, G=grab)		Field Filtered Sample (Yes or No)	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		Preservation Code:	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		X	
Sample Date		X	
Sample Time		X	
Sample Type (C=Comp, G=grab)		X	
Matrix (W=water,			



Environment Testing
TestAmerica

[illegible]



Environment Testing
TestAmerica

[illegible]

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-87205-1

Login Number: 87205

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-87205-1

Login Number: 87205

List Number: 3

Creator: O'Toole, Maria C

List Source: Eurofins TestAmerica, Spokane

List Creation: 06/28/19 02:06 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	496969
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	2.9
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Not listed on COC
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-87205-1

Login Number: 87205

List Number: 4

Creator: O'Toole, Maria C

List Source: Eurofins TestAmerica, Spokane

List Creation: 07/02/19 10:01 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	785074
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	3.3
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	Not listed on COC
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Not listed on COC
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	No analysis requiring residual chlorine check assigned.
Residual Chlorine Checked.	N/A	

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: TripBlank2-20190626

Date Collected: 06/26/19 00:01

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-2

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.20	0.20	ug/L			06/28/19 01:34	1
Benzene	ND		0.20	0.20	ug/L			06/28/19 01:34	1
Ethylbenzene	ND		0.20	0.20	ug/L			06/28/19 01:34	1
Methyl tert-butyl ether	ND		0.30	0.30	ug/L			06/28/19 01:34	1
m-Xylene & p-Xylene	ND		0.50	0.50	ug/L			06/28/19 01:34	1
o-Xylene	ND		0.50	0.50	ug/L			06/28/19 01:34	1
Toluene	0.42		0.20	0.20	ug/L			06/28/19 01:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		80 - 120		06/28/19 01:34	1
4-Bromofluorobenzene (Surr)	100		80 - 120		06/28/19 01:34	1
Dibromofluoromethane (Surr)	103		80 - 120		06/28/19 01:34	1
Toluene-d8 (Surr)	103		80 - 120		06/28/19 01:34	1
Trifluorotoluene (Surr)	99		80 - 120		06/28/19 01:34	1

Client Sample ID: MTA-B02-14-20190626

Date Collected: 06/26/19 09:40

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-6

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.20	0.20	ug/L			06/28/19 07:20	1
Benzene	ND		0.20	0.20	ug/L			06/28/19 07:20	1
Ethylbenzene	ND		0.20	0.20	ug/L			06/28/19 07:20	1
Methyl tert-butyl ether	ND		0.30	0.30	ug/L			06/28/19 07:20	1
m-Xylene & p-Xylene	ND		0.50	0.50	ug/L			06/28/19 07:20	1
o-Xylene	ND		0.50	0.50	ug/L			06/28/19 07:20	1
Toluene	ND		0.20	0.20	ug/L			06/28/19 07:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		80 - 120		06/28/19 07:20	1
4-Bromofluorobenzene (Surr)	99		80 - 120		06/28/19 07:20	1
Dibromofluoromethane (Surr)	104		80 - 120		06/28/19 07:20	1
Toluene-d8 (Surr)	103		80 - 120		06/28/19 07:20	1
Trifluorotoluene (Surr)	98		80 - 120		06/28/19 07:20	1

Client Sample ID: MTA-B99-20190626

Date Collected: 06/26/19 09:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-7

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.20	0.20	ug/L			07/01/19 17:47	1
Benzene	ND		0.20	0.20	ug/L			07/01/19 17:47	1
Ethylbenzene	ND		0.20	0.20	ug/L			07/01/19 17:47	1
Methyl tert-butyl ether	ND		0.30	0.30	ug/L			07/01/19 17:47	1
m-Xylene & p-Xylene	ND		0.50	0.50	ug/L			07/01/19 17:47	1
o-Xylene	ND		0.50	0.50	ug/L			07/01/19 17:47	1
Toluene	ND		0.20	0.20	ug/L			07/01/19 17:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		80 - 120		07/01/19 17:47	1
4-Bromofluorobenzene (Surr)	103		80 - 120		07/01/19 17:47	1
Dibromofluoromethane (Surr)	104		80 - 120		07/01/19 17:47	1
Toluene-d8 (Surr)	102		80 - 120		07/01/19 17:47	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MTA-B99-20190626
Date Collected: 06/26/19 09:45
Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	96		80 - 120		07/01/19 17:47	1

Client Sample ID: MTA-B07-14-20190626
Date Collected: 06/26/19 11:33
Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-9
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.20	0.20	ug/L			07/01/19 18:13	1
Benzene	ND		0.20	0.20	ug/L			07/01/19 18:13	1
Ethylbenzene	ND		0.20	0.20	ug/L			07/01/19 18:13	1
Methyl tert-butyl ether	ND		0.30	0.30	ug/L			07/01/19 18:13	1
m-Xylene & p-Xylene	ND		0.50	0.50	ug/L			07/01/19 18:13	1
o-Xylene	ND		0.50	0.50	ug/L			07/01/19 18:13	1
Toluene	ND		0.20	0.20	ug/L			07/01/19 18:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		80 - 120		07/01/19 18:13	1
4-Bromofluorobenzene (Surr)	97		80 - 120		07/01/19 18:13	1
Dibromofluoromethane (Surr)	102		80 - 120		07/01/19 18:13	1
Toluene-d8 (Surr)	103		80 - 120		07/01/19 18:13	1
Trifluorotoluene (Surr)	106		80 - 120		07/01/19 18:13	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: TripBlank1-20190626

Date Collected: 06/26/19 00:01

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-1

Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0	1.0	ug/Kg		06/26/19 16:40	06/28/19 15:19	1
Benzene	ND		2.0	2.0	ug/Kg		06/26/19 16:40	06/28/19 15:19	1
Ethylbenzene	ND		2.0	2.0	ug/Kg		06/26/19 16:40	06/28/19 15:19	1
m-Xylene & p-Xylene	ND		10	10	ug/Kg		06/26/19 16:40	06/28/19 15:19	1
o-Xylene	ND		5.0	5.0	ug/Kg		06/26/19 16:40	06/28/19 15:19	1
Toluene	ND		10	10	ug/Kg		06/26/19 16:40	06/28/19 15:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122	X	80 - 121	06/26/19 16:40	06/28/19 15:19	1
4-Bromofluorobenzene (Surr)	100		80 - 120	06/26/19 16:40	06/28/19 15:19	1
Dibromofluoromethane (Surr)	103		80 - 120	06/26/19 16:40	06/28/19 15:19	1
Toluene-d8 (Surr)	104		80 - 120	06/26/19 16:40	06/28/19 15:19	1
Trifluorotoluene (Surr)	102		80 - 120	06/26/19 16:40	06/28/19 15:19	1

Client Sample ID: MTA-B06(0-3)-20190626

Date Collected: 06/26/19 08:20

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-3

Matrix: Solid

Percent Solids: 93.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0	1.0	ug/Kg	✱	06/26/19 16:40	06/28/19 19:01	1
Benzene	ND		2.0	2.0	ug/Kg	✱	06/26/19 16:40	06/28/19 19:01	1
Ethylbenzene	ND		2.0	2.0	ug/Kg	✱	06/26/19 16:40	06/28/19 19:01	1
m-Xylene & p-Xylene	ND		10	10	ug/Kg	✱	06/26/19 16:40	06/28/19 19:01	1
o-Xylene	ND		5.0	5.0	ug/Kg	✱	06/26/19 16:40	06/28/19 19:01	1
Toluene	ND		10	10	ug/Kg	✱	06/26/19 16:40	06/28/19 19:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		80 - 121	06/26/19 16:40	06/28/19 19:01	1
4-Bromofluorobenzene (Surr)	103		80 - 120	06/26/19 16:40	06/28/19 19:01	1
Dibromofluoromethane (Surr)	109		80 - 120	06/26/19 16:40	06/28/19 19:01	1
Toluene-d8 (Surr)	99		80 - 120	06/26/19 16:40	06/28/19 19:01	1
Trifluorotoluene (Surr)	97		80 - 120	06/26/19 16:40	06/28/19 19:01	1

Client Sample ID: MTA-B02(0-3)-20190626

Date Collected: 06/26/19 08:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-4

Matrix: Solid

Percent Solids: 83.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.85	0.85	ug/Kg	✱	06/26/19 16:40	06/28/19 19:26	1
Benzene	ND		1.7	1.7	ug/Kg	✱	06/26/19 16:40	06/28/19 19:26	1
Ethylbenzene	ND		1.7	1.7	ug/Kg	✱	06/26/19 16:40	06/28/19 19:26	1
m-Xylene & p-Xylene	ND		8.5	8.5	ug/Kg	✱	06/26/19 16:40	06/28/19 19:26	1
o-Xylene	ND		4.2	4.2	ug/Kg	✱	06/26/19 16:40	06/28/19 19:26	1
Toluene	ND		8.5	8.5	ug/Kg	✱	06/26/19 16:40	06/28/19 19:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		80 - 121	06/26/19 16:40	06/28/19 19:26	1
4-Bromofluorobenzene (Surr)	101		80 - 120	06/26/19 16:40	06/28/19 19:26	1
Dibromofluoromethane (Surr)	107		80 - 120	06/26/19 16:40	06/28/19 19:26	1
Toluene-d8 (Surr)	99		80 - 120	06/26/19 16:40	06/28/19 19:26	1
Trifluorotoluene (Surr)	96		80 - 120	06/26/19 16:40	06/28/19 19:26	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: MTA-B02(5.5-6.5)-20190626

Date Collected: 06/26/19 09:30

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-5

Matrix: Solid

Percent Solids: 94.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0	1.0	ug/Kg	☼	06/26/19 16:40	06/28/19 19:50	1
Benzene	ND		2.0	2.0	ug/Kg	☼	06/26/19 16:40	06/28/19 19:50	1
Ethylbenzene	ND		2.0	2.0	ug/Kg	☼	06/26/19 16:40	06/28/19 19:50	1
m-Xylene & p-Xylene	ND		10	10	ug/Kg	☼	06/26/19 16:40	06/28/19 19:50	1
o-Xylene	ND		5.1	5.1	ug/Kg	☼	06/26/19 16:40	06/28/19 19:50	1
Toluene	ND		10	10	ug/Kg	☼	06/26/19 16:40	06/28/19 19:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		80 - 121	06/26/19 16:40	06/28/19 19:50	1
4-Bromofluorobenzene (Surr)	101		80 - 120	06/26/19 16:40	06/28/19 19:50	1
Dibromofluoromethane (Surr)	102		80 - 120	06/26/19 16:40	06/28/19 19:50	1
Toluene-d8 (Surr)	98		80 - 120	06/26/19 16:40	06/28/19 19:50	1
Trifluorotoluene (Surr)	99		80 - 120	06/26/19 16:40	06/28/19 19:50	1

Client Sample ID: MTA-B07(6.5-7.5)-20190626

Date Collected: 06/26/19 10:55

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-8

Matrix: Solid

Percent Solids: 92.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.92	0.92	ug/Kg	☼	06/26/19 16:40	06/28/19 20:15	1
Benzene	ND		1.8	1.8	ug/Kg	☼	06/26/19 16:40	06/28/19 20:15	1
Ethylbenzene	ND		1.8	1.8	ug/Kg	☼	06/26/19 16:40	06/28/19 20:15	1
m-Xylene & p-Xylene	ND		9.2	9.2	ug/Kg	☼	06/26/19 16:40	06/28/19 20:15	1
o-Xylene	ND		4.6	4.6	ug/Kg	☼	06/26/19 16:40	06/28/19 20:15	1
Toluene	ND		9.2	9.2	ug/Kg	☼	06/26/19 16:40	06/28/19 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		80 - 121	06/26/19 16:40	06/28/19 20:15	1
4-Bromofluorobenzene (Surr)	102		80 - 120	06/26/19 16:40	06/28/19 20:15	1
Dibromofluoromethane (Surr)	106		80 - 120	06/26/19 16:40	06/28/19 20:15	1
Toluene-d8 (Surr)	102		80 - 120	06/26/19 16:40	06/28/19 20:15	1
Trifluorotoluene (Surr)	97		80 - 120	06/26/19 16:40	06/28/19 20:15	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Client Sample ID: TripBlank1-20190626

Date Collected: 06/26/19 00:01

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-1

Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		1.0	1.0	ug/Kg		06/26/19 16:40	07/10/19 19:58	1
Methyl tert-butyl ether	ND		2.0	2.0	ug/Kg		06/26/19 16:40	07/10/19 19:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		80 - 121				06/26/19 16:40	07/10/19 19:58	1
4-Bromofluorobenzene (Surr)	98		80 - 120				06/26/19 16:40	07/10/19 19:58	1
Dibromofluoromethane (Surr)	108		80 - 120				06/26/19 16:40	07/10/19 19:58	1
Toluene-d8 (Surr)	99		80 - 120				06/26/19 16:40	07/10/19 19:58	1
Trifluorotoluene (Surr)	102		80 - 120				06/26/19 16:40	07/10/19 19:58	1

Client Sample ID: MTA-B06(0-3)-20190626

Date Collected: 06/26/19 08:20

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-3

Matrix: Solid

Percent Solids: 93.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.86	0.86	ug/Kg	☼	06/26/19 16:40	07/10/19 21:37	1
Methyl tert-butyl ether	ND		1.7	1.7	ug/Kg	☼	06/26/19 16:40	07/10/19 21:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122	X	80 - 121				06/26/19 16:40	07/10/19 21:37	1
4-Bromofluorobenzene (Surr)	96		80 - 120				06/26/19 16:40	07/10/19 21:37	1
Dibromofluoromethane (Surr)	106		80 - 120				06/26/19 16:40	07/10/19 21:37	1
Toluene-d8 (Surr)	98		80 - 120				06/26/19 16:40	07/10/19 21:37	1
Trifluorotoluene (Surr)	98		80 - 120				06/26/19 16:40	07/10/19 21:37	1

Client Sample ID: MTA-B02(0-3)-20190626

Date Collected: 06/26/19 08:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-4

Matrix: Solid

Percent Solids: 83.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.96	0.96	ug/Kg	☼	06/26/19 16:40	07/10/19 22:02	1
Methyl tert-butyl ether	ND		1.9	1.9	ug/Kg	☼	06/26/19 16:40	07/10/19 22:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122	X	80 - 121				06/26/19 16:40	07/10/19 22:02	1
4-Bromofluorobenzene (Surr)	102		80 - 120				06/26/19 16:40	07/10/19 22:02	1
Dibromofluoromethane (Surr)	108		80 - 120				06/26/19 16:40	07/10/19 22:02	1
Toluene-d8 (Surr)	98		80 - 120				06/26/19 16:40	07/10/19 22:02	1
Trifluorotoluene (Surr)	99		80 - 120				06/26/19 16:40	07/10/19 22:02	1

Client Sample ID: MTA-B02(5.5-6.5)-20190626

Date Collected: 06/26/19 09:30

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-5

Matrix: Solid

Percent Solids: 94.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		1.1	1.1	ug/Kg	☼	06/26/19 16:40	07/10/19 22:26	1
Methyl tert-butyl ether	ND		2.2	2.2	ug/Kg	☼	06/26/19 16:40	07/10/19 22:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		80 - 121				06/26/19 16:40	07/10/19 22:26	1
4-Bromofluorobenzene (Surr)	97		80 - 120				06/26/19 16:40	07/10/19 22:26	1
Dibromofluoromethane (Surr)	109		80 - 120				06/26/19 16:40	07/10/19 22:26	1
Toluene-d8 (Surr)	100		80 - 120				06/26/19 16:40	07/10/19 22:26	1
Trifluorotoluene (Surr)	101		80 - 120				06/26/19 16:40	07/10/19 22:26	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Client Sample ID: MTA-B07(6.5-7.5)-20190626

Date Collected: 06/26/19 10:55

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-8

Matrix: Solid

Percent Solids: 92.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.89	0.89	ug/Kg	☼	06/26/19 16:40	07/10/19 22:51	1
Methyl tert-butyl ether	ND		1.8	1.8	ug/Kg	☼	06/26/19 16:40	07/10/19 22:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		80 - 121				06/26/19 16:40	07/10/19 22:51	1
4-Bromofluorobenzene (Surr)	100		80 - 120				06/26/19 16:40	07/10/19 22:51	1
Dibromofluoromethane (Surr)	106		80 - 120				06/26/19 16:40	07/10/19 22:51	1
Toluene-d8 (Surr)	97		80 - 120				06/26/19 16:40	07/10/19 22:51	1
Trifluorotoluene (Surr)	102		80 - 120				06/26/19 16:40	07/10/19 22:51	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Client Sample ID: MTA-B06(0-3)-20190626

Date Collected: 06/26/19 08:20

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-3

Matrix: Solid

Percent Solids: 93.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	2400		11	11	ug/Kg	☼	07/09/19 09:10	07/09/19 12:33	1
Chrysene	2600		110	110	ug/Kg	☼	07/09/19 09:10	07/10/19 11:30	10
Benzo[b]fluoranthene	3000		110	110	ug/Kg	☼	07/09/19 09:10	07/10/19 11:30	10
Benzo[k]fluoranthene	1100		11	11	ug/Kg	☼	07/09/19 09:10	07/09/19 12:33	1
Benzo[a]pyrene	1900		11	11	ug/Kg	☼	07/09/19 09:10	07/09/19 12:33	1
Indeno[1,2,3-cd]pyrene	1300		11	11	ug/Kg	☼	07/09/19 09:10	07/09/19 12:33	1
Dibenz(a,h)anthracene	470		11	11	ug/Kg	☼	07/09/19 09:10	07/09/19 12:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	116		61 - 136	07/09/19 09:10	07/09/19 12:33	1
p-Terphenyl-d14	108		61 - 136	07/09/19 09:10	07/10/19 11:30	10
Nitrobenzene-d5	91		31 - 120	07/09/19 09:10	07/09/19 12:33	1
Nitrobenzene-d5	86		31 - 120	07/09/19 09:10	07/10/19 11:30	10
2-Fluorobiphenyl (Surr)	98		46 - 120	07/09/19 09:10	07/09/19 12:33	1
2-Fluorobiphenyl (Surr)	93		46 - 120	07/09/19 09:10	07/10/19 11:30	10

Client Sample ID: MTA-B02(0-3)-20190626

Date Collected: 06/26/19 08:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-4

Matrix: Solid

Percent Solids: 83.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		12	12	ug/Kg	☼	07/09/19 09:10	07/09/19 13:00	1
Chrysene	ND		12	12	ug/Kg	☼	07/09/19 09:10	07/09/19 13:00	1
Benzo[b]fluoranthene	ND		12	12	ug/Kg	☼	07/09/19 09:10	07/09/19 13:00	1
Benzo[k]fluoranthene	ND		12	12	ug/Kg	☼	07/09/19 09:10	07/09/19 13:00	1
Benzo[a]pyrene	ND		12	12	ug/Kg	☼	07/09/19 09:10	07/09/19 13:00	1
Indeno[1,2,3-cd]pyrene	ND		12	12	ug/Kg	☼	07/09/19 09:10	07/09/19 13:00	1
Dibenz(a,h)anthracene	ND		12	12	ug/Kg	☼	07/09/19 09:10	07/09/19 13:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	118		61 - 136	07/09/19 09:10	07/09/19 13:00	1
Nitrobenzene-d5	86		31 - 120	07/09/19 09:10	07/09/19 13:00	1
2-Fluorobiphenyl (Surr)	96		46 - 120	07/09/19 09:10	07/09/19 13:00	1

Client Sample ID: MTA-B02(5.5-6.5)-20190626

Date Collected: 06/26/19 09:30

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-5

Matrix: Solid

Percent Solids: 94.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		10	10	ug/Kg	☼	07/09/19 09:10	07/09/19 13:26	1
Chrysene	ND		10	10	ug/Kg	☼	07/09/19 09:10	07/09/19 13:26	1
Benzo[b]fluoranthene	ND		10	10	ug/Kg	☼	07/09/19 09:10	07/09/19 13:26	1
Benzo[k]fluoranthene	ND		10	10	ug/Kg	☼	07/09/19 09:10	07/09/19 13:26	1
Benzo[a]pyrene	ND		10	10	ug/Kg	☼	07/09/19 09:10	07/09/19 13:26	1
Indeno[1,2,3-cd]pyrene	ND		10	10	ug/Kg	☼	07/09/19 09:10	07/09/19 13:26	1
Dibenz(a,h)anthracene	ND		10	10	ug/Kg	☼	07/09/19 09:10	07/09/19 13:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	115		61 - 136	07/09/19 09:10	07/09/19 13:26	1
Nitrobenzene-d5	83		31 - 120	07/09/19 09:10	07/09/19 13:26	1
2-Fluorobiphenyl (Surr)	94		46 - 120	07/09/19 09:10	07/09/19 13:26	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Client Sample ID: MTA-B02-14-20190626

Date Collected: 06/26/19 09:40

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-6

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/03/19 00:10	1
Chrysene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/03/19 00:10	1
Benzo[b]fluoranthene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/03/19 00:10	1
Benzo[k]fluoranthene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/03/19 00:10	1
Benzo[a]pyrene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/03/19 00:10	1
Indeno[1,2,3-cd]pyrene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/03/19 00:10	1
Dibenz(a,h)anthracene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/03/19 00:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	99		51 - 121	07/02/19 10:14	07/03/19 00:10	1
Nitrobenzene-d5	91		36 - 126	07/02/19 10:14	07/03/19 00:10	1
2-Fluorobiphenyl (Surr)	88		44 - 120	07/02/19 10:14	07/03/19 00:10	1

Client Sample ID: MTA-B99-20190626

Date Collected: 06/26/19 09:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-7

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.093	0.093	ug/L		07/02/19 10:14	07/03/19 00:37	1
Chrysene	ND		0.093	0.093	ug/L		07/02/19 10:14	07/03/19 00:37	1
Benzo[b]fluoranthene	ND		0.093	0.093	ug/L		07/02/19 10:14	07/03/19 00:37	1
Benzo[k]fluoranthene	ND		0.093	0.093	ug/L		07/02/19 10:14	07/03/19 00:37	1
Benzo[a]pyrene	ND		0.093	0.093	ug/L		07/02/19 10:14	07/03/19 00:37	1
Indeno[1,2,3-cd]pyrene	ND		0.093	0.093	ug/L		07/02/19 10:14	07/03/19 00:37	1
Dibenz(a,h)anthracene	ND		0.093	0.093	ug/L		07/02/19 10:14	07/03/19 00:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	96		51 - 121	07/02/19 10:14	07/03/19 00:37	1
Nitrobenzene-d5	86		36 - 126	07/02/19 10:14	07/03/19 00:37	1
2-Fluorobiphenyl (Surr)	81		44 - 120	07/02/19 10:14	07/03/19 00:37	1

Client Sample ID: MTA-B07(6.5-7.5)-20190626

Date Collected: 06/26/19 10:55

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-8

Matrix: Solid

Percent Solids: 92.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		10	10	ug/Kg	☼	07/09/19 09:10	07/09/19 13:52	1
Chrysene	ND		10	10	ug/Kg	☼	07/09/19 09:10	07/09/19 13:52	1
Benzo[b]fluoranthene	ND		10	10	ug/Kg	☼	07/09/19 09:10	07/09/19 13:52	1
Benzo[k]fluoranthene	ND		10	10	ug/Kg	☼	07/09/19 09:10	07/09/19 13:52	1
Benzo[a]pyrene	ND		10	10	ug/Kg	☼	07/09/19 09:10	07/09/19 13:52	1
Indeno[1,2,3-cd]pyrene	ND		10	10	ug/Kg	☼	07/09/19 09:10	07/09/19 13:52	1
Dibenz(a,h)anthracene	ND		10	10	ug/Kg	☼	07/09/19 09:10	07/09/19 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	108		61 - 136	07/09/19 09:10	07/09/19 13:52	1
Nitrobenzene-d5	75		31 - 120	07/09/19 09:10	07/09/19 13:52	1
2-Fluorobiphenyl (Surr)	88		46 - 120	07/09/19 09:10	07/09/19 13:52	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Client Sample ID: MTA-B07-14-20190626

Date Collected: 06/26/19 11:33

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-9

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/03/19 01:03	1
Chrysene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/03/19 01:03	1
Benzo[b]fluoranthene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/03/19 01:03	1
Benzo[k]fluoranthene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/03/19 01:03	1
Benzo[a]pyrene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/03/19 01:03	1
Indeno[1,2,3-cd]pyrene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/03/19 01:03	1
Dibenz(a,h)anthracene	ND		0.091	0.091	ug/L		07/02/19 10:14	07/03/19 01:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	90		51 - 121	07/02/19 10:14	07/03/19 01:03	1
Nitrobenzene-d5	81		36 - 126	07/02/19 10:14	07/03/19 01:03	1
2-Fluorobiphenyl (Surr)	77		44 - 120	07/02/19 10:14	07/03/19 01:03	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Client Sample ID: TripBlank1-20190626

Date Collected: 06/26/19 00:01

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-1

Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		5.0	5.0	mg/Kg	—	07/02/19 08:50	07/02/19 13:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		50 - 150				07/02/19 08:50	07/02/19 13:08	1

Client Sample ID: TripBlank2-20190626

Date Collected: 06/26/19 00:01

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-2

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		0.25	0.25	mg/L	—		07/01/19 16:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		50 - 150					07/01/19 16:12	1
Trifluorotoluene (Surr)	116		50 - 150					07/01/19 16:12	1

Client Sample ID: MTA-B06(0-3)-20190626

Date Collected: 06/26/19 08:20

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-3

Matrix: Solid

Percent Solids: 93.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		5.2	5.2	mg/Kg	☼	07/02/19 08:50	07/02/19 14:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		50 - 150				07/02/19 08:50	07/02/19 14:02	1

Client Sample ID: MTA-B02(0-3)-20190626

Date Collected: 06/26/19 08:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-4

Matrix: Solid

Percent Solids: 83.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		5.9	5.9	mg/Kg	☼	07/02/19 08:50	07/02/19 14:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		50 - 150				07/02/19 08:50	07/02/19 14:56	1

Client Sample ID: MTA-B02(5.5-6.5)-20190626

Date Collected: 06/26/19 09:30

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-5

Matrix: Solid

Percent Solids: 94.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		5.5	5.5	mg/Kg	☼	07/02/19 08:50	07/02/19 15:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		50 - 150				07/02/19 08:50	07/02/19 15:23	1

Client Sample ID: MTA-B02-14-20190626

Date Collected: 06/26/19 09:40

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-6

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		0.25	0.25	mg/L	—		06/28/19 20:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		50 - 150					06/28/19 20:53	1
Trifluorotoluene (Surr)	107		50 - 150					06/28/19 20:53	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Client Sample ID: MTA-B99-20190626

Date Collected: 06/26/19 09:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-7

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		0.25	0.25	mg/L	—		06/28/19 21:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		50 - 150					06/28/19 21:20	1
Trifluorotoluene (Surr)	105		50 - 150					06/28/19 21:20	1

Client Sample ID: MTA-B07(6.5-7.5)-20190626

Date Collected: 06/26/19 10:55

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-8

Matrix: Solid

Percent Solids: 92.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		5.1	5.1	mg/Kg	☼	07/02/19 08:50	07/02/19 15:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		50 - 150				07/02/19 08:50	07/02/19 15:50	1

Client Sample ID: MTA-B07-14-20190626

Date Collected: 06/26/19 11:33

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-9

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		0.25	0.25	mg/L	—		06/28/19 21:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		50 - 150					06/28/19 21:47	1
Trifluorotoluene (Surr)	107		50 - 150					06/28/19 21:47	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Client Sample ID: MTA-B02-14-20190626

Date Collected: 06/26/19 09:40

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-6

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.010	0.010	ug/L	—	07/09/19 14:57	07/10/19 19:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dibromopropane	96		60 - 140				07/09/19 14:57	07/10/19 19:42	1

Client Sample ID: MTA-B99-20190626

Date Collected: 06/26/19 09:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-7

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020	0.020	ug/L	—	07/09/19 14:57	07/10/19 19:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dibromopropane	95		60 - 140				07/09/19 14:57	07/10/19 19:59	1

Client Sample ID: MTA-B07-14-20190626

Date Collected: 06/26/19 11:33

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-9

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.0099	0.0099	ug/L	—	07/09/19 14:57	07/10/19 23:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dibromopropane	95		60 - 140				07/09/19 14:57	07/10/19 23:03	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: MTA-B06(0-3)-20190626

Date Collected: 06/26/19 08:20

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-3

Matrix: Solid

Percent Solids: 93.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 20:00	1
PCB-1221	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 20:00	1
PCB-1232	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 20:00	1
PCB-1242	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 20:00	1
PCB-1248	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 20:00	1
PCB-1254	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 20:00	1
PCB-1260	ND		10	10	ug/Kg	☼	07/10/19 09:18	07/10/19 20:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	65		31 - 142	07/10/19 09:18	07/10/19 20:00	1
DCB Decachlorobiphenyl (Surr)	129	p	20 - 150	07/10/19 09:18	07/10/19 20:00	1

Client Sample ID: MTA-B02(0-3)-20190626

Date Collected: 06/26/19 08:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-4

Matrix: Solid

Percent Solids: 83.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		12	12	ug/Kg	☼	07/10/19 09:18	07/10/19 20:21	1
PCB-1221	ND		12	12	ug/Kg	☼	07/10/19 09:18	07/10/19 20:21	1
PCB-1232	ND		12	12	ug/Kg	☼	07/10/19 09:18	07/10/19 20:21	1
PCB-1242	ND		12	12	ug/Kg	☼	07/10/19 09:18	07/10/19 20:21	1
PCB-1248	ND		12	12	ug/Kg	☼	07/10/19 09:18	07/10/19 20:21	1
PCB-1254	ND		12	12	ug/Kg	☼	07/10/19 09:18	07/10/19 20:21	1
PCB-1260	ND		12	12	ug/Kg	☼	07/10/19 09:18	07/10/19 20:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	91		31 - 142	07/10/19 09:18	07/10/19 20:21	1
DCB Decachlorobiphenyl (Surr)	90		20 - 150	07/10/19 09:18	07/10/19 20:21	1

Client Sample ID: MTA-B02(5.5-6.5)-20190626

Date Collected: 06/26/19 09:30

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-5

Matrix: Solid

Percent Solids: 94.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		11	11	ug/Kg	☼	07/10/19 09:18	07/10/19 20:41	1
PCB-1221	ND		11	11	ug/Kg	☼	07/10/19 09:18	07/10/19 20:41	1
PCB-1232	ND		11	11	ug/Kg	☼	07/10/19 09:18	07/10/19 20:41	1
PCB-1242	ND		11	11	ug/Kg	☼	07/10/19 09:18	07/10/19 20:41	1
PCB-1248	ND		11	11	ug/Kg	☼	07/10/19 09:18	07/10/19 20:41	1
PCB-1254	ND		11	11	ug/Kg	☼	07/10/19 09:18	07/10/19 20:41	1
PCB-1260	ND		11	11	ug/Kg	☼	07/10/19 09:18	07/10/19 20:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		31 - 142	07/10/19 09:18	07/10/19 20:41	1
DCB Decachlorobiphenyl (Surr)	71		20 - 150	07/10/19 09:18	07/10/19 20:41	1

Client Sample ID: MTA-B02-14-20190626

Date Collected: 06/26/19 09:40

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.10	0.062	ug/L	—	07/11/19 10:34	07/11/19 15:04	1
PCB-1221	ND		0.10	0.062	ug/L	—	07/11/19 10:34	07/11/19 15:04	1
PCB-1232	ND		0.10	0.062	ug/L	—	07/11/19 10:34	07/11/19 15:04	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Client Sample ID: MTA-B02-14-20190626

Date Collected: 06/26/19 09:40

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 15:04	1
PCB-1248	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 15:04	1
PCB-1254	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 15:04	1
PCB-1260	ND		0.10	0.044	ug/L		07/11/19 10:34	07/11/19 15:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	59		20 - 126	07/11/19 10:34	07/11/19 15:04	1
DCB Decachlorobiphenyl (Surr)	79		23 - 138	07/11/19 10:34	07/11/19 15:04	1

Client Sample ID: MTA-B99-20190626

Date Collected: 06/26/19 09:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.10	0.063	ug/L		07/11/19 10:34	07/11/19 15:25	1
PCB-1221	ND		0.10	0.063	ug/L		07/11/19 10:34	07/11/19 15:25	1
PCB-1232	ND		0.10	0.063	ug/L		07/11/19 10:34	07/11/19 15:25	1
PCB-1242	ND		0.10	0.063	ug/L		07/11/19 10:34	07/11/19 15:25	1
PCB-1248	ND		0.10	0.063	ug/L		07/11/19 10:34	07/11/19 15:25	1
PCB-1254	ND		0.10	0.063	ug/L		07/11/19 10:34	07/11/19 15:25	1
PCB-1260	ND		0.10	0.044	ug/L		07/11/19 10:34	07/11/19 15:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	57		20 - 126	07/11/19 10:34	07/11/19 15:25	1
DCB Decachlorobiphenyl (Surr)	82		23 - 138	07/11/19 10:34	07/11/19 15:25	1

Client Sample ID: MTA-B07(6.5-7.5)-20190626

Date Collected: 06/26/19 10:55

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-8

Matrix: Solid

Percent Solids: 92.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10	10	ug/Kg	✱	07/10/19 09:18	07/10/19 21:02	1
PCB-1221	ND		10	10	ug/Kg	✱	07/10/19 09:18	07/10/19 21:02	1
PCB-1232	ND		10	10	ug/Kg	✱	07/10/19 09:18	07/10/19 21:02	1
PCB-1242	ND		10	10	ug/Kg	✱	07/10/19 09:18	07/10/19 21:02	1
PCB-1248	ND		10	10	ug/Kg	✱	07/10/19 09:18	07/10/19 21:02	1
PCB-1254	ND		10	10	ug/Kg	✱	07/10/19 09:18	07/10/19 21:02	1
PCB-1260	ND		10	10	ug/Kg	✱	07/10/19 09:18	07/10/19 21:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	84		31 - 142	07/10/19 09:18	07/10/19 21:02	1
DCB Decachlorobiphenyl (Surr)	80		20 - 150	07/10/19 09:18	07/10/19 21:02	1

Client Sample ID: MTA-B07-14-20190626

Date Collected: 06/26/19 11:33

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.10	0.063	ug/L		07/11/19 10:34	07/11/19 15:45	1
PCB-1221	ND		0.10	0.063	ug/L		07/11/19 10:34	07/11/19 15:45	1
PCB-1232	ND		0.10	0.063	ug/L		07/11/19 10:34	07/11/19 15:45	1
PCB-1242	ND		0.10	0.063	ug/L		07/11/19 10:34	07/11/19 15:45	1
PCB-1248	ND		0.10	0.063	ug/L		07/11/19 10:34	07/11/19 15:45	1
PCB-1254	ND		0.10	0.063	ug/L		07/11/19 10:34	07/11/19 15:45	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Client Sample ID: MTA-B07-14-20190626

Lab Sample ID: 580-87205-9

Date Collected: 06/26/19 11:33

Matrix: Water

Date Received: 06/26/19 14:14

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	ND		0.10	0.044	ug/L		07/11/19 10:34	07/11/19 15:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	56		20 - 126	07/11/19 10:34	07/11/19 15:45	1
DCB Decachlorobiphenyl (Surr)	87		23 - 138	07/11/19 10:34	07/11/19 15:45	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Client Sample ID: MTA-B06(0-3)-20190626

Date Collected: 06/26/19 08:20

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-3

Matrix: Solid

Percent Solids: 93.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	45		10	10	mg/Kg	☼	07/09/19 10:00	07/10/19 05:26	1
Residual Range Organics (RRO) (C25-C36)	130		26	26	mg/Kg	☼	07/09/19 10:00	07/10/19 05:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	97		50 - 150				07/09/19 10:00	07/10/19 05:26	1
<i>n</i> -Triacontane-d62	91		50 - 150				07/09/19 10:00	07/10/19 05:26	1

Client Sample ID: MTA-B02(0-3)-20190626

Date Collected: 06/26/19 08:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-4

Matrix: Solid

Percent Solids: 83.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		12	12	mg/Kg	☼	07/09/19 10:00	07/10/19 05:46	1
Residual Range Organics (RRO) (C25-C36)	ND		29	29	mg/Kg	☼	07/09/19 10:00	07/10/19 05:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				07/09/19 10:00	07/10/19 05:46	1
<i>n</i> -Triacontane-d62	86		50 - 150				07/09/19 10:00	07/10/19 05:46	1

Client Sample ID: MTA-B02(5.5-6.5)-20190626

Date Collected: 06/26/19 09:30

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-5

Matrix: Solid

Percent Solids: 94.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		10	10	mg/Kg	☼	07/09/19 10:00	07/10/19 06:06	1
Residual Range Organics (RRO) (C25-C36)	ND		25	25	mg/Kg	☼	07/09/19 10:00	07/10/19 06:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150				07/09/19 10:00	07/10/19 06:06	1
<i>n</i> -Triacontane-d62	96		50 - 150				07/09/19 10:00	07/10/19 06:06	1

Client Sample ID: MTA-B02-14-20190626

Date Collected: 06/26/19 09:40

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-6

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		0.24	0.24	mg/L	—	07/10/19 10:09	07/11/19 01:47	1
Residual Range Organics (RRO) (C25-C36)	ND		0.40	0.40	mg/L	—	07/10/19 10:09	07/11/19 01:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				07/10/19 10:09	07/11/19 01:47	1
<i>n</i> -Triacontane-d62	79		50 - 150				07/10/19 10:09	07/11/19 01:47	1

Client Sample ID: MTA-B99-20190626

Date Collected: 06/26/19 09:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-7

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		0.24	0.24	mg/L	—	07/10/19 10:09	07/11/19 02:07	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Client Sample ID: MTA-B99-20190626

Date Collected: 06/26/19 09:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-7

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Residual Range Organics (RRO) (C25-C36)	ND		0.40	0.40	mg/L	—	07/10/19 10:09	07/11/19 02:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				07/10/19 10:09	07/11/19 02:07	1
<i>n</i> -Triacontane-d62	81		50 - 150				07/10/19 10:09	07/11/19 02:07	1

Client Sample ID: MTA-B07(6.5-7.5)-20190626

Date Collected: 06/26/19 10:55

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-8

Matrix: Solid

Percent Solids: 92.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		11	11	mg/Kg	☼	07/09/19 10:00	07/10/19 06:26	1
Residual Range Organics (RRO) (C25-C36)	ND		27	27	mg/Kg	☼	07/09/19 10:00	07/10/19 06:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				07/09/19 10:00	07/10/19 06:26	1
<i>n</i> -Triacontane-d62	86		50 - 150				07/09/19 10:00	07/10/19 06:26	1

Client Sample ID: MTA-B07-14-20190626

Date Collected: 06/26/19 11:33

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-9

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		0.24	0.24	mg/L	—	07/10/19 10:09	07/11/19 02:26	1
Residual Range Organics (RRO) (C25-C36)	ND		0.40	0.40	mg/L	—	07/10/19 10:09	07/11/19 02:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				07/10/19 10:09	07/11/19 02:26	1
<i>n</i> -Triacontane-d62	76		50 - 150				07/10/19 10:09	07/11/19 02:26	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 6010C - Metals (ICP)

Client Sample ID: MTA-B06(0-3)-20190626

Date Collected: 06/26/19 08:20

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-3

Matrix: Solid

Percent Solids: 93.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.4	2.4	mg/Kg	☼	07/02/19 11:41	07/03/19 10:43	1
Barium	64		0.41	0.41	mg/Kg	☼	07/02/19 11:41	07/03/19 10:43	1
Cadmium	ND		0.81	0.81	mg/Kg	☼	07/02/19 11:41	07/03/19 10:43	1
Chromium	57		1.1	1.1	mg/Kg	☼	07/02/19 11:41	07/03/19 10:43	1
Lead	130		1.2	1.2	mg/Kg	☼	07/02/19 11:41	07/03/19 10:43	1
Selenium	ND		4.1	4.1	mg/Kg	☼	07/02/19 11:41	07/03/19 10:43	1
Silver	ND		2.0	2.0	mg/Kg	☼	07/02/19 11:41	07/03/19 10:43	1

Client Sample ID: MTA-B02(0-3)-20190626

Date Collected: 06/26/19 08:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-4

Matrix: Solid

Percent Solids: 83.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.8	2.8	mg/Kg	☼	07/02/19 11:41	07/03/19 10:46	1
Barium	56		0.47	0.47	mg/Kg	☼	07/02/19 11:41	07/03/19 10:46	1
Cadmium	0.95		0.94	0.94	mg/Kg	☼	07/02/19 11:41	07/03/19 10:46	1
Chromium	77		1.2	1.2	mg/Kg	☼	07/02/19 11:41	07/03/19 10:46	1
Lead	7.7		1.4	1.4	mg/Kg	☼	07/02/19 11:41	07/03/19 10:46	1
Selenium	ND		4.7	4.7	mg/Kg	☼	07/02/19 11:41	07/03/19 10:46	1
Silver	ND		2.4	2.4	mg/Kg	☼	07/02/19 11:41	07/03/19 10:46	1

Client Sample ID: MTA-B02(5.5-6.5)-20190626

Date Collected: 06/26/19 09:30

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-5

Matrix: Solid

Percent Solids: 94.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.3	2.3	mg/Kg	☼	07/02/19 11:41	07/03/19 10:50	1
Barium	33		0.38	0.38	mg/Kg	☼	07/02/19 11:41	07/03/19 10:50	1
Cadmium	ND		0.77	0.77	mg/Kg	☼	07/02/19 11:41	07/03/19 10:50	1
Chromium	63		1.0	1.0	mg/Kg	☼	07/02/19 11:41	07/03/19 10:50	1
Lead	9.3		1.2	1.2	mg/Kg	☼	07/02/19 11:41	07/03/19 10:50	1
Selenium	ND		3.8	3.8	mg/Kg	☼	07/02/19 11:41	07/03/19 10:50	1
Silver	ND		1.9	1.9	mg/Kg	☼	07/02/19 11:41	07/03/19 10:50	1

Client Sample ID: MTA-B07(6.5-7.5)-20190626

Date Collected: 06/26/19 10:55

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-8

Matrix: Solid

Percent Solids: 92.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.5	2.5	mg/Kg	☼	07/02/19 11:41	07/03/19 10:13	1
Barium	33		0.41	0.41	mg/Kg	☼	07/02/19 11:41	07/03/19 10:13	1
Cadmium	ND		0.82	0.82	mg/Kg	☼	07/02/19 11:41	07/03/19 10:13	1
Chromium	54	F1 F2	1.1	1.1	mg/Kg	☼	07/02/19 11:41	07/03/19 10:13	1
Lead	ND		1.2	1.2	mg/Kg	☼	07/02/19 11:41	07/03/19 10:13	1
Selenium	ND		4.1	4.1	mg/Kg	☼	07/02/19 11:41	07/03/19 10:13	1
Silver	ND		2.1	2.1	mg/Kg	☼	07/02/19 11:41	07/03/19 10:13	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 6020A - Metals (ICP/MS) - Dissolved

Client Sample ID: MTA-B02-14-20190626

Date Collected: 06/26/19 09:40

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-6

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050	0.0050	mg/L		07/08/19 15:52	07/10/19 17:18	5
Barium	ND		0.0060	0.0060	mg/L		07/08/19 15:52	07/10/19 17:18	5
Cadmium	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 17:18	5
Chromium	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 17:18	5
Lead	ND		0.0040	0.0040	mg/L		07/08/19 15:52	07/10/19 17:18	5
Selenium	ND		0.040	0.040	mg/L		07/08/19 15:52	07/10/19 17:18	5
Silver	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 17:18	5

Client Sample ID: MTA-B99-20190626

Date Collected: 06/26/19 09:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-7

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050	0.0050	mg/L		07/08/19 15:52	07/10/19 17:22	5
Barium	ND		0.0060	0.0060	mg/L		07/08/19 15:52	07/10/19 17:22	5
Cadmium	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 17:22	5
Chromium	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 17:22	5
Lead	ND		0.0040	0.0040	mg/L		07/08/19 15:52	07/10/19 17:22	5
Selenium	ND		0.040	0.040	mg/L		07/08/19 15:52	07/10/19 17:22	5
Silver	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 17:22	5

Client Sample ID: MTA-B07-14-20190626

Date Collected: 06/26/19 11:33

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-9

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050	0.0050	mg/L		07/08/19 15:52	07/10/19 17:35	5
Barium	ND		0.0060	0.0060	mg/L		07/08/19 15:52	07/10/19 17:35	5
Cadmium	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 17:35	5
Chromium	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 17:35	5
Lead	ND		0.0040	0.0040	mg/L		07/08/19 15:52	07/10/19 17:35	5
Selenium	ND		0.040	0.040	mg/L		07/08/19 15:52	07/10/19 17:35	5
Silver	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 17:35	5

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 7470A - Mercury (CVAA) - Dissolved

Client Sample ID: MTA-B02-14-20190626

Date Collected: 06/26/19 09:40

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-6

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00030	0.00030	mg/L	—	07/08/19 08:39	07/08/19 17:16	1

Client Sample ID: MTA-B99-20190626

Date Collected: 06/26/19 09:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-7

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00030	0.00030	mg/L	—	07/08/19 08:39	07/08/19 17:21	1

Client Sample ID: MTA-B07-14-20190626

Date Collected: 06/26/19 11:33

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-9

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00030	0.00030	mg/L	—	07/08/19 08:39	07/08/19 17:18	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: MTA-B06(0-3)-20190626

Date Collected: 06/26/19 08:20

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-3

Matrix: Solid

Percent Solids: 93.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044		0.025	0.025	mg/Kg	☼	07/08/19 09:59	07/08/19 15:12	1

Client Sample ID: MTA-B02(0-3)-20190626

Date Collected: 06/26/19 08:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-4

Matrix: Solid

Percent Solids: 83.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037		0.030	0.030	mg/Kg	☼	07/08/19 09:59	07/08/19 15:19	1

Client Sample ID: MTA-B02(5.5-6.5)-20190626

Date Collected: 06/26/19 09:30

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-5

Matrix: Solid

Percent Solids: 94.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.026	0.026	mg/Kg	☼	07/08/19 09:59	07/08/19 15:21	1

Client Sample ID: MTA-B07(6.5-7.5)-20190626

Date Collected: 06/26/19 10:55

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-8

Matrix: Solid

Percent Solids: 92.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.025	0.025	mg/Kg	☼	07/08/19 09:59	07/08/19 15:23	1

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-304262/7

Matrix: Water

Analysis Batch: 304262

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.20	0.20	ug/L			06/27/19 23:48	1
Benzene	ND		0.20	0.20	ug/L			06/27/19 23:48	1
Ethylbenzene	ND		0.20	0.20	ug/L			06/27/19 23:48	1
Methyl tert-butyl ether	ND		0.30	0.30	ug/L			06/27/19 23:48	1
m-Xylene & p-Xylene	ND		0.50	0.50	ug/L			06/27/19 23:48	1
o-Xylene	ND		0.50	0.50	ug/L			06/27/19 23:48	1
Toluene	ND		0.20	0.20	ug/L			06/27/19 23:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		80 - 120		06/27/19 23:48	1
4-Bromofluorobenzene (Surr)	100		80 - 120		06/27/19 23:48	1
Dibromofluoromethane (Surr)	105		80 - 120		06/27/19 23:48	1
Toluene-d8 (Surr)	103		80 - 120		06/27/19 23:48	1
Trifluorotoluene (Surr)	100		80 - 120		06/27/19 23:48	1

Lab Sample ID: LCS 580-304262/4

Matrix: Water

Analysis Batch: 304262

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	5.00	4.82		ug/L		96	74 - 130
Benzene	5.00	4.80		ug/L		96	73 - 133
Ethylbenzene	5.00	4.62		ug/L		92	80 - 130
Methyl tert-butyl ether	5.00	5.06		ug/L		101	60 - 150
m-Xylene & p-Xylene	5.00	4.66		ug/L		93	78 - 130
o-Xylene	5.00	4.69		ug/L		94	80 - 139
Toluene	5.00	4.74		ug/L		95	80 - 126

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	101		80 - 120
Trifluorotoluene (Surr)	102		80 - 120

Lab Sample ID: LCSD 580-304262/5

Matrix: Water

Analysis Batch: 304262

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane	5.00	4.97		ug/L		99	74 - 130	3	15
Benzene	5.00	4.95		ug/L		99	73 - 133	3	20
Ethylbenzene	5.00	4.68		ug/L		94	80 - 130	1	20
Methyl tert-butyl ether	5.00	5.48		ug/L		110	60 - 150	8	25
m-Xylene & p-Xylene	5.00	4.74		ug/L		95	78 - 130	2	20
o-Xylene	5.00	4.73		ug/L		95	80 - 139	1	20
Toluene	5.00	4.80		ug/L		96	80 - 126	1	20

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-304262/5

Matrix: Water

Analysis Batch: 304262

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	99		80 - 120
Trifluorotoluene (Surr)	97		80 - 120

Lab Sample ID: MB 580-304537/7

Matrix: Water

Analysis Batch: 304537

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dichloroethane	ND		0.20	0.20	ug/L			07/01/19 17:16	1
Benzene	ND		0.20	0.20	ug/L			07/01/19 17:16	1
Ethylbenzene	ND		0.20	0.20	ug/L			07/01/19 17:16	1
Methyl tert-butyl ether	ND		0.30	0.30	ug/L			07/01/19 17:16	1
m-Xylene & p-Xylene	ND		0.50	0.50	ug/L			07/01/19 17:16	1
o-Xylene	ND		0.50	0.50	ug/L			07/01/19 17:16	1
Toluene	ND		0.20	0.20	ug/L			07/01/19 17:16	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1,2-Dichloroethane-d4 (Surr)	119		80 - 120		07/01/19 17:16	1			
4-Bromofluorobenzene (Surr)	101		80 - 120		07/01/19 17:16	1			
Dibromofluoromethane (Surr)	105		80 - 120		07/01/19 17:16	1			
Toluene-d8 (Surr)	100		80 - 120		07/01/19 17:16	1			
Trifluorotoluene (Surr)	99		80 - 120		07/01/19 17:16	1			

Lab Sample ID: LCS 580-304537/4

Matrix: Water

Analysis Batch: 304537

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
1,2-Dichloroethane	5.00	5.11		ug/L		102	74 - 130
Benzene	5.00	4.80		ug/L		96	73 - 133
Ethylbenzene	5.00	4.48		ug/L		90	80 - 130
Methyl tert-butyl ether	5.00	5.43		ug/L		109	60 - 150
m-Xylene & p-Xylene	5.00	4.50		ug/L		90	78 - 130
o-Xylene	5.00	4.61		ug/L		92	80 - 139
Toluene	5.00	4.57		ug/L		91	80 - 126

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		80 - 120
4-Bromofluorobenzene (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
Toluene-d8 (Surr)	97		80 - 120
Trifluorotoluene (Surr)	91		80 - 120

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-304537/5

Matrix: Water

Analysis Batch: 304537

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane	5.00	5.05		ug/L		101	74 - 130	1	15
Benzene	5.00	4.84		ug/L		97	73 - 133	1	20
Ethylbenzene	5.00	4.45		ug/L		89	80 - 130	1	20
Methyl tert-butyl ether	5.00	5.28		ug/L		106	60 - 150	3	25
m-Xylene & p-Xylene	5.00	4.50		ug/L		90	78 - 130	0	20
o-Xylene	5.00	4.55		ug/L		91	80 - 139	1	20
Toluene	5.00	4.53		ug/L		91	80 - 126	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	103		80 - 120
Toluene-d8 (Surr)	96		80 - 120
Trifluorotoluene (Surr)	93		80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-304325/1-A

Matrix: Solid

Analysis Batch: 304327

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 304325

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0	1.0	ug/Kg		06/28/19 12:35	06/28/19 14:29	1
Benzene	ND		2.0	2.0	ug/Kg		06/28/19 12:35	06/28/19 14:29	1
Ethylbenzene	ND		2.0	2.0	ug/Kg		06/28/19 12:35	06/28/19 14:29	1
m-Xylene & p-Xylene	ND		10	10	ug/Kg		06/28/19 12:35	06/28/19 14:29	1
o-Xylene	ND		5.0	5.0	ug/Kg		06/28/19 12:35	06/28/19 14:29	1
Toluene	ND		10	10	ug/Kg		06/28/19 12:35	06/28/19 14:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 121	06/28/19 12:35	06/28/19 14:29	1
4-Bromofluorobenzene (Surr)	97		80 - 120	06/28/19 12:35	06/28/19 14:29	1
Dibromofluoromethane (Surr)	92		80 - 120	06/28/19 12:35	06/28/19 14:29	1
Toluene-d8 (Surr)	107		80 - 120	06/28/19 12:35	06/28/19 14:29	1
Trifluorotoluene (Surr)	112		80 - 120	06/28/19 12:35	06/28/19 14:29	1

Lab Sample ID: LCS 580-304325/2-A

Matrix: Solid

Analysis Batch: 304327

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 304325

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	20.0	17.6		ug/Kg		88	68 - 132
Benzene	20.0	18.2		ug/Kg		91	72 - 135
Ethylbenzene	20.0	19.1		ug/Kg		96	80 - 135
m-Xylene & p-Xylene	20.0	18.5		ug/Kg		93	80 - 132
o-Xylene	20.0	18.3		ug/Kg		91	80 - 125
Toluene	20.0	18.1		ug/Kg		91	75 - 137

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-304325/2-A

Matrix: Solid

Analysis Batch: 304327

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 304325

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		80 - 121
4-Bromofluorobenzene (Surr)	93		80 - 120
Dibromofluoromethane (Surr)	103		80 - 120
Toluene-d8 (Surr)	101		80 - 120
Trifluorotoluene (Surr)	106		80 - 120

Lab Sample ID: LCSD 580-304325/3-A

Matrix: Solid

Analysis Batch: 304327

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 304325

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane	20.0	15.2		ug/Kg		76	68 - 132	15	17
Benzene	20.0	16.3		ug/Kg		82	72 - 135	11	15
Ethylbenzene	20.0	17.6		ug/Kg		88	80 - 135	9	16
m-Xylene & p-Xylene	20.0	16.9		ug/Kg		85	80 - 132	9	20
o-Xylene	20.0	16.3		ug/Kg		81	80 - 125	12	14
Toluene	20.0	16.6		ug/Kg		83	75 - 137	9	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		80 - 121
4-Bromofluorobenzene (Surr)	89		80 - 120
Dibromofluoromethane (Surr)	96		80 - 120
Toluene-d8 (Surr)	104		80 - 120
Trifluorotoluene (Surr)	107		80 - 120

Lab Sample ID: MB 580-305295/1-A

Matrix: Solid

Analysis Batch: 305302

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 305295

	MB	MB							
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0	1.0	ug/Kg		07/10/19 16:40	07/10/19 19:33	1
Benzene	ND		2.0	2.0	ug/Kg		07/10/19 16:40	07/10/19 19:33	1
Ethylbenzene	ND		2.0	2.0	ug/Kg		07/10/19 16:40	07/10/19 19:33	1
Ethylene Dibromide	ND		1.0	1.0	ug/Kg		07/10/19 16:40	07/10/19 19:33	1
Methyl tert-butyl ether	ND		2.0	2.0	ug/Kg		07/10/19 16:40	07/10/19 19:33	1
m-Xylene & p-Xylene	ND		10	10	ug/Kg		07/10/19 16:40	07/10/19 19:33	1
o-Xylene	ND		5.0	5.0	ug/Kg		07/10/19 16:40	07/10/19 19:33	1
Toluene	ND		10	10	ug/Kg		07/10/19 16:40	07/10/19 19:33	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1,2-Dichloroethane-d4 (Surr)	114		80 - 121	07/10/19 16:40	07/10/19 19:33	1			
4-Bromofluorobenzene (Surr)	100		80 - 120	07/10/19 16:40	07/10/19 19:33	1			
Dibromofluoromethane (Surr)	108		80 - 120	07/10/19 16:40	07/10/19 19:33	1			
Toluene-d8 (Surr)	103		80 - 120	07/10/19 16:40	07/10/19 19:33	1			
Trifluorotoluene (Surr)	103		80 - 120	07/10/19 16:40	07/10/19 19:33	1			

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-305295/2-A

Matrix: Solid

Analysis Batch: 305302

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 305295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	20.0	23.2		ug/Kg		116	68 - 132
Benzene	20.0	22.0		ug/Kg		110	72 - 135
Ethylbenzene	20.0	20.8		ug/Kg		104	80 - 135
Ethylene Dibromide	20.0	20.7		ug/Kg		103	77 - 123
Methyl tert-butyl ether	20.0	22.4		ug/Kg		112	68 - 132
m-Xylene & p-Xylene	20.0	20.5		ug/Kg		103	80 - 132
o-Xylene	20.0	20.8		ug/Kg		104	80 - 125
Toluene	20.0	19.8		ug/Kg		99	75 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		80 - 121
4-Bromofluorobenzene (Surr)	94		80 - 120
Dibromofluoromethane (Surr)	105		80 - 120
Toluene-d8 (Surr)	95		80 - 120
Trifluorotoluene (Surr)	100		80 - 120

Lab Sample ID: LCSD 580-305295/3-A

Matrix: Solid

Analysis Batch: 305302

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 305295

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,2-Dichloroethane	20.0	20.6		ug/Kg		103	68 - 132	12	17
Benzene	20.0	19.4		ug/Kg		97	72 - 135	12	15
Ethylbenzene	20.0	18.7		ug/Kg		94	80 - 135	11	16
Ethylene Dibromide	20.0	18.7		ug/Kg		93	77 - 123	10	20
Methyl tert-butyl ether	20.0	18.5		ug/Kg		92	68 - 132	19	25
m-Xylene & p-Xylene	20.0	18.6		ug/Kg		93	80 - 132	10	20
o-Xylene	20.0	18.5		ug/Kg		92	80 - 125	12	14
Toluene	20.0	18.1		ug/Kg		90	75 - 137	9	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		80 - 121
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120
Toluene-d8 (Surr)	100		80 - 120
Trifluorotoluene (Surr)	103		80 - 120

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 590-22845/1-A

Matrix: Water

Analysis Batch: 22857

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22845

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.090	0.090	ug/L		07/02/19 10:14	07/02/19 22:24	1
Chrysene	ND		0.090	0.090	ug/L		07/02/19 10:14	07/02/19 22:24	1
Benzo[b]fluoranthene	ND		0.090	0.090	ug/L		07/02/19 10:14	07/02/19 22:24	1
Benzo[k]fluoranthene	ND		0.090	0.090	ug/L		07/02/19 10:14	07/02/19 22:24	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 590-22845/1-A

Matrix: Water

Analysis Batch: 22857

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22845

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.090	0.090	ug/L		07/02/19 10:14	07/02/19 22:24	1
Indeno[1,2,3-cd]pyrene	ND		0.090	0.090	ug/L		07/02/19 10:14	07/02/19 22:24	1
Dibenz(a,h)anthracene	ND		0.090	0.090	ug/L		07/02/19 10:14	07/02/19 22:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	114		51 - 121	07/02/19 10:14	07/02/19 22:24	1
Nitrobenzene-d5	102		36 - 126	07/02/19 10:14	07/02/19 22:24	1
2-Fluorobiphenyl (Surr)	88		44 - 120	07/02/19 10:14	07/02/19 22:24	1

Lab Sample ID: LCS 590-22845/2-A

Matrix: Water

Analysis Batch: 22857

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	1.60	1.33		ug/L		83	68 - 120
Chrysene	1.60	1.36		ug/L		85	69 - 120
Benzo[b]fluoranthene	1.60	1.23		ug/L		77	63 - 120
Benzo[k]fluoranthene	1.60	1.44		ug/L		90	67 - 120
Benzo[a]pyrene	1.60	1.31		ug/L		82	70 - 120
Indeno[1,2,3-cd]pyrene	1.60	1.28		ug/L		80	58 - 120
Dibenz(a,h)anthracene	1.60	1.24		ug/L		78	58 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl-d14	97		51 - 121
Nitrobenzene-d5	91		36 - 126
2-Fluorobiphenyl (Surr)	74		44 - 120

Lab Sample ID: LCSD 590-22845/3-A

Matrix: Water

Analysis Batch: 22857

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22845

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzo[a]anthracene	1.60	1.31		ug/L		82	68 - 120	2	30
Chrysene	1.60	1.33		ug/L		83	69 - 120	2	24
Benzo[b]fluoranthene	1.60	1.17		ug/L		73	63 - 120	5	30
Benzo[k]fluoranthene	1.60	1.40		ug/L		87	67 - 120	3	30
Benzo[a]pyrene	1.60	1.26		ug/L		79	70 - 120	4	30
Indeno[1,2,3-cd]pyrene	1.60	1.22		ug/L		76	58 - 120	5	30
Dibenz(a,h)anthracene	1.60	1.24		ug/L		77	58 - 120	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
p-Terphenyl-d14	88		51 - 121
Nitrobenzene-d5	83		36 - 126
2-Fluorobiphenyl (Surr)	68		44 - 120

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 590-22912/1-A

Matrix: Solid

Analysis Batch: 22917

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22912

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		10	10	ug/Kg		07/09/19 09:10	07/09/19 11:40	1
Chrysene	ND		10	10	ug/Kg		07/09/19 09:10	07/09/19 11:40	1
Benzo[b]fluoranthene	ND		10	10	ug/Kg		07/09/19 09:10	07/09/19 11:40	1
Benzo[k]fluoranthene	ND		10	10	ug/Kg		07/09/19 09:10	07/09/19 11:40	1
Benzo[a]pyrene	ND		10	10	ug/Kg		07/09/19 09:10	07/09/19 11:40	1
Indeno[1,2,3-cd]pyrene	ND		10	10	ug/Kg		07/09/19 09:10	07/09/19 11:40	1
Dibenz(a,h)anthracene	ND		10	10	ug/Kg		07/09/19 09:10	07/09/19 11:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	124		61 - 136	07/09/19 09:10	07/09/19 11:40	1
Nitrobenzene-d5	91		31 - 120	07/09/19 09:10	07/09/19 11:40	1
2-Fluorobiphenyl (Surr)	95		46 - 120	07/09/19 09:10	07/09/19 11:40	1

Lab Sample ID: LCS 590-22912/2-A

Matrix: Solid

Analysis Batch: 22917

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	267	293		ug/Kg		110	61 - 125
Chrysene	267	292		ug/Kg		109	57 - 127
Benzo[b]fluoranthene	267	266		ug/Kg		100	59 - 127
Benzo[k]fluoranthene	267	273		ug/Kg		102	63 - 127
Benzo[a]pyrene	267	261		ug/Kg		98	60 - 120
Indeno[1,2,3-cd]pyrene	267	270		ug/Kg		101	55 - 128
Dibenz(a,h)anthracene	267	272		ug/Kg		102	60 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl-d14	127		61 - 136
Nitrobenzene-d5	100		31 - 120
2-Fluorobiphenyl (Surr)	103		46 - 120

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-304451/12

Matrix: Water

Analysis Batch: 304451

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		0.25	0.25	mg/L			06/28/19 14:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		50 - 150		06/28/19 14:07	1
Trifluorotoluene (Surr)	115		50 - 150		06/28/19 14:07	1

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QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-304451/13

Matrix: Water

Analysis Batch: 304451

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics			1.00	0.905		mg/L	—	90	79 - 120		
C6-C12											
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	107		50 - 150								
Trifluorotoluene (Surr)	112		50 - 150								

Lab Sample ID: LCSD 580-304451/14

Matrix: Water

Analysis Batch: 304451

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

			Spike	LCSD	LCSD				%Rec.	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics C6-C12			1.00	0.879		mg/L	-	88	79 - 120	3	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	107		50 - 150								
Trifluorotoluene (Surr)	111		50 - 150								

Lab Sample ID: MB 580-304482/5

Matrix: Water

Analysis Batch: 304482

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		0.25	0.25	mg/L	-		07/01/19 10:04	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		50 - 150					07/01/19 10:04	1
Trifluorotoluene (Surr)	118		50 - 150					07/01/19 10:04	1

Lab Sample ID: LCS 580-304482/6

Matrix: Water

Analysis Batch: 304482

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

				Spike	LCS	LCS			
Analyte			Added	Result	Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics C6-C12			1.00	0.876		mg/L	—	88	79 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	103		50 - 150						
Trifluorotoluene (Surr)	115		50 - 150						

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QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCSD 580-304482/7

Matrix: Water

Analysis Batch: 304482

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics C6-C12	1.00	0.891		mg/L	-	89	79 - 120	2	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	104		50 - 150						
Trifluorotoluene (Surr)	110		50 - 150						

Lab Sample ID: MB 580-304581/1-A

Matrix: Solid

Analysis Batch: 304584

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 304581

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics C6-C12	ND		5.0	5.0	mg/Kg	-	07/02/19 08:50	07/02/19 09:59	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	100		50 - 150	07/02/19 08:50	07/02/19 09:59	1			

Lab Sample ID: LCS 580-304581/2-A

Matrix: Solid

Analysis Batch: 304584

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 304581

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics C6-C12	40.0	35.6		mg/Kg	-	89	80 - 120		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	108		50 - 150						

Lab Sample ID: LCSD 580-304581/3-A

Matrix: Solid

Analysis Batch: 304584

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 304581

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics C6-C12	40.0	35.9		mg/Kg	-	90	80 - 120	1	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	106		50 - 150						

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 580-305135/1-A

Matrix: Water

Analysis Batch: 305285

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 305135

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.010	0.010	ug/L	-	07/09/19 14:57	07/10/19 17:47	1

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QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 580-305135/1-A

Matrix: Water

Analysis Batch: 305285

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 305135

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane	86		60 - 140	07/09/19 14:57	07/10/19 17:47	1

Lab Sample ID: LCS 580-305135/2-A

Matrix: Water

Analysis Batch: 305285

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 305135

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Ethylene Dibromide	0.0587	0.0627		ug/L		107	60 - 140
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dibromopropane	82		60 - 140				

Lab Sample ID: LCSD 580-305135/3-A

Matrix: Water

Analysis Batch: 305285

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 305135

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Ethylene Dibromide	0.0578	0.0561		ug/L		97	60 - 140	11	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1,2-Dibromopropane	87		60 - 140						

Lab Sample ID: LLCS 580-305135/28-A

Matrix: Water

Analysis Batch: 305285

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 305135

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	Limits
Ethylene Dibromide	0.0117	ND		ug/L		85	60 - 140
Surrogate	LLCS %Recovery	LLCS Qualifier	Limits				
1,2-Dibromopropane	110		60 - 140				

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 590-22942/1-A

Matrix: Solid

Analysis Batch: 22957

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22942

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10	10	ug/Kg		07/10/19 09:18	07/10/19 15:13	1
PCB-1221	ND		10	10	ug/Kg		07/10/19 09:18	07/10/19 15:13	1
PCB-1232	ND		10	10	ug/Kg		07/10/19 09:18	07/10/19 15:13	1
PCB-1242	ND		10	10	ug/Kg		07/10/19 09:18	07/10/19 15:13	1
PCB-1248	ND		10	10	ug/Kg		07/10/19 09:18	07/10/19 15:13	1
PCB-1254	ND		10	10	ug/Kg		07/10/19 09:18	07/10/19 15:13	1
PCB-1260	ND		10	10	ug/Kg		07/10/19 09:18	07/10/19 15:13	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 590-22942/1-A

Matrix: Solid

Analysis Batch: 22957

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22942

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	93		31 - 142	07/10/19 09:18	07/10/19 15:13	1
DCB Decachlorobiphenyl (Surr)	103		20 - 150	07/10/19 09:18	07/10/19 15:13	1

Lab Sample ID: LCS 590-22942/2-A

Matrix: Solid

Analysis Batch: 22957

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	66.7	65.1		ug/Kg		98	63 - 127
PCB-1260	66.7	67.1		ug/Kg		101	63 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	92		31 - 142
DCB Decachlorobiphenyl (Surr)	90		20 - 150

Lab Sample ID: MB 590-22976/1-A

Matrix: Water

Analysis Batch: 22973

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22976

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 13:47	1
PCB-1221	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 13:47	1
PCB-1232	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 13:47	1
PCB-1242	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 13:47	1
PCB-1248	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 13:47	1
PCB-1254	ND		0.10	0.062	ug/L		07/11/19 10:34	07/11/19 13:47	1
PCB-1260	ND		0.10	0.043	ug/L		07/11/19 10:34	07/11/19 13:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	57		20 - 126	07/11/19 10:34	07/11/19 13:47	1
DCB Decachlorobiphenyl (Surr)	76		23 - 138	07/11/19 10:34	07/11/19 13:47	1

Lab Sample ID: LCS 590-22976/2-A

Matrix: Water

Analysis Batch: 22973

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22976

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1.60	1.30		ug/L		81	51 - 120
PCB-1260	1.60	1.17		ug/L		73	42 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	58		20 - 126
DCB Decachlorobiphenyl (Surr)	87		23 - 138

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCSD 590-22976/3-A

Matrix: Water

Analysis Batch: 22973

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22976

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	1.60	1.20		ug/L		75	51 - 120	8	20
PCB-1260	1.60	1.14		ug/L		71	42 - 120	2	28
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
Tetrachloro-m-xylene	49		20 - 126						
DCB Decachlorobiphenyl (Surr)	78		23 - 138						

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 590-22922/1-A

Matrix: Solid

Analysis Batch: 22915

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22922

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		10	10	mg/Kg		07/09/19 10:00	07/10/19 00:28	1
Residual Range Organics (RRO) (C25-C36)	ND		25	25	mg/Kg		07/09/19 10:00	07/10/19 00:28	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	85		50 - 150				07/09/19 10:00	07/10/19 00:28	1
n-Triacontane-d62	75		50 - 150				07/09/19 10:00	07/10/19 00:28	1

Lab Sample ID: LCS 590-22922/2-A

Matrix: Solid

Analysis Batch: 22915

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22922

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (DRO) (C10-C25)			66.7	60.2		mg/Kg	-	90	50 - 150		
Residual Range Organics (RRO) (C25-C36)			66.7	67.3		mg/Kg		101	50 - 150		
Surrogate	LCS %Recovery	LCS Qualifier	Limits								
o-Terphenyl	98		50 - 150								
n-Triacontane-d62	99		50 - 150								

Lab Sample ID: MB 590-22950/1-A

Matrix: Water

Analysis Batch: 22943

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22950

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		0.24	0.24	mg/L		07/10/19 10:09	07/11/19 00:47	1
Residual Range Organics (RRO) (C25-C36)	ND		0.40	0.40	mg/L		07/10/19 10:09	07/11/19 00:47	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	85		50 - 150				07/10/19 10:09	07/11/19 00:47	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: MB 590-22950/1-A

Matrix: Water

Analysis Batch: 22943

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22950

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Triacontane-d62	73		50 - 150	07/10/19 10:09	07/11/19 00:47	1

Lab Sample ID: LCS 590-22950/2-A

Matrix: Water

Analysis Batch: 22943

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22950

Analysis Date: 11/10/10									
Analyte			Spike	LCS	LCS	Unit	D	%Rec.	
			Added	Result	Qualifier			Limits	
Diesel Range Organics (DRO)			1.60	1.34		mg/L		84	50 - 150
(C10-C25)									
Residual Range Organics (RRO)			1.60	1.55		mg/L		97	50 - 150
(C25-C36)									
Surrogate	LCS	LCS							
	%Recovery	Qualifier	Limits						
o-Terphenyl	88		50 - 150						
n-Triacontane-d62	96		50 - 150						
Analysis Date: 11/10/10									

Lab Sample ID: LCSD 590-22950/3-A

Matrix: Water

Analysis Batch: 22943

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22950

Top Data: 11/20/10										
Analyte			Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD
			Added	Result	Qualifier			Limits	RPD	Limit
Diesel Range Organics (DRO)			1.60	1.26		mg/L		79	50 - 150	6
(C10-C25)										25
Residual Range Organics (RRO)			1.60	1.46		mg/L		91	50 - 150	6
(C25-C36)										25
Bottom Data: 11/20/10										
Surrogate	LCSD		Limits							
	%Recovery	Qualifier								
o-Terphenyl	90		50 - 150							
n-Triacontane-d62	92		50 - 150							

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 580-304620/22-A

Matrix: Solid

Analysis Batch: 304787

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 304620

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0	3.0	mg/Kg		07/02/19 11:41	07/03/19 10:04	1
Barium	ND		0.50	0.50	mg/Kg		07/02/19 11:41	07/03/19 10:04	1
Cadmium	ND		1.0	1.0	mg/Kg		07/02/19 11:41	07/03/19 10:04	1
Chromium	ND		1.3	1.3	mg/Kg		07/02/19 11:41	07/03/19 10:04	1
Lead	ND		1.5	1.5	mg/Kg		07/02/19 11:41	07/03/19 10:04	1
Selenium	ND		5.0	5.0	mg/Kg		07/02/19 11:41	07/03/19 10:04	1
Silver	ND		2.5	2.5	mg/Kg		07/02/19 11:41	07/03/19 10:04	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 580-304620/23-A

Matrix: Solid

Analysis Batch: 304787

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 304620

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	50.4		mg/Kg		101	80 - 120
Barium	50.0	51.9		mg/Kg		104	80 - 120
Cadmium	50.0	51.4		mg/Kg		103	80 - 120
Chromium	50.0	54.9		mg/Kg		110	80 - 120
Lead	50.0	50.7		mg/Kg		101	80 - 120
Selenium	50.0	51.0		mg/Kg		102	80 - 120
Silver	50.0	52.4		mg/Kg		105	80 - 120

Lab Sample ID: LCSD 580-304620/24-A

Matrix: Solid

Analysis Batch: 304787

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 304620

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	50.0	49.7		mg/Kg		99	80 - 120	1	20
Barium	50.0	50.6		mg/Kg		101	80 - 120	2	20
Cadmium	50.0	50.5		mg/Kg		101	80 - 120	2	20
Chromium	50.0	53.8		mg/Kg		108	80 - 120	2	20
Lead	50.0	49.9		mg/Kg		100	80 - 120	2	20
Selenium	50.0	50.1		mg/Kg		100	80 - 120	2	20
Silver	50.0	50.6		mg/Kg		101	80 - 120	3	20

Lab Sample ID: 580-87205-8 MS

Matrix: Solid

Analysis Batch: 304787

Client Sample ID: MTA-B07(6.5-7.5)-20190626

Prep Type: Total/NA

Prep Batch: 304620

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		40.1	39.2		mg/Kg	✱	98	80 - 120
Barium	33		40.1	72.0		mg/Kg	✱	97	80 - 120
Cadmium	ND		40.1	42.3		mg/Kg	✱	105	80 - 120
Chromium	54	F1 F2	40.1	81.5	F1	mg/Kg	✱	69	80 - 120
Lead	ND		40.1	40.9		mg/Kg	✱	102	80 - 120
Selenium	ND		40.1	36.9		mg/Kg	✱	92	80 - 120
Silver	ND		40.1	45.6		mg/Kg	✱	114	80 - 120

Lab Sample ID: 580-87205-8 MSD

Matrix: Solid

Analysis Batch: 304787

Client Sample ID: MTA-B07(6.5-7.5)-20190626

Prep Type: Total/NA

Prep Batch: 304620

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		40.2	40.1		mg/Kg	✱	100	80 - 120	2	20
Barium	33		40.2	72.1		mg/Kg	✱	97	80 - 120	0	20
Cadmium	ND		40.2	42.4		mg/Kg	✱	105	80 - 120	0	20
Chromium	54	F1 F2	40.2	117	F1 F2	mg/Kg	✱	157	80 - 120	36	20
Lead	ND		40.2	41.0		mg/Kg	✱	102	80 - 120	0	20
Selenium	ND		40.2	37.6		mg/Kg	✱	93	80 - 120	2	20
Silver	ND		40.2	39.4		mg/Kg	✱	98	80 - 120	15	20

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 580-87205-8 DU

Matrix: Solid

Analysis Batch: 304787

Client Sample ID: MTA-B07(6.5-7.5)-20190626

Prep Type: Total/NA

Prep Batch: 304620

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	ND		ND		mg/Kg	✖	NC	20
Barium	33		30.7		mg/Kg	✖	8	20
Cadmium	ND		ND		mg/Kg	✖	NC	20
Chromium	54	F1 F2	44.1		mg/Kg	✖	20	20
Lead	ND		ND		mg/Kg	✖	NC	20
Selenium	ND		ND		mg/Kg	✖	NC	20
Silver	ND		ND		mg/Kg	✖	NC	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 580-305019/16-A

Matrix: Water

Analysis Batch: 305308

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 305019

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050	0.0050	mg/L		07/08/19 15:52	07/10/19 16:12	5
Barium	ND		0.0060	0.0060	mg/L		07/08/19 15:52	07/10/19 16:12	5
Cadmium	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 16:12	5
Chromium	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 16:12	5
Lead	ND		0.0040	0.0040	mg/L		07/08/19 15:52	07/10/19 16:12	5
Selenium	ND		0.040	0.040	mg/L		07/08/19 15:52	07/10/19 16:12	5
Silver	ND		0.0020	0.0020	mg/L		07/08/19 15:52	07/10/19 16:12	5

Lab Sample ID: LCS 580-305019/17-A

Matrix: Water

Analysis Batch: 305308

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 305019

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	1.01		mg/L		101	80 - 120
Barium	1.00	1.03		mg/L		103	80 - 120
Cadmium	1.00	1.02		mg/L		102	80 - 120
Chromium	1.00	0.989		mg/L		99	80 - 120
Lead	1.00	1.01		mg/L		101	80 - 120
Selenium	1.00	1.02		mg/L		102	80 - 120
Silver	1.00	0.991		mg/L		99	80 - 120

Lab Sample ID: LCSD 580-305019/18-A

Matrix: Water

Analysis Batch: 305308

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 305019

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	1.00	1.02		mg/L		102	80 - 120	1	20
Barium	1.00	1.04		mg/L		104	80 - 120	1	20
Cadmium	1.00	1.01		mg/L		101	80 - 120	1	20
Chromium	1.00	0.985		mg/L		99	80 - 120	0	20
Lead	1.00	0.995		mg/L		99	80 - 120	1	20
Selenium	1.00	1.03		mg/L		103	80 - 120	1	20
Silver	1.00	0.972		mg/L		97	80 - 120	2	20

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-304931/22-A
Matrix: Water
Analysis Batch: 305055

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 304931

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00030	0.00030	mg/L		07/08/19 08:39	07/08/19 16:22	1

Lab Sample ID: LCS 580-304931/23-A
Matrix: Water
Analysis Batch: 305055

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 304931

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00195		mg/L		97	80 - 120

Lab Sample ID: LCSD 580-304931/24-A
Matrix: Water
Analysis Batch: 305055

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 304931

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Mercury	0.00200	0.00189		mg/L		94	80 - 120	3	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 580-304948/22-A
Matrix: Solid
Analysis Batch: 305018

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 304948

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.030	0.030	mg/Kg		07/08/19 09:59	07/08/19 14:23	1

Lab Sample ID: LCS 580-304948/23-A
Matrix: Solid
Analysis Batch: 305018

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 304948

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.163		mg/Kg		98	80 - 120

Lab Sample ID: LCSD 580-304948/24-A
Matrix: Solid
Analysis Batch: 305018

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 304948

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Mercury	0.167	0.148		mg/Kg		89	80 - 120	10	20

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Client Sample ID: TripBlank1-20190626

Lab Sample ID: 580-87205-1

Date Collected: 06/26/19 00:01

Matrix: Solid

Date Received: 06/26/19 14:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304325	06/26/19 16:40	APR	TAL SEA
Total/NA	Analysis	8260C		1	304327	06/28/19 15:19	APR	TAL SEA
Total/NA	Prep	5035	RA		305295	06/26/19 16:40	APR	TAL SEA
Total/NA	Analysis	8260C	RA	1	305302	07/10/19 19:58	T1W	TAL SEA
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 13:08	DCV	TAL SEA

Client Sample ID: TripBlank2-20190626

Lab Sample ID: 580-87205-2

Date Collected: 06/26/19 00:01

Matrix: Water

Date Received: 06/26/19 14:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	304262	06/28/19 01:34	DSO	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304482	07/01/19 16:12	DCV	TAL SEA

Client Sample ID: MTA-B06(0-3)-20190626

Lab Sample ID: 580-87205-3

Date Collected: 06/26/19 08:20

Matrix: Solid

Date Received: 06/26/19 14:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	304902	07/06/19 14:40	FCG	TAL SEA

Client Sample ID: MTA-B06(0-3)-20190626

Lab Sample ID: 580-87205-3

Date Collected: 06/26/19 08:20

Matrix: Solid

Date Received: 06/26/19 14:14

Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304325	06/26/19 16:40	APR	TAL SEA
Total/NA	Analysis	8260C		1	304327	06/28/19 19:01	APR	TAL SEA
Total/NA	Prep	5035	RA		305295	06/26/19 16:40	APR	TAL SEA
Total/NA	Analysis	8260C	RA	1	305302	07/10/19 21:37	T1W	TAL SEA
Total/NA	Prep	3550C			22912	07/09/19 09:10	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22917	07/09/19 12:33	NMI	TAL SPK
Total/NA	Prep	3550C			22912	07/09/19 09:10	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		10	22949	07/10/19 11:30	NMI	TAL SPK
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 14:02	DCV	TAL SEA
Total/NA	Prep	3550C			22942	07/10/19 09:18	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22957	07/10/19 20:00	NMI	TAL SPK
Total/NA	Prep	3550C			22922	07/09/19 10:00	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22915	07/10/19 05:26	NMI	TAL SPK
Total/NA	Prep	3050B			304620	07/02/19 11:41	JCP	TAL SEA
Total/NA	Analysis	6010C		1	304787	07/03/19 10:43	SPP	TAL SEA
Total/NA	Prep	7471A			304948	07/08/19 09:59	T1H	TAL SEA
Total/NA	Analysis	7471A		1	305018	07/08/19 15:12	T1H	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Client Sample ID: MTA-B02(0-3)-20190626

Lab Sample ID: 580-87205-4

Date Collected: 06/26/19 08:45

Matrix: Solid

Date Received: 06/26/19 14:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	304902	07/06/19 14:40	FCG	TAL SEA

Client Sample ID: MTA-B02(0-3)-20190626

Lab Sample ID: 580-87205-4

Date Collected: 06/26/19 08:45

Matrix: Solid

Date Received: 06/26/19 14:14

Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304325	06/26/19 16:40	APR	TAL SEA
Total/NA	Analysis	8260C		1	304327	06/28/19 19:26	APR	TAL SEA
Total/NA	Prep	5035	RA		305295	06/26/19 16:40	APR	TAL SEA
Total/NA	Analysis	8260C	RA	1	305302	07/10/19 22:02	T1W	TAL SEA
Total/NA	Prep	3550C			22912	07/09/19 09:10	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22917	07/09/19 13:00	NMI	TAL SPK
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 14:56	DCV	TAL SEA
Total/NA	Prep	3550C			22942	07/10/19 09:18	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22957	07/10/19 20:21	NMI	TAL SPK
Total/NA	Prep	3550C			22922	07/09/19 10:00	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22915	07/10/19 05:46	NMI	TAL SPK
Total/NA	Prep	3050B			304620	07/02/19 11:41	JCP	TAL SEA
Total/NA	Analysis	6010C		1	304787	07/03/19 10:46	SPP	TAL SEA
Total/NA	Prep	7471A			304948	07/08/19 09:59	T1H	TAL SEA
Total/NA	Analysis	7471A		1	305018	07/08/19 15:19	T1H	TAL SEA

Client Sample ID: MTA-B02(5.5-6.5)-20190626

Lab Sample ID: 580-87205-5

Date Collected: 06/26/19 09:30

Matrix: Solid

Date Received: 06/26/19 14:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	304970	07/08/19 11:52	MLT	TAL SEA

Client Sample ID: MTA-B02(5.5-6.5)-20190626

Lab Sample ID: 580-87205-5

Date Collected: 06/26/19 09:30

Matrix: Solid

Date Received: 06/26/19 14:14

Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304325	06/26/19 16:40	APR	TAL SEA
Total/NA	Analysis	8260C		1	304327	06/28/19 19:50	APR	TAL SEA
Total/NA	Prep	5035	RA		305295	06/26/19 16:40	APR	TAL SEA
Total/NA	Analysis	8260C	RA	1	305302	07/10/19 22:26	T1W	TAL SEA
Total/NA	Prep	3550C			22912	07/09/19 09:10	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22917	07/09/19 13:26	NMI	TAL SPK
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 15:23	DCV	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Client Sample ID: MTA-B02(5.5-6.5)-20190626

Lab Sample ID: 580-87205-5

Date Collected: 06/26/19 09:30

Matrix: Solid

Date Received: 06/26/19 14:14

Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			22942	07/10/19 09:18	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22957	07/10/19 20:41	NMI	TAL SPK
Total/NA	Prep	3550C			22922	07/09/19 10:00	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22915	07/10/19 06:06	NMI	TAL SPK
Total/NA	Prep	3050B			304620	07/02/19 11:41	JCP	TAL SEA
Total/NA	Analysis	6010C		1	304787	07/03/19 10:50	SPP	TAL SEA
Total/NA	Prep	7471A			304948	07/08/19 09:59	T1H	TAL SEA
Total/NA	Analysis	7471A		1	305018	07/08/19 15:21	T1H	TAL SEA

Client Sample ID: MTA-B02-14-20190626

Lab Sample ID: 580-87205-6

Date Collected: 06/26/19 09:40

Matrix: Water

Date Received: 06/26/19 14:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	304262	06/28/19 07:20	DSO	TAL SEA
Total/NA	Prep	3510C			22845	07/02/19 10:14	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22857	07/03/19 00:10	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	304451	06/28/19 20:53	DCV	TAL SEA
Total/NA	Prep	8011			305135	07/09/19 14:57	K1H	TAL SEA
Total/NA	Analysis	8011		1	305285	07/10/19 19:42	TL1	TAL SEA
Total/NA	Prep	3510C			22976	07/11/19 10:34	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22973	07/11/19 15:04	NMI	TAL SPK
Total/NA	Prep	3510C			22950	07/10/19 10:09	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22943	07/11/19 01:47	NMI	TAL SPK
Dissolved	Prep	3005A			305019	07/08/19 15:52	ART	TAL SEA
Dissolved	Analysis	6020A		5	305308	07/10/19 17:18	RM	TAL SEA
Dissolved	Prep	7470A			304931	07/08/19 08:39	T1H	TAL SEA
Dissolved	Analysis	7470A		1	305055	07/08/19 17:16	T1H	TAL SEA

Client Sample ID: MTA-B99-20190626

Lab Sample ID: 580-87205-7

Date Collected: 06/26/19 09:45

Matrix: Water

Date Received: 06/26/19 14:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	304537	07/01/19 17:47	CJ	TAL SEA
Total/NA	Prep	3510C			22845	07/02/19 10:14	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22857	07/03/19 00:37	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	304451	06/28/19 21:20	DCV	TAL SEA
Total/NA	Prep	8011			305135	07/09/19 14:57	K1H	TAL SEA
Total/NA	Analysis	8011		1	305285	07/10/19 19:59	TL1	TAL SEA
Total/NA	Prep	3510C			22976	07/11/19 10:34	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22973	07/11/19 15:25	NMI	TAL SPK
Total/NA	Prep	3510C			22950	07/10/19 10:09	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22943	07/11/19 02:07	NMI	TAL SPK

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Client Sample ID: MTA-B99-20190626

Lab Sample ID: 580-87205-7

Date Collected: 06/26/19 09:45

Matrix: Water

Date Received: 06/26/19 14:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			305019	07/08/19 15:52	ART	TAL SEA
Dissolved	Analysis	6020A		5	305308	07/10/19 17:22	RM	TAL SEA
Dissolved	Prep	7470A			304931	07/08/19 08:39	T1H	TAL SEA
Dissolved	Analysis	7470A		1	305055	07/08/19 17:21	T1H	TAL SEA

Client Sample ID: MTA-B07(6.5-7.5)-20190626

Lab Sample ID: 580-87205-8

Date Collected: 06/26/19 10:55

Matrix: Solid

Date Received: 06/26/19 14:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	304902	07/06/19 14:40	FCG	TAL SEA

Client Sample ID: MTA-B07(6.5-7.5)-20190626

Lab Sample ID: 580-87205-8

Date Collected: 06/26/19 10:55

Matrix: Solid

Date Received: 06/26/19 14:14

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			304325	06/26/19 16:40	APR	TAL SEA
Total/NA	Analysis	8260C		1	304327	06/28/19 20:15	APR	TAL SEA
Total/NA	Prep	5035	RA		305295	06/26/19 16:40	APR	TAL SEA
Total/NA	Analysis	8260C	RA	1	305302	07/10/19 22:51	T1W	TAL SEA
Total/NA	Prep	3550C			22912	07/09/19 09:10	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22917	07/09/19 13:52	NMI	TAL SPK
Total/NA	Prep	5035			304581	07/02/19 08:50	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	304584	07/02/19 15:50	DCV	TAL SEA
Total/NA	Prep	3550C			22942	07/10/19 09:18	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22957	07/10/19 21:02	NMI	TAL SPK
Total/NA	Prep	3550C			22922	07/09/19 10:00	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22915	07/10/19 06:26	NMI	TAL SPK
Total/NA	Prep	3050B			304620	07/02/19 11:41	JCP	TAL SEA
Total/NA	Analysis	6010C		1	304787	07/03/19 10:13	SPP	TAL SEA
Total/NA	Prep	7471A			304948	07/08/19 09:59	T1H	TAL SEA
Total/NA	Analysis	7471A		1	305018	07/08/19 15:23	T1H	TAL SEA

Client Sample ID: MTA-B07-14-20190626

Lab Sample ID: 580-87205-9

Date Collected: 06/26/19 11:33

Matrix: Water

Date Received: 06/26/19 14:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	304537	07/01/19 18:13	CJ	TAL SEA
Total/NA	Prep	3510C			22845	07/02/19 10:14	NMI	TAL SPK
Total/NA	Analysis	8270D SIM		1	22857	07/03/19 01:03	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	304451	06/28/19 21:47	DCV	TAL SEA
Total/NA	Prep	8011			305135	07/09/19 14:57	K1H	TAL SEA
Total/NA	Analysis	8011		1	305285	07/10/19 23:03	TL1	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Client Sample ID: MTA-B07-14-20190626

Lab Sample ID: 580-87205-9

Date Collected: 06/26/19 11:33

Matrix: Water

Date Received: 06/26/19 14:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			22976	07/11/19 10:34	NMI	TAL SPK
Total/NA	Analysis	8082A		1	22973	07/11/19 15:45	NMI	TAL SPK
Total/NA	Prep	3510C			22950	07/10/19 10:09	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1	22943	07/11/19 02:26	NMI	TAL SPK
Dissolved	Prep	3005A			305019	07/08/19 15:52	ART	TAL SEA
Dissolved	Analysis	6020A		5	305308	07/10/19 17:35	RM	TAL SEA
Dissolved	Prep	7470A			304931	07/08/19 08:39	T1H	TAL SEA
Dissolved	Analysis	7470A		1	305055	07/08/19 17:18	T1H	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TAL SPK = Eurofins TestAmerica, Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-1

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-024	01-19-20
ANAB	Dept. of Defense ELAP		L2236	01-19-22
ANAB	DoD		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
California	State Program	9	2901	11-05-19
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-05-19
Oregon	NELAP		WA100007	11-05-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-14-00126	02-10-20
Washington	State Program	10	C553	02-17-20

Laboratory: Eurofins TestAmerica, Spokane

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-025	12-07-19
Oregon	NELAP	10	4137	12-07-19
Oregon	NELAP		4137	12-07-19
Washington	State Program	10	C569	01-06-20

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

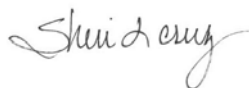
Laboratory Job ID: 580-87205-2

Client Project/Site: MTA Parking Lot, Shelton, WA
Revision: 1

For:

Landau & Associates, Inc.
2107 South C Street
Tacoma, Washington 98402

Attn: Sierra Mott



Authorized for release by:
8/1/2019 2:50:24 PM

Sheri Cruz, Project Manager I
(253)922-2310
sheri.cruz@testamericainc.com

LINKS

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results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-2

Job ID: 580-87205-2

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-87205-2

Comments

7/17/19 client emailed to activate sample 4 for Hexachromium analysis.

7/30/19 revised to fix linking of LCS/LCSD in prep batch : Prep batch 490-607903 and AB 608002

Receipt

The samples were received on 6/26/2019 2:14 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.9° C and 3.3° C.

General Chemistry

Method(s) 7196A: The matrix spike soluble / matrix spike insoluble (MSS/MSI) / post digestion spike (PDS) recovery for preparation batch 490-607903 and analytical batch 490-608002 was outside control limits due to sample matrix.

Method(s) 7196A: Reanalysis of the following sample was performed outside of the analytical holding time due to QC failure: MTA-B02(0-3)-20190626 (580-87205-4).

Method(s) 7196A: The matrix spike soluble (MSS) / post digestion spike (PDS) recoveries for preparation batch 490-608037 and analytical batch 490-608191 were outside control limits due to sample matrix. The associated laboratory control soluble sample (LCSS), laboratory control insoluble sample (LCSI), and matrix spike insoluble (MSI) recoveries met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-2

Qualifiers

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-87205-4	MTA-B02(0-3)-20190626	Solid	06/26/19 08:45	06/26/19 14:14	

1

2

3

4

5

6

7

8

9

10

11



Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☒ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080

Date 6/26/2019
 Page 1 of 1

Turnaround Time:
☒ Standard
☐ Accelerated

Project Name Mason Transit Authority Project No. 1817001.010.012
 Project Location/Event Shelton, WA /drilling
 Sampler's Name Katie Gaughite
 Project Contact S. Fees
 Send Results To D. Jorgensen, S. Fees

Testing Parameters

87205

Special Handling Requirements:

Shipment Method:

Stored on ice: ☒ Yes / ☐ No

Sample I.D.

Date

Time

Matrix

No. of Containers

1	Trip Blank 1 - 20190626	6/26/19	820	Soil	3
	Trip Blank 2 - 20190626			Aq	6
-3	MTA-B06(0-3)-20190626	6/26/19	820	Soil	5
	MTA-B02(0-3)-20190626		845	Soil	5
-5	MTA-B02(5.5-6.5)-20190626		930	Soil	5
	MTA-B02-14-20190626		940	Aq	15
-7	MTA-B09-20190626		945	Aq	15
	MTA-B07(6.5-7.5)-20190626		1055	Soil	5
-9	MTA-B07-14-20190626		1133	Aq	15
	MTA-IDW-20190626	6/26/19	1115	Soil	2

RCA 8 Metals 6010C/7410
 Hex. Chromium 7196A/1500A
 BTEX, EDC, MTBE 8200C/LL
 TPH-G NWT PH-GX
 TPH-D, TPH-O, NWT PH-DX
 PAH 8270
 PCBs 8082A
 EDB 8260C/LL
 EDB 8011

TLUP Metals *

Observations/Comments

Allow water samples to settle, collect aliquot from clear portion ☐

NWTPH-Dx - Acid wash cleanup ☐

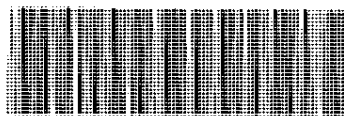
- Silica gel cleanup ☐

X Dissolved metal samples were field filtered
 0.45um filter

Other

* Hex. chromium soil samples are on hold pending results of RCA 8 analysis

* TLUP Metals on hold pending RCA 8 metals results



580-87205 Chain of Custody

Therm. ID: A2 Cor: 0.9C Unc: 1.2C
 Cooler Dsc: Ly Blue
 Packing: Bubble FedEx: _____
 Cust. Seal: Yes No X UPS: _____
 Blue Ice, Yes Dry, None Lab Cour: _____
 Other: clean

Therm. ID: A2 Cor: 3.3C Unc: 3.6C
 Cooler Dsc: Ly Blue
 Packing: bubble FedEx: _____
 Cust. Seal: Yes No X UPS: _____
 Blue Ice, Yes Dry, None Lab Cour: _____
 Other: clean

Relinquished by

Signature Katie Gaughite
 Printed Name Katie Gaughite
 Company Landau Associates
 Date 6/26/19 Time 14:15

Received by

Signature Terrence Harris
 Printed Name Terrence Harris
 Company T.A.
 Date 6/26/19 Time 14:14

Relinquished by

Signature _____
 Printed Name _____
 Company _____
 Date _____ Time _____

Received by

Signature _____
 Printed Name _____
 Company _____
 Date _____ Time _____



Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☒ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080

Date 6/26/2019
Page 1 of 1

Turnaround Time:
☒ Standard
☐ Accelerated

Project Name Mason Transit Authority Project No. 1817001.010.012
Project Location/Event Shelton, WA /drilling
Sampler's Name Katie Gauglitz
Project Contact S. Fees
Send Results To D Jorgensen, S. Fees

Testing Parameters

Special Handling Requirements:
Shipment Method:
Stored on ice: ☒ Yes / ☐ No

Observations/Comments

Allow water samples to settle, collect aliquot from clear portion ☐
NWTPH-Dx - Acid wash cleanup ☐
Silica gel cleanup ☐
☒ Dissolved metal samples were field filtered
0.45um filter
Other _____
* Hex. chromium soil samples
are on hold pending
results of RCRA 8 analysis
* TCLP Metals on hold
pending RCRA 8 metals
results

Sample I.D.	Date	Time	Matrix	No. of Containers	RCRA 8 Metals	Hex. Chromium	BTX	EDC	MTBE	TPH-G	TPH-D	TPH-O	CPAH	PCBS	EDB	EDS	TCLP Metals
Trip Blank 1 - 20190626	6/26/19		Soil	3													
Trip Blank 2 - 20190626			Aq	6													
MTA-B06(0-3)-20190626	6/26/19	820	Soil	5	X	X	X	X	X	X	X	X	X	X	X	X	
MTA-B02(0-3)-20190626		845	Soil	5	X	X	X	X	X	X	X	X	X	X	X	X	
MTA-B02(5.5-6.5)-20190626		930	Soil	5	X	X	X	X	X	X	X	X	X	X	X	X	
MTA-B02-14-20190626		940	Aq	15	X	X	X	X	X	X	X	X	X	X	X	X	
MTA-B09-20190626		945	Aq	15	X	X	X	X	X	X	X	X	X	X	X	X	
MTA-B07(6.5-7.5)-20190626		1055	Soil	5	X	X	X	X	X	X	X	X	X	X	X	X	
MTA-B07-14-20190626		1133	Aq	15	X	X	X	X	X	X	X	X	X	X	X	X	
MTA-IDW-20190626	6/26/19	1115	Soil	2													X

Relinquished by
Signature Katie M. Gauglitz
Printed Name Katie Gauglitz
Company Landau Associates
Date 6/26/19 Time 14:15

Received by
Signature [Signature]
Printed Name Terrence Harris
Company T.A.
Date 6/26/19 Time 14:14

Relinquished by
Signature _____
Printed Name _____
Company _____
Date _____ Time _____

Received by
Signature _____
Printed Name _____
Company _____
Date _____ Time _____

COOLER RECEIPT FORM



580-87205 Chain of Custody

Cooler Received/Opened On 07-26-2019 @ 09:20

Time Samples Removed From Cooler 1014 Time Samples Placed In Storage 1016 (2 Hour Window)

1. Tracking # 3426 (last 4 digits, FedEx) Courier: FedEx
IR Gun ID 14740456 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 2.4 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: 1 (left)

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (initial) GA

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA



Larger than this.

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # 6H

I certify that I unloaded the cooler and answered questions 7-14 (initial) GA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) GA

17. Were custody papers properly filled out (ink, signed, etc)? YES NO NA

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) GA

I certify that I attached a label with the unique LIMS number to each container (initial) GA

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO NA

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-87205-2

Login Number: 87205

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-2

General Chemistry

Client Sample ID: MTA-B02(0-3)-20190626

Date Collected: 06/26/19 08:45

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-4

Matrix: Solid

Percent Solids: 83.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hex	ND	F1	5.9	5.9	mg/Kg	☼	07/26/19 10:32	07/26/19 16:30	1
Chromium, hex	ND	H F1	6.0	6.0	mg/Kg	☼	07/28/19 15:57	07/30/19 13:30	1

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-2

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 490-607903/1-A

Matrix: Solid

Analysis Batch: 608002

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 607903

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hex	ND		5.0	5.0	mg/Kg		07/26/19 10:32	07/26/19 16:30	1

Lab Sample ID: LCS1 490-607903/3-A

Matrix: Solid

Analysis Batch: 608002

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 607903

Analyte	Spike Added	LCS1 Result	LCS1 Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hex	63.9	50.5	*	mg/Kg		79	80 - 120

Lab Sample ID: LCSS 490-607903/2-A

Matrix: Solid

Analysis Batch: 608002

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 607903

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hex	39.5	33.8		mg/Kg		85	80 - 120

Lab Sample ID: 580-87205-4 MSI

Matrix: Solid

Analysis Batch: 608002

Client Sample ID: MTA-B02(0-3)-20190626

Prep Type: Total/NA

Prep Batch: 607903

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hex	ND	F1	76.7	57.1	F1	mg/Kg	✖	74	75 - 125

Lab Sample ID: 580-87205-4 MSS

Matrix: Solid

Analysis Batch: 608002

Client Sample ID: MTA-B02(0-3)-20190626

Prep Type: Total/NA

Prep Batch: 607903

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hex	ND	F1	47.2	31.6	F1	mg/Kg	✖	67	75 - 125

Lab Sample ID: 580-87205-4 DU

Matrix: Solid

Analysis Batch: 608002

Client Sample ID: MTA-B02(0-3)-20190626

Prep Type: Total/NA

Prep Batch: 607903

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hex	ND	F1	ND		mg/Kg	✖	NC	20

Lab Sample ID: MB 490-608037/1-A

Matrix: Solid

Analysis Batch: 608191

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 608037

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hex	ND		5.0	5.0	mg/Kg		07/28/19 15:57	07/30/19 13:30	1

Lab Sample ID: LCS1 490-608037/3-A

Matrix: Solid

Analysis Batch: 608191

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 608037

Analyte	Spike Added	LCS1 Result	LCS1 Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hex	64.7	53.3		mg/Kg		82	80 - 120

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-2

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: LCSS 490-608037/2-A

Matrix: Solid

Analysis Batch: 608191

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 608037

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hex	39.6	31.7		mg/Kg		80	80 - 120

Lab Sample ID: 580-87205-4 MSI

Matrix: Solid

Analysis Batch: 608191

Client Sample ID: MTA-B02(0-3)-20190626

Prep Type: Total/NA

Prep Batch: 608037

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hex	ND	H F1	76.2	64.2		mg/Kg	✱	84	75 - 125

Lab Sample ID: 580-87205-4 MSS

Matrix: Solid

Analysis Batch: 608191

Client Sample ID: MTA-B02(0-3)-20190626

Prep Type: Total/NA

Prep Batch: 608037

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hex	ND	H F1	46.9	33.6	F1	mg/Kg	✱	71	75 - 125

Lab Sample ID: 580-87205-4 DU

Matrix: Solid

Analysis Batch: 608191

Client Sample ID: MTA-B02(0-3)-20190626

Prep Type: Total/NA

Prep Batch: 608037

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Chromium, hex	ND	H F1	ND		mg/Kg	✱	NC	20

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-2

Client Sample ID: MTA-B02(0-3)-20190626

Lab Sample ID: 580-87205-4

Date Collected: 06/26/19 08:45

Matrix: Solid

Date Received: 06/26/19 14:14

Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			607903	07/26/19 10:32	BMC	TAL NSH
Total/NA	Analysis	7196A		1	608002	07/26/19 16:30	BMC	TAL NSH
Total/NA	Prep	3060A			608037	07/28/19 15:57	MSP	TAL NSH
Total/NA	Analysis	7196A		1	608191	07/30/19 13:30	BMC	TAL NSH

Laboratory References:

TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-2

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-024	01-19-20
ANAB	Dept. of Defense ELAP		L2236	01-19-22
ANAB	DoD		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
California	State		2901	11-05-19
California	State Program	9	2901	11-05-19
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-05-19
Oregon	NELAP		WA100007	11-05-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-14-00126	02-10-20
USDA	US Federal Programs		P330-17-00039	02-10-20
Washington	State		C553	02-17-20
Washington	State Program	10	C553	02-17-20

Laboratory: Eurofins TestAmerica, Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	09-30-19
Arizona	State Program	9	AZ0473	05-05-20
Arkansas DEQ	State Program	6	88-0737	04-25-20
California	State Program	9	2938	06-30-20
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-20
Georgia	State Program	4	E87358(FL)/453.07(A2L A)	06-30-20
Illinois	NELAP	5	200010	12-09-19
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-20
Kentucky (WW)	State Program	4	90038	12-31-19
Louisiana	NELAP	6	30613	06-30-20
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-20
Massachusetts	State Program	1	M-TN032	06-30-20
Minnesota	NELAP	5	047-999-345	12-31-19
Mississippi	State Program	4	N/A	06-30-20
Nevada	State Program	9	TN00032	08-31-19 *
New Hampshire	NELAP	1	2963	10-09-19
New Jersey	NELAP	2	TN965	06-30-20
New York	NELAP	2	11342	03-31-20
North Carolina (WW/SW)	State Program	4	387	12-31-19
North Dakota	State Program	8	R-146	06-30-20
Oklahoma	State Program	6	9412	08-31-19 *
Oregon	NELAP	10	TN200001	04-26-20
Pennsylvania	NELAP	3	68-00585	07-31-19 *
Rhode Island	State Program	1	LAO00268	12-30-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Seattle

Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-2

Laboratory: Eurofins TestAmerica, Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
South Carolina	State Program	4	84009 (001)	02-28-20
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	04-10-20
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-20
Washington	State Program	10	C789	07-19-19 *
West Virginia DEP	State Program	3	219	02-28-20
Wisconsin	State Program	5	998020430	08-31-19 *
Wyoming (UST)	A2LA	8	453.07	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Seattle

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

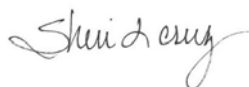
Laboratory Job ID: 580-87205-4

Client Project/Site: MTA Parking Lot, Shelton, WA

For:

Landau & Associates, Inc.
2107 South C Street
Tacoma, Washington 98402

Attn: Sierra Mott



Authorized for release by:
8/15/2019 4:13:32 PM

Sheri Cruz, Project Manager I
(253)922-2310
sheri.cruz@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-4

Job ID: 580-87205-4

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-87205-4

Comments

Client emailed updated COC on 8/7/19 to activate TCLP lead on sample 580-87205 sample 3 (MTA-B06(0-3)-20190626)

Receipt

The samples were received on 6/26/2019 2:14 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.9° C and 3.3° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-4

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-87205-3	MTA-B06(0-3)-20190626	Solid	06/26/19 08:20	06/26/19 14:14	

1

2

3

4

5

6

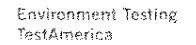
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[illegible]Ver: 01/16/2019 8/15/2019



Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☒ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080

Date 6/26/2019
Page 1 of 1

Turnaround Time:
☒ Standard
☐ Accelerated

Project Name Mason Transit Authority Project No. 1817001.010.012
Project Location/Event Shelton, WA /drilling
Sampler's Name Katie Gauglitz
Project Contact S. Fees
Send Results To D Jorgensen, S. Fees

Testing Parameters

Special Handling Requirements:
Shipment Method:
Stored on ice: ☒ Yes / ☐ No

Observations/Comments

Allow water samples to settle, collect aliquot from clear portion ☐
NWTPH-Dx - Acid wash cleanup ☐
Silica gel cleanup ☐
☒ Dissolved metal samples were field filtered
0.45um filter
Other _____
* Hex. chromium soil samples
are on hold pending
results of RCRA 8 analysis
* TCLP Metals on hold
pending RCRA 8 metals
results

Sample I.D.	Date	Time	Matrix	No. of Containers	RCRA 8 Metals	Hex. Chromium	BTX	EDC	MTBE	TPH-G	TPH-D	TPH-O	CPAH	PCBS	EDB	EDB	EDB	TCLP Metals
Trip Blank 1 - 20190626	6/26/19	820	Soil	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Trip Blank 2 - 20190626	6/26/19	845	Ag	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MTA-B06(0-3)-20190626	6/26/19	845	Soil	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MTA-B02(0-3)-20190626	6/26/19	930	Soil	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MTA-B02(5.5-6.5)-20190626	6/26/19	940	Soil	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MTA-B02-14-20190626	6/26/19	945	Ag	15	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MTA-B07(6.5-7.5)-20190626	6/26/19	1055	Ag	15	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MTA-B07-14-20190626	6/26/19	1133	Soil	15	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MTA-IDW-20190626	6/26/19	1115	Soil	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Relinquished by
Signature Katie M. Gauglitz
Printed Name Katie Gauglitz
Company Landau Associates
Date 6/26/19 Time 14:15

Received by
Signature T. Harris
Printed Name Terrence Harris
Company T.A.
Date 6/26/19 Time 14:14

Relinquished by
Signature _____
Printed Name _____
Company _____
Date _____ Time _____

Received by
Signature _____
Printed Name _____
Company _____
Date _____ Time _____

WHITE COPY - Laboratory

YELLOW COPY - Project File

PINK COPY - Client Representative

10/2018

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-87205-4

Login Number: 87205

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-4

Method: 6010C - Metals (ICP) - TCLP

Client Sample ID: MTA-B06(0-3)-20190626

Date Collected: 06/26/19 08:20

Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-3

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.033		0.030	0.0027	mg/L		08/13/19 14:54	08/14/19 18:28	1

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-4

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 580-308120/1-C

Matrix: Solid

Analysis Batch: 308421

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 308234

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.030	0.0027	mg/L		08/13/19 14:54	08/14/19 17:29	1

Lab Sample ID: LCS 580-308120/2-C

Matrix: Solid

Analysis Batch: 308421

Client Sample ID: Lab Control Sample

Prep Type: TCLP

Prep Batch: 308234

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	1.00	0.993		mg/L		99	80 - 120

Lab Sample ID: LCSD 580-308120/3-C

Matrix: Solid

Analysis Batch: 308421

Client Sample ID: Lab Control Sample Dup

Prep Type: TCLP

Prep Batch: 308234

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	1.00	1.01		mg/L		101	80 - 120	2	20

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-4

Client Sample ID: MTA-B06(0-3)-20190626

Lab Sample ID: 580-87205-3

Date Collected: 06/26/19 08:20

Matrix: Solid

Date Received: 06/26/19 14:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			308120	08/12/19 12:56	ART	TAL SEA
TCLP	Prep	3010A			308234	08/13/19 14:54	T1H	TAL SEA
TCLP	Analysis	6010C		1	308421	08/14/19 18:28	T1H	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Project/Site: MTA Parking Lot, Shelton, WA

Job ID: 580-87205-4

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State		17-024	01-19-22
Alaska (UST)	State Program	10	17-024	01-19-20
ANAB	Dept. of Defense ELAP		L2236	01-19-22
ANAB	DoD		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
California	State		2901	11-05-19
California	State Program	9	2901	11-05-19
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-05-19
Oregon	NELAP		WA100007	11-05-19
US Fish & Wildlife	Federal		LE058448-0	07-31-20
US Fish & Wildlife	US Federal Programs		058448	07-31-20
USDA	Federal		P330-14-00126	02-10-20
USDA	US Federal Programs		P330-17-00039	02-10-20
Washington	State		C553	02-17-20
Washington	State Program	10	C553	02-17-20

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

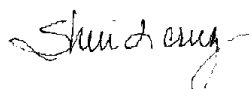
Laboratory Job ID: 580-93490-1

Client Project/Site: MTA T-CC Parking Lot

For:

Landau & Associates, Inc.
2107 South C Street
Tacoma, Washington 98402

Attn: Sierra Mott



Authorized for release by:
3/19/2020 12:54:54 PM

Sheri Cruz, Project Manager I
(253)922-2310
sheri.cruz@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-1

Job ID: 580-93490-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-93490-1

Comments

No additional comments.

Receipt

The samples were received on 3/16/2020 4:37 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6° C.

GC/MS Semi VOA

Method 8270D SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 580-324979 and analytical batch 580-325022 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F7	MS/MSD RPD exceeds control limits. Sample size differs by <10%

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-93490-1	MTA-B09(1-3)	Solid	03/16/20 13:10	03/16/20 16:37	
580-93490-2	MTA-B10(1-3)	Solid	03/16/20 13:25	03/16/20 16:37	
580-93490-3	MTA-B11(1-3)	Solid	03/16/20 13:40	03/16/20 16:37	
580-93490-4	MTA-B12(1-3)	Solid	03/16/20 15:03	03/16/20 16:37	
580-93490-5	MTA-SP-COMP	Solid	03/16/20 12:35	03/16/20 16:37	



Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907
☒ Tacoma (253) 926-2493
☐ Spokane (509) 327-9737
☐ Portland (503) 542-1080

Date 3/16/20
 Page 1 of 1

Turnaround Time:
 Standard 3-5 Day
 Accelerated 3-Day

Project Name MTA Project No. 1817001.010.011

Project Location/Event MTA T-CC Parking Lot

Sampler's Name SEF/KMG

Project Contact Sarah Fees

Send Results To djorgenson@landauinc.com

sfees@landauinc.com

Sample I.D. Date Time Matrix No. of Containers

Sample I.D.	Date	Time	Matrix	No. of Containers
-1 MTA-B09(1-3)	3/16/20	1310	Soil	1
MTA-B09(1-3)	3/16/20	1325	↓	1
-3 MTA-B11(1-3)	3/16/20	1340	↓	1
MTA-B12(1-3)	3/16/20	1303	↓	1
-5 MTA-SP-COMP	3/16/20	1235	↓	1
MTA-SP-A	3/16/20	1509	↓	1
-7 MTA-SP-B	3/16/20	1513	↓	1
MTA-SP-C	3/16/20	1518	↓	1
-9 MTA-SP-D	3/16/20	1523	↓	1
MTA-SP-E	3/16/20	1527	Soil	1

CPAH - 8270 SIA
Hold

Testing Parameters

93490

Special Handling Requirements:

Shipment Method:

Stored on ice: ☒ Yes / ☐ No

Observations/Comments

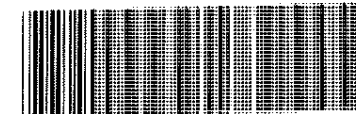
Allow water samples to settle, collect aliquot from clear portion ☐

NWTPH-DX - Acid wash cleanup ☐

- Silica gel cleanup ☐

Dissolved metal samples were field filtered

Other



580-93490 Chain of Custody

Therm. ID: R6 Cor: 1.6 ° Unc: 1.2 °

Cooler Desc: Sm Blue

Packing: buc

Cust. Seal: Yes ☒ No ☐

Blue Ice: Wet Dry, None

FedEx:

UPS:

Lab Cour:

Other: clicko

Relinquished by

Signature Katrin Ganglitz

Printed Name Katrin Ganglitz

Company Landau Associates

Date 3/16/20 Time 16:37

Received by

Signature Tom Blankinship

Printed Name Blankinship

Company TA-SEA

Date 3/16/20 Time 16:37

Relinquished by

Signature

Printed Name

Company

Date Time

Received by

Signature

Printed Name

Company

Date Time

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-93490-1

Login Number: 93490

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Client Sample ID: MTA-B09(1-3)

Date Collected: 03/16/20 13:10

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-1

Matrix: Solid

Percent Solids: 79.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	16		6.2	6.2	ug/Kg	☼	03/17/20 09:27	03/17/20 22:51	1
Chrysene	28		6.2	6.2	ug/Kg	☼	03/17/20 09:27	03/17/20 22:51	1
Benzo[a]pyrene	9.0		6.2	6.2	ug/Kg	☼	03/17/20 09:27	03/17/20 22:51	1
Indeno[1,2,3-cd]pyrene	27		6.2	6.2	ug/Kg	☼	03/17/20 09:27	03/17/20 22:51	1
Dibenz(a,h)anthracene	ND		6.2	6.2	ug/Kg	☼	03/17/20 09:27	03/17/20 22:51	1
Benzo[b]fluoranthene	43		6.2	6.2	ug/Kg	☼	03/17/20 09:27	03/17/20 22:51	1
Benzo[k]fluoranthene	9.4		6.2	6.2	ug/Kg	☼	03/17/20 09:27	03/17/20 22:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	98		57 - 120	03/17/20 09:27	03/17/20 22:51	1

Client Sample ID: MTA-B10(1-3)

Date Collected: 03/16/20 13:25

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-2

Matrix: Solid

Percent Solids: 79.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		6.1	6.1	ug/Kg	☼	03/17/20 09:27	03/17/20 23:17	1
Chrysene	ND		6.1	6.1	ug/Kg	☼	03/17/20 09:27	03/17/20 23:17	1
Benzo[a]pyrene	ND		6.1	6.1	ug/Kg	☼	03/17/20 09:27	03/17/20 23:17	1
Indeno[1,2,3-cd]pyrene	ND		6.1	6.1	ug/Kg	☼	03/17/20 09:27	03/17/20 23:17	1
Dibenz(a,h)anthracene	ND		6.1	6.1	ug/Kg	☼	03/17/20 09:27	03/17/20 23:17	1
Benzo[b]fluoranthene	ND		6.1	6.1	ug/Kg	☼	03/17/20 09:27	03/17/20 23:17	1
Benzo[k]fluoranthene	ND		6.1	6.1	ug/Kg	☼	03/17/20 09:27	03/17/20 23:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	99		57 - 120	03/17/20 09:27	03/17/20 23:17	1

Client Sample ID: MTA-B11(1-3)

Date Collected: 03/16/20 13:40

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-3

Matrix: Solid

Percent Solids: 80.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	7.9		5.9	5.9	ug/Kg	☼	03/17/20 09:27	03/17/20 23:43	1
Chrysene	13		5.9	5.9	ug/Kg	☼	03/17/20 09:27	03/17/20 23:43	1
Benzo[a]pyrene	ND		5.9	5.9	ug/Kg	☼	03/17/20 09:27	03/17/20 23:43	1
Indeno[1,2,3-cd]pyrene	11		5.9	5.9	ug/Kg	☼	03/17/20 09:27	03/17/20 23:43	1
Dibenz(a,h)anthracene	ND		5.9	5.9	ug/Kg	☼	03/17/20 09:27	03/17/20 23:43	1
Benzo[b]fluoranthene	17		5.9	5.9	ug/Kg	☼	03/17/20 09:27	03/17/20 23:43	1
Benzo[k]fluoranthene	ND		5.9	5.9	ug/Kg	☼	03/17/20 09:27	03/17/20 23:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	103		57 - 120	03/17/20 09:27	03/17/20 23:43	1

Client Sample ID: MTA-B12(1-3)

Date Collected: 03/16/20 15:03

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-4

Matrix: Solid

Percent Solids: 79.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	52		5.9	5.9	ug/Kg	☼	03/17/20 09:27	03/18/20 00:09	1
Chrysene	63		5.9	5.9	ug/Kg	☼	03/17/20 09:27	03/18/20 00:09	1
Benzo[a]pyrene	44		5.9	5.9	ug/Kg	☼	03/17/20 09:27	03/18/20 00:09	1
Indeno[1,2,3-cd]pyrene	59		5.9	5.9	ug/Kg	☼	03/17/20 09:27	03/18/20 00:09	1
Dibenz(a,h)anthracene	11		5.9	5.9	ug/Kg	☼	03/17/20 09:27	03/18/20 00:09	1
Benzo[b]fluoranthene	120		5.9	5.9	ug/Kg	☼	03/17/20 09:27	03/18/20 00:09	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Client Sample ID: MTA-B12(1-3)

Date Collected: 03/16/20 15:03

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-4

Matrix: Solid

Percent Solids: 79.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	26		5.9	5.9	ug/Kg	☼	03/17/20 09:27	03/18/20 00:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	105		57 - 120	03/17/20 09:27	03/18/20 00:09	1

Client Sample ID: MTA-SP-COMP

Date Collected: 03/16/20 12:35

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-5

Matrix: Solid

Percent Solids: 88.7

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	15	F2 F1	5.3	5.3	ug/Kg	☼	03/17/20 09:27	03/18/20 00:35	1
Chrysene	37	F2 F1	5.3	5.3	ug/Kg	☼	03/17/20 09:27	03/18/20 00:35	1
Benzo[a]pyrene	14	F2 F1	5.3	5.3	ug/Kg	☼	03/17/20 09:27	03/18/20 00:35	1
Indeno[1,2,3-cd]pyrene	20	F2 F1	5.3	5.3	ug/Kg	☼	03/17/20 09:27	03/18/20 00:35	1
Dibenz(a,h)anthracene	ND	F2 F1	5.3	5.3	ug/Kg	☼	03/17/20 09:27	03/18/20 00:35	1
Benzo[b]fluoranthene	47	F2 F1	5.3	5.3	ug/Kg	☼	03/17/20 09:27	03/18/20 00:35	1
Benzo[k]fluoranthene	9.2	F2 F1	5.3	5.3	ug/Kg	☼	03/17/20 09:27	03/18/20 00:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	88		57 - 120	03/17/20 09:27	03/18/20 00:35	1

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 580-324979/1-A

Matrix: Solid

Analysis Batch: 325022

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 324979

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		5.0	5.0	ug/Kg		03/17/20 09:27	03/17/20 18:54	1
Chrysene	ND		5.0	5.0	ug/Kg		03/17/20 09:27	03/17/20 18:54	1
Benzo[a]pyrene	ND		5.0	5.0	ug/Kg		03/17/20 09:27	03/17/20 18:54	1
Indeno[1,2,3-cd]pyrene	ND		5.0	5.0	ug/Kg		03/17/20 09:27	03/17/20 18:54	1
Dibenz(a,h)anthracene	ND		5.0	5.0	ug/Kg		03/17/20 09:27	03/17/20 18:54	1
Benzo[b]fluoranthene	ND		5.0	5.0	ug/Kg		03/17/20 09:27	03/17/20 18:54	1
Benzo[k]fluoranthene	ND		5.0	5.0	ug/Kg		03/17/20 09:27	03/17/20 18:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	107		57 - 120	03/17/20 09:27	03/17/20 18:54	1

Lab Sample ID: LCS 580-324979/2-A

Matrix: Solid

Analysis Batch: 325022

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 324979

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzo[a]anthracene	1000	923		ug/Kg		92	66 - 120
Chrysene	1000	854		ug/Kg		85	63 - 120
Benzo[a]pyrene	1000	987		ug/Kg		99	72 - 124
Indeno[1,2,3-cd]pyrene	1000	934		ug/Kg		93	65 - 132
Dibenz(a,h)anthracene	1000	973		ug/Kg		97	70 - 133
Benzo[b]fluoranthene	1000	857		ug/Kg		86	63 - 132
Benzo[k]fluoranthene	1000	1010		ug/Kg		101	63 - 131

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	108		57 - 120

Lab Sample ID: 580-93490-5 MS

Matrix: Solid

Analysis Batch: 325022

Client Sample ID: MTA-SP-COMP

Prep Type: Total/NA

Prep Batch: 324979

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Benzo[a]anthracene	15	F2 F1	1100	614	F1	ug/Kg	☼	54	66 - 120
Chrysene	37	F2 F1	1100	569	F1	ug/Kg	☼	48	63 - 120
Benzo[a]pyrene	14	F2 F1	1100	466	F1	ug/Kg	☼	41	72 - 124
Indeno[1,2,3-cd]pyrene	20	F2 F1	1100	458	F1	ug/Kg	☼	40	65 - 132
Dibenz(a,h)anthracene	ND	F2 F1	1100	372	F1	ug/Kg	☼	34	70 - 133
Benzo[b]fluoranthene	47	F2 F1	1100	626	F1	ug/Kg	☼	53	63 - 132
Benzo[k]fluoranthene	9.2	F2 F1	1100	442	F1	ug/Kg	☼	39	63 - 131

Surrogate	MS %Recovery	MS Qualifier	Limits
Terphenyl-d14	86		57 - 120

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 580-93490-5 MSD

Matrix: Solid

Analysis Batch: 325022

Client Sample ID: MTA-SP-COMP

Prep Type: Total/NA

Prep Batch: 324979

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	15	F2 F1	1080	390	F7 F1	ug/Kg	✱	35	66 - 120	45	14
Chrysene	37	F2 F1	1080	359	F7 F1	ug/Kg	✱	30	63 - 120	45	10
Benzo[a]pyrene	14	F2 F1	1080	332	F7 F1	ug/Kg	✱	29	72 - 124	34	19
Indeno[1,2,3-cd]pyrene	20	F2 F1	1080	317	F7 F1	ug/Kg	✱	28	65 - 132	36	15
Dibenz(a,h)anthracene	ND	F2 F1	1080	273	F7 F1	ug/Kg	✱	25	70 - 133	31	13
Benzo[b]fluoranthene	47	F2 F1	1080	479	F7 F1	ug/Kg	✱	40	63 - 132	27	25
Benzo[k]fluoranthene	9.2	F2 F1	1080	312	F7 F1	ug/Kg	✱	28	63 - 131	35	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Terphenyl-d14	71		57 - 120

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-1

Client Sample ID: MTA-B09(1-3)

Date Collected: 03/16/20 13:10

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	325012	03/17/20 12:01	HBP	TAL SEA

Client Sample ID: MTA-B09(1-3)

Date Collected: 03/16/20 13:10

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-1

Matrix: Solid

Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			324979	03/17/20 09:27	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	325022	03/17/20 22:51	W1T	TAL SEA

Client Sample ID: MTA-B10(1-3)

Date Collected: 03/16/20 13:25

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	325012	03/17/20 12:01	HBP	TAL SEA

Client Sample ID: MTA-B10(1-3)

Date Collected: 03/16/20 13:25

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-2

Matrix: Solid

Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			324979	03/17/20 09:27	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	325022	03/17/20 23:17	W1T	TAL SEA

Client Sample ID: MTA-B11(1-3)

Date Collected: 03/16/20 13:40

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	325012	03/17/20 12:01	HBP	TAL SEA

Client Sample ID: MTA-B11(1-3)

Date Collected: 03/16/20 13:40

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-3

Matrix: Solid

Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			324979	03/17/20 09:27	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	325022	03/17/20 23:43	W1T	TAL SEA

Client Sample ID: MTA-B12(1-3)

Date Collected: 03/16/20 15:03

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	325012	03/17/20 12:01	HBP	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-1

Client Sample ID: MTA-B12(1-3)

Lab Sample ID: 580-93490-4

Date Collected: 03/16/20 15:03

Matrix: Solid

Date Received: 03/16/20 16:37

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			324979	03/17/20 09:27	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	325022	03/18/20 00:09	W1T	TAL SEA

Client Sample ID: MTA-SP-COMP

Lab Sample ID: 580-93490-5

Date Collected: 03/16/20 12:35

Matrix: Solid

Date Received: 03/16/20 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	325012	03/17/20 12:01	HBP	TAL SEA

Client Sample ID: MTA-SP-COMP

Lab Sample ID: 580-93490-5

Date Collected: 03/16/20 12:35

Matrix: Solid

Date Received: 03/16/20 16:37

Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			324979	03/17/20 09:27	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	325022	03/18/20 00:35	W1T	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-1

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-024	01-14-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-20-23
California	State	2901	11-05-20
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-06-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-20-00031	02-10-23
Washington	State	C553	02-18-21

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

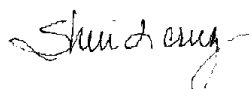
Laboratory Job ID: 580-93490-2

Client Project/Site: MTA T-CC Parking Lot

For:

Landau & Associates, Inc.
2107 South C Street
Tacoma, Washington 98402

Attn: Sierra Mott



Authorized for release by:
4/6/2020 12:42:41 PM

Sheri Cruz, Project Manager I
(253)922-2310
sheri.cruz@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-2

Job ID: 580-93490-2

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-93490-2

Comments

04/01/2020 client activated samples 6-10 that were on hold previously for cPAHs after hold times had expired: MTA-SP-A (580-93490-6), MTA-SP-B (580-93490-7), MTA-SP-C (580-93490-8), MTA-SP-D (580-93490-9) and MTA-SP-E (580-93490-10).

Receipt

The samples were received on 3/16/2020 4:37 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6° C.

Receipt Exceptions

The following sample(s) was activated by the client on 4/1/2020. Client wants to proceed with activating past hold times. MTA-SP-A (580-93490-6), MTA-SP-B (580-93490-7), MTA-SP-C (580-93490-8), MTA-SP-D (580-93490-9) and MTA-SP-E (580-93490-10).

GC/MS Semi VOA

Method 8270D SIM: The following samples were prepared outside of preparation holding time due to the client activating these samples for analysis outside of holding time : MTA-SP-A (580-93490-6), MTA-SP-B (580-93490-7), MTA-SP-C (580-93490-8), MTA-SP-D (580-93490-9) and MTA-SP-E (580-93490-10).

Method 8270D SIM: Surrogate recovery for the following samples were outside control limits: MTA-SP-C (580-93490-8), MTA-SP-D (580-93490-9) and MTA-SP-E (580-93490-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3546: The following samples were prepared outside of preparation holding time due to the client activating these samples for analysis out of hold : MTA-SP-A (580-93490-6), MTA-SP-B (580-93490-7), MTA-SP-C (580-93490-8), MTA-SP-D (580-93490-9) and MTA-SP-E (580-93490-10).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-2

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-93490-6	MTA-SP-A	Solid	03/16/20 15:09	03/16/20 16:37	
580-93490-7	MTA-SP-B	Solid	03/16/20 15:13	03/16/20 16:37	
580-93490-8	MTA-SP-C	Solid	03/16/20 15:18	03/16/20 16:37	
580-93490-9	MTA-SP-D	Solid	03/16/20 15:23	03/16/20 16:37	
580-93490-10	MTA-SP-E	Solid	03/16/20 15:27	03/16/20 16:37	



Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☒ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080

Date 3/16/20
 Page 1 of 1

Turnaround Time:
 Standard 3-5 Day
 Accelerated 3-Day

Project Name MTA Project No. 1817001.010.011

Project Location/Event MTA T-CC Parking Lot

Sampler's Name SEF/KMG

Project Contact Sarah Fees

Send Results To djorgenson@landauinc.com

sfees@landauinc.com

Sample I.D. Date Time Matrix No. of Containers

Sample I.D.	Date	Time	Matrix	No. of Containers
-1 MTA-B09(1-3)	3/16/20	1310	Soil	1
MTA-B09(1-3)	3/16/20	1325	↓	1
-3 MTA-B11(1-3)	3/16/20	1340	↓	1
MTA-B12(1-3)	3/16/20	1303	↓	1
-5 MTA-SP-COMP	3/16/20	1235	↓	1
MTA-SP-A	3/16/20	1509	↓	1
-7 MTA-SP-B	3/16/20	1513	↓	1
MTA-SP-C	3/16/20	1518	↓	1
-9 MTA-SP-D	3/16/20	1523	↓	1
MTA-SP-E	3/16/20	1527	Soil	1

CPAH - 8270 SIA
 Hold

Testing Parameters

93490

Special Handling Requirements:

Shipment Method:

Stored on ice: ☒ Yes / ☐ No

Observations/Comments

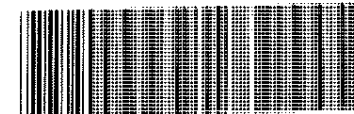
Allow water samples to settle, collect aliquot from clear portion ☐

NWTPH-DX - Acid wash cleanup ☐

- Silica gel cleanup ☐

Dissolved metal samples were field filtered

Other



580-93490 Chain of Custody

Therm. ID: R6 Cor: 1.6 Unc: 1.2

Cooler Desc: Sm Blue

Packing: Ice

Cust. Seal: Yes ☒ No ☒

Blue Ice: Wet Dry, None

FedEx:

UPS:

Lab Cour:

Other: clicko

Relinquished by

Signature Katrin Ganglitz

Printed Name Katrin Ganglitz

Company Landau Associates

Date 3/16/2020 Time 16:37

Received by

Signature Tom Blankinship

Printed Name Blankinship

Company TA-SEA

Date 3/16/20 Time 1637

Relinquished by

Signature

Printed Name

Company

Date Time

Received by

Signature

Printed Name

Company

Date Time

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-93490-2

Login Number: 93490

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Client Sample ID: MTA-SP-A
Date Collected: 03/16/20 15:09
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-6
Matrix: Solid
Percent Solids: 92.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	40	H	5.2	5.2	ug/Kg	☼	04/02/20 12:07	04/04/20 15:13	1
Chrysene	70	H	5.2	5.2	ug/Kg	☼	04/02/20 12:07	04/04/20 15:13	1
Benzo[a]pyrene	48	H	5.2	5.2	ug/Kg	☼	04/02/20 12:07	04/04/20 15:13	1
Indeno[1,2,3-cd]pyrene	43	H	5.2	5.2	ug/Kg	☼	04/02/20 12:07	04/04/20 15:13	1
Dibenz(a,h)anthracene	6.4	H	5.2	5.2	ug/Kg	☼	04/02/20 12:07	04/04/20 15:13	1
Benzo[b]fluoranthene	110	H	5.2	5.2	ug/Kg	☼	04/02/20 12:07	04/04/20 15:13	1
Benzo[k]fluoranthene	ND	H	5.2	5.2	ug/Kg	☼	04/02/20 12:07	04/04/20 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	80		57 - 120	04/02/20 12:07	04/04/20 15:13	1

Client Sample ID: MTA-SP-B
Date Collected: 03/16/20 15:13
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-7
Matrix: Solid
Percent Solids: 92.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	100	H	5.1	5.1	ug/Kg	☼	04/02/20 12:07	04/04/20 15:39	1
Chrysene	150	H	5.1	5.1	ug/Kg	☼	04/02/20 12:07	04/04/20 15:39	1
Benzo[a]pyrene	120	H	5.1	5.1	ug/Kg	☼	04/02/20 12:07	04/04/20 15:39	1
Indeno[1,2,3-cd]pyrene	110	H	5.1	5.1	ug/Kg	☼	04/02/20 12:07	04/04/20 15:39	1
Dibenz(a,h)anthracene	28	H	5.1	5.1	ug/Kg	☼	04/02/20 12:07	04/04/20 15:39	1
Benzo[b]fluoranthene	310	H	5.1	5.1	ug/Kg	☼	04/02/20 12:07	04/04/20 15:39	1
Benzo[k]fluoranthene	ND	H	5.1	5.1	ug/Kg	☼	04/02/20 12:07	04/04/20 15:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	85		57 - 120	04/02/20 12:07	04/04/20 15:39	1

Client Sample ID: MTA-SP-C
Date Collected: 03/16/20 15:18
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-8
Matrix: Solid
Percent Solids: 88.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	14	H	5.4	5.4	ug/Kg	☼	04/02/20 12:07	04/04/20 16:05	1
Chrysene	31	H	5.4	5.4	ug/Kg	☼	04/02/20 12:07	04/04/20 16:05	1
Benzo[a]pyrene	16	H	5.4	5.4	ug/Kg	☼	04/02/20 12:07	04/04/20 16:05	1
Indeno[1,2,3-cd]pyrene	15	H	5.4	5.4	ug/Kg	☼	04/02/20 12:07	04/04/20 16:05	1
Dibenz(a,h)anthracene	ND	H	5.4	5.4	ug/Kg	☼	04/02/20 12:07	04/04/20 16:05	1
Benzo[b]fluoranthene	46	H	5.4	5.4	ug/Kg	☼	04/02/20 12:07	04/04/20 16:05	1
Benzo[k]fluoranthene	ND	H	5.4	5.4	ug/Kg	☼	04/02/20 12:07	04/04/20 16:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	49	X	57 - 120	04/02/20 12:07	04/04/20 16:05	1

Client Sample ID: MTA-SP-D
Date Collected: 03/16/20 15:23
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-9
Matrix: Solid
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND	H	5.7	5.7	ug/Kg	☼	04/02/20 12:07	04/04/20 16:32	1
Chrysene	7.7	H	5.7	5.7	ug/Kg	☼	04/02/20 12:07	04/04/20 16:32	1
Benzo[a]pyrene	ND	H	5.7	5.7	ug/Kg	☼	04/02/20 12:07	04/04/20 16:32	1
Indeno[1,2,3-cd]pyrene	ND	H	5.7	5.7	ug/Kg	☼	04/02/20 12:07	04/04/20 16:32	1
Dibenz(a,h)anthracene	ND	H	5.7	5.7	ug/Kg	☼	04/02/20 12:07	04/04/20 16:32	1
Benzo[b]fluoranthene	ND	H	5.7	5.7	ug/Kg	☼	04/02/20 12:07	04/04/20 16:32	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Client Sample ID: MTA-SP-D
Date Collected: 03/16/20 15:23
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-9
Matrix: Solid
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND	H	5.7	5.7	ug/Kg	☼	04/02/20 12:07	04/04/20 16:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	10	X	57 - 120				04/02/20 12:07	04/04/20 16:32	1

Client Sample ID: MTA-SP-E
Date Collected: 03/16/20 15:27
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-10
Matrix: Solid
Percent Solids: 86.8

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND	H	5.4	5.4	ug/Kg	☼	04/02/20 12:07	04/04/20 16:58	1
Chrysene	10	H	5.4	5.4	ug/Kg	☼	04/02/20 12:07	04/04/20 16:58	1
Benzo[a]pyrene	ND	H	5.4	5.4	ug/Kg	☼	04/02/20 12:07	04/04/20 16:58	1
Indeno[1,2,3-cd]pyrene	ND	H	5.4	5.4	ug/Kg	☼	04/02/20 12:07	04/04/20 16:58	1
Dibenz(a,h)anthracene	ND	H	5.4	5.4	ug/Kg	☼	04/02/20 12:07	04/04/20 16:58	1
Benzo[b]fluoranthene	12	H	5.4	5.4	ug/Kg	☼	04/02/20 12:07	04/04/20 16:58	1
Benzo[k]fluoranthene	ND	H	5.4	5.4	ug/Kg	☼	04/02/20 12:07	04/04/20 16:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	14	X	57 - 120				04/02/20 12:07	04/04/20 16:58	1

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 580-326053/1-A

Matrix: Solid

Analysis Batch: 326147

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 326053

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		5.0	5.0	ug/Kg		04/02/20 12:07	04/04/20 10:51	1
Chrysene	ND		5.0	5.0	ug/Kg		04/02/20 12:07	04/04/20 10:51	1
Benzo[a]pyrene	ND		5.0	5.0	ug/Kg		04/02/20 12:07	04/04/20 10:51	1
Indeno[1,2,3-cd]pyrene	ND		5.0	5.0	ug/Kg		04/02/20 12:07	04/04/20 10:51	1
Dibenz(a,h)anthracene	ND		5.0	5.0	ug/Kg		04/02/20 12:07	04/04/20 10:51	1
Benzo[b]fluoranthene	ND		5.0	5.0	ug/Kg		04/02/20 12:07	04/04/20 10:51	1
Benzo[k]fluoranthene	ND		5.0	5.0	ug/Kg		04/02/20 12:07	04/04/20 10:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	87		57 - 120	04/02/20 12:07	04/04/20 10:51	1

Lab Sample ID: LCS 580-326053/2-A

Matrix: Solid

Analysis Batch: 326147

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 326053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzo[a]anthracene	1000	839		ug/Kg		84	66 - 120
Chrysene	1000	892		ug/Kg		89	63 - 120
Benzo[a]pyrene	1000	942		ug/Kg		94	72 - 124
Indeno[1,2,3-cd]pyrene	1000	1240		ug/Kg		124	65 - 132
Dibenz(a,h)anthracene	1000	894		ug/Kg		89	70 - 133
Benzo[b]fluoranthene	1000	904		ug/Kg		90	63 - 132
Benzo[k]fluoranthene	1000	944		ug/Kg		94	63 - 131

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	79		57 - 120

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-2

Client Sample ID: MTA-SP-A

Date Collected: 03/16/20 15:09

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	326036	04/02/20 09:46	HBP	TAL SEA

Client Sample ID: MTA-SP-A

Date Collected: 03/16/20 15:09

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-6

Matrix: Solid

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			326053	04/02/20 12:07	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	326147	04/04/20 15:13	APR	TAL SEA

Client Sample ID: MTA-SP-B

Date Collected: 03/16/20 15:13

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	326036	04/02/20 09:46	HBP	TAL SEA

Client Sample ID: MTA-SP-B

Date Collected: 03/16/20 15:13

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-7

Matrix: Solid

Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			326053	04/02/20 12:07	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	326147	04/04/20 15:39	APR	TAL SEA

Client Sample ID: MTA-SP-C

Date Collected: 03/16/20 15:18

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	326036	04/02/20 09:46	HBP	TAL SEA

Client Sample ID: MTA-SP-C

Date Collected: 03/16/20 15:18

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-8

Matrix: Solid

Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			326053	04/02/20 12:07	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	326147	04/04/20 16:05	APR	TAL SEA

Client Sample ID: MTA-SP-D

Date Collected: 03/16/20 15:23

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	326036	04/02/20 09:46	HBP	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-2

Client Sample ID: MTA-SP-D

Lab Sample ID: 580-93490-9

Date Collected: 03/16/20 15:23

Matrix: Solid

Date Received: 03/16/20 16:37

Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			326053	04/02/20 12:07	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	326147	04/04/20 16:32	APR	TAL SEA

Client Sample ID: MTA-SP-E

Lab Sample ID: 580-93490-10

Date Collected: 03/16/20 15:27

Matrix: Solid

Date Received: 03/16/20 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	326036	04/02/20 09:46	HBP	TAL SEA

Client Sample ID: MTA-SP-E

Lab Sample ID: 580-93490-10

Date Collected: 03/16/20 15:27

Matrix: Solid

Date Received: 03/16/20 16:37

Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			326053	04/02/20 12:07	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	326147	04/04/20 16:58	APR	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-2

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-024	01-14-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-20-23
California	State	2901	11-05-20
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-06-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-20-00031	02-10-23
Washington	State	C553	02-18-21

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

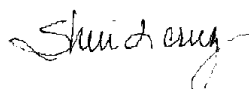
Laboratory Job ID: 580-93490-3

Client Project/Site: MTA T-CC Parking Lot

For:

Landau & Associates, Inc.
2107 South C Street
Tacoma, Washington 98402

Attn: Sierra Mott



Authorized for release by:
4/10/2020 1:03:38 PM

Sheri Cruz, Project Manager I
(253)922-2310
sheri.cruz@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-3

Job ID: 580-93490-3

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-93490-3

Comments

4/7/2020 samples 6-10 activated for RCRA 8 metals by client on email.

Receipt

The samples were received on 3/16/2020 4:37 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6° C.

Receipt Exceptions

The following sample(s) was activated by the client on 4//7/2020 for RCRA 8 metals: MTA-SP-A (580-93490-6), MTA-SP-B (580-93490-7), MTA-SP-C (580-93490-8), MTA-SP-D (580-93490-9) and MTA-SP-E (580-93490-10).

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-3

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-93490-6	MTA-SP-A	Solid	03/16/20 15:09	03/16/20 16:37	
580-93490-7	MTA-SP-B	Solid	03/16/20 15:13	03/16/20 16:37	
580-93490-8	MTA-SP-C	Solid	03/16/20 15:18	03/16/20 16:37	
580-93490-9	MTA-SP-D	Solid	03/16/20 15:23	03/16/20 16:37	
580-93490-10	MTA-SP-E	Solid	03/16/20 15:27	03/16/20 16:37	



Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907
☒ Tacoma (253) 926-2493
☐ Spokane (509) 327-9737
☐ Portland (503) 542-1080

Date 3/16/20
 Page 1 of 1

Turnaround Time:
 Standard 3-5 Day
 Accelerated 3-Day

Project Name MTA Project No. 1817001.0/0.011

Project Location/Event MTA T-CC Parking Lot

Sampler's Name SEF/KMG

Project Contact Sarah Fees

Send Results To djorgenson@landauinc.com

sfees@landauinc.com

Sample I.D. Date Time Matrix No. of Containers

Sample I.D.	Date	Time	Matrix	No. of Containers
-1 MTA-B09(1-3)	3/16/20	1310	Soil	1
MTA-B09(1-3)	3/16/20	1325	↓	1
-3 MTA-B11(1-3)	3/16/20	1340	↓	1
MTA-B12(1-3)	3/16/20	1303	↓	1
-5 MTA-SP-COMP	3/16/20	1235	↓	1
MTA-SP-A	3/16/20	1509	↓	1
-7 MTA-SP-B	3/16/20	1513	↓	1
MTA-SP-C	3/16/20	1518	↓	1
-9 MTA-SP-D	3/16/20	1523	↓	1
MTA-SP-E	3/16/20	1527	Soil	1

CPAH - 8270 SIA
Hold

Testing Parameters

93490

Special Handling Requirements:

Shipment Method:

Stored on ice: ☒ Yes / ☐ No

Observations/Comments

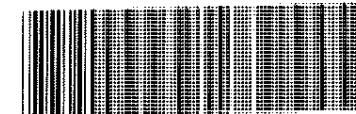
Allow water samples to settle, collect aliquot from clear portion ☐

NWTPH-DX - Acid wash cleanup ☐

- Silica gel cleanup ☐

Dissolved metal samples were field filtered

Other



580-93490 Chain of Custody

Therm. ID: R6 Cor: 1.6 ° Unc: 1.2 °

Cooler Desc: Sm Blue

Packing: buc

Cust. Seal: Yes ☒ No ☒

Blue Ice: Wet, Dry, None

FedEx:

UPS:

Lab Cour:

Other: clicko

Relinquished by

Signature Katrin Ganglitz

Printed Name Katrin Ganglitz

Company Landau Associates

Date 3/16/2020 Time 16:37

Received by

Signature Tom Blankinship

Printed Name Blankinship

Company TA-SEA

Date 3/16/20 Time 1637

Relinquished by

Signature

Printed Name

Company

Date Time

Received by

Signature

Printed Name

Company

Date Time

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-93490-3

Login Number: 93490

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-3

Method: 6010C - Metals (ICP)

Client Sample ID: MTA-SP-A
Date Collected: 03/16/20 15:09
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-6
Matrix: Solid
Percent Solids: 92.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.0		2.5	2.5	mg/Kg	☼	04/07/20 13:50	04/09/20 00:55	1
Barium	65		0.42	0.42	mg/Kg	☼	04/07/20 13:50	04/09/20 00:55	1
Cadmium	ND		0.85	0.85	mg/Kg	☼	04/07/20 13:50	04/09/20 00:55	1
Chromium	42		1.1	1.1	mg/Kg	☼	04/07/20 13:50	04/09/20 00:55	1
Lead	160		1.3	1.3	mg/Kg	☼	04/07/20 13:50	04/09/20 00:55	1
Selenium	ND		4.2	4.2	mg/Kg	☼	04/07/20 13:50	04/09/20 00:55	1
Silver	ND		2.1	2.1	mg/Kg	☼	04/07/20 13:50	04/09/20 00:55	1

Client Sample ID: MTA-SP-B
Date Collected: 03/16/20 15:13
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-7
Matrix: Solid
Percent Solids: 92.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.8		2.0	2.0	mg/Kg	☼	04/07/20 13:50	04/09/20 00:58	1
Barium	49		0.34	0.34	mg/Kg	☼	04/07/20 13:50	04/09/20 00:58	1
Cadmium	ND		0.68	0.68	mg/Kg	☼	04/07/20 13:50	04/09/20 00:58	1
Chromium	39		0.89	0.89	mg/Kg	☼	04/07/20 13:50	04/09/20 00:58	1
Lead	120		1.0	1.0	mg/Kg	☼	04/07/20 13:50	04/09/20 00:58	1
Selenium	ND		3.4	3.4	mg/Kg	☼	04/07/20 13:50	04/09/20 00:58	1
Silver	ND		1.7	1.7	mg/Kg	☼	04/07/20 13:50	04/09/20 00:58	1

Client Sample ID: MTA-SP-C
Date Collected: 03/16/20 15:18
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-8
Matrix: Solid
Percent Solids: 88.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.7		2.5	2.5	mg/Kg	☼	04/07/20 13:50	04/09/20 01:01	1
Barium	64		0.41	0.41	mg/Kg	☼	04/07/20 13:50	04/09/20 01:01	1
Cadmium	ND		0.82	0.82	mg/Kg	☼	04/07/20 13:50	04/09/20 01:01	1
Chromium	46		1.1	1.1	mg/Kg	☼	04/07/20 13:50	04/09/20 01:01	1
Lead	230		1.2	1.2	mg/Kg	☼	04/07/20 13:50	04/09/20 01:01	1
Selenium	ND		4.1	4.1	mg/Kg	☼	04/07/20 13:50	04/09/20 01:01	1
Silver	ND		2.0	2.0	mg/Kg	☼	04/07/20 13:50	04/09/20 01:01	1

Client Sample ID: MTA-SP-D
Date Collected: 03/16/20 15:23
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-9
Matrix: Solid
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.8		2.4	2.4	mg/Kg	☼	04/07/20 13:50	04/09/20 01:04	1
Barium	110		0.41	0.41	mg/Kg	☼	04/07/20 13:50	04/09/20 01:04	1
Cadmium	1.1		0.81	0.81	mg/Kg	☼	04/07/20 13:50	04/09/20 01:04	1
Chromium	77		1.1	1.1	mg/Kg	☼	04/07/20 13:50	04/09/20 01:04	1
Lead	250		1.2	1.2	mg/Kg	☼	04/07/20 13:50	04/09/20 01:04	1
Selenium	ND		4.1	4.1	mg/Kg	☼	04/07/20 13:50	04/09/20 01:04	1
Silver	ND		2.0	2.0	mg/Kg	☼	04/07/20 13:50	04/09/20 01:04	1

Client Sample ID: MTA-SP-E
Date Collected: 03/16/20 15:27
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-10
Matrix: Solid
Percent Solids: 86.8

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.6		3.0	3.0	mg/Kg	☼	04/07/20 13:50	04/09/20 01:08	1
Barium	90		0.49	0.49	mg/Kg	☼	04/07/20 13:50	04/09/20 01:08	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-3

Method: 6010C - Metals (ICP) (Continued)

Client Sample ID: MTA-SP-E
Date Collected: 03/16/20 15:27
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-10
Matrix: Solid
Percent Solids: 86.8

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.99	0.99	mg/Kg	⚠	04/07/20 13:50	04/09/20 01:08	1
Chromium	54		1.3	1.3	mg/Kg	⚠	04/07/20 13:50	04/09/20 01:08	1
Lead	260		1.5	1.5	mg/Kg	⚠	04/07/20 13:50	04/09/20 01:08	1
Selenium	ND		4.9	4.9	mg/Kg	⚠	04/07/20 13:50	04/09/20 01:08	1
Silver	ND		2.5	2.5	mg/Kg	⚠	04/07/20 13:50	04/09/20 01:08	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-3

Method: 7471A - Mercury (CVAA)

Client Sample ID: MTA-SP-A
Date Collected: 03/16/20 15:09
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-6
Matrix: Solid
Percent Solids: 92.4

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.051		0.024	0.024	mg/Kg	☼	04/07/20 15:23	04/08/20 16:33	1

Client Sample ID: MTA-SP-B
Date Collected: 03/16/20 15:13
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-7
Matrix: Solid
Percent Solids: 92.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040		0.022	0.022	mg/Kg	☼	04/07/20 15:23	04/08/20 16:31	1

Client Sample ID: MTA-SP-C
Date Collected: 03/16/20 15:18
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-8
Matrix: Solid
Percent Solids: 88.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.047		0.028	0.028	mg/Kg	☼	04/07/20 15:23	04/08/20 16:29	1

Client Sample ID: MTA-SP-D
Date Collected: 03/16/20 15:23
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-9
Matrix: Solid
Percent Solids: 84.7

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.063		0.022	0.022	mg/Kg	☼	04/07/20 15:23	04/08/20 16:22	1

Client Sample ID: MTA-SP-E
Date Collected: 03/16/20 15:27
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-10
Matrix: Solid
Percent Solids: 86.8

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.064	F1	0.029	0.029	mg/Kg	☼	04/07/20 15:23	04/08/20 16:13	1

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-3

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 580-326307/13-A
Matrix: Solid
Analysis Batch: 326466

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 326307

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0	3.0	mg/Kg		04/07/20 13:50	04/09/20 00:05	1
Barium	ND		0.50	0.50	mg/Kg		04/07/20 13:50	04/09/20 00:05	1
Cadmium	ND		1.0	1.0	mg/Kg		04/07/20 13:50	04/09/20 00:05	1
Chromium	ND		1.3	1.3	mg/Kg		04/07/20 13:50	04/09/20 00:05	1
Lead	ND		1.5	1.5	mg/Kg		04/07/20 13:50	04/09/20 00:05	1
Selenium	ND		5.0	5.0	mg/Kg		04/07/20 13:50	04/09/20 00:05	1
Silver	ND		2.5	2.5	mg/Kg		04/07/20 13:50	04/09/20 00:05	1

Lab Sample ID: LCS 580-326307/14-A
Matrix: Solid
Analysis Batch: 326466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 326307

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	47.6		mg/Kg		95	80 - 120
Barium	50.0	43.3		mg/Kg		87	80 - 120
Cadmium	50.0	46.8		mg/Kg		94	80 - 120
Chromium	50.0	48.7		mg/Kg		97	80 - 120
Lead	50.0	47.4		mg/Kg		95	80 - 120
Selenium	50.0	48.8		mg/Kg		98	80 - 120
Silver	50.0	46.2		mg/Kg		92	80 - 120

Lab Sample ID: LCSD 580-326307/15-A
Matrix: Solid
Analysis Batch: 326466

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 326307

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	50.0	48.7		mg/Kg		97	80 - 120	2	20
Barium	50.0	43.7		mg/Kg		87	80 - 120	1	20
Cadmium	50.0	47.5		mg/Kg		95	80 - 120	1	20
Chromium	50.0	49.0		mg/Kg		98	80 - 120	1	20
Lead	50.0	48.2		mg/Kg		96	80 - 120	2	20
Selenium	50.0	49.8		mg/Kg		100	80 - 120	2	20
Silver	50.0	46.2		mg/Kg		92	80 - 120	0	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 580-326319/12-A
Matrix: Solid
Analysis Batch: 326368

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 326319

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.030	0.030	mg/Kg		04/07/20 15:23	04/08/20 16:06	1

Lab Sample ID: LCS 580-326319/13-A
Matrix: Solid
Analysis Batch: 326368

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 326319

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.150		mg/Kg		90	80 - 120

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-3

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 580-326319/14-A

Matrix: Solid

Analysis Batch: 326368

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 326319

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.167	0.149		mg/Kg		90	80 - 120	1	20

Lab Sample ID: 580-93490-10 MS

Matrix: Solid

Analysis Batch: 326368

Client Sample ID: MTA-SP-E

Prep Type: Total/NA

Prep Batch: 326319

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.064	F1	0.163	0.255		mg/Kg	✱	117	80 - 120		

Lab Sample ID: 580-93490-10 MSD

Matrix: Solid

Analysis Batch: 326368

Client Sample ID: MTA-SP-E

Prep Type: Total/NA

Prep Batch: 326319

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.064	F1	0.164	0.264	F1	mg/Kg	✱	122	80 - 120	3	20

Lab Sample ID: 580-93490-10 DU

Matrix: Solid

Analysis Batch: 326368

Client Sample ID: MTA-SP-E

Prep Type: Total/NA

Prep Batch: 326319

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.064	F1	0.0744		mg/Kg	✱			15	20

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-3

Client Sample ID: MTA-SP-A

Date Collected: 03/16/20 15:09

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-6

Matrix: Solid

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			326307	04/07/20 13:50	ART	TAL SEA
Total/NA	Analysis	6010C		1	326466	04/09/20 00:55	TMH	TAL SEA
Total/NA	Prep	7471A			326319	04/07/20 15:23	ART	TAL SEA
Total/NA	Analysis	7471A		1	326368	04/08/20 16:33	A1B	TAL SEA

Client Sample ID: MTA-SP-B

Date Collected: 03/16/20 15:13

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-7

Matrix: Solid

Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			326307	04/07/20 13:50	ART	TAL SEA
Total/NA	Analysis	6010C		1	326466	04/09/20 00:58	TMH	TAL SEA
Total/NA	Prep	7471A			326319	04/07/20 15:23	ART	TAL SEA
Total/NA	Analysis	7471A		1	326368	04/08/20 16:31	A1B	TAL SEA

Client Sample ID: MTA-SP-C

Date Collected: 03/16/20 15:18

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-8

Matrix: Solid

Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			326307	04/07/20 13:50	ART	TAL SEA
Total/NA	Analysis	6010C		1	326466	04/09/20 01:01	TMH	TAL SEA
Total/NA	Prep	7471A			326319	04/07/20 15:23	ART	TAL SEA
Total/NA	Analysis	7471A		1	326368	04/08/20 16:29	A1B	TAL SEA

Client Sample ID: MTA-SP-D

Date Collected: 03/16/20 15:23

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-9

Matrix: Solid

Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			326307	04/07/20 13:50	ART	TAL SEA
Total/NA	Analysis	6010C		1	326466	04/09/20 01:04	TMH	TAL SEA
Total/NA	Prep	7471A			326319	04/07/20 15:23	ART	TAL SEA
Total/NA	Analysis	7471A		1	326368	04/08/20 16:22	A1B	TAL SEA

Client Sample ID: MTA-SP-E

Date Collected: 03/16/20 15:27

Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-10

Matrix: Solid

Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			326307	04/07/20 13:50	ART	TAL SEA
Total/NA	Analysis	6010C		1	326466	04/09/20 01:08	TMH	TAL SEA
Total/NA	Prep	7471A			326319	04/07/20 15:23	ART	TAL SEA
Total/NA	Analysis	7471A		1	326368	04/08/20 16:13	A1B	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-3

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

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Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-3

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-024	01-14-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-20-23
California	State	2901	11-05-20
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-06-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-20-00031	02-10-23
Washington	State	C553	02-18-21

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

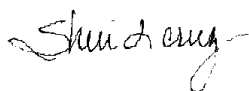
Laboratory Job ID: 580-93490-4

Client Project/Site: MTA T-CC Parking Lot

For:

Landau & Associates, Inc.
2107 South C Street
Tacoma, Washington 98402

Attn: Sierra Mott



Authorized for release by:
4/17/2020 10:10:59 AM

Sheri Cruz, Project Manager I
(253)922-2310
sheri.cruz@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-4

Job ID: 580-93490-4

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative
580-93490-4

Comments

No additional comments.

Receipt

The samples were received on 3/16/2020 4:37 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6° C.

Receipt Exceptions

The following sample was activated by the client on 4/13/2020 for TCLP lead only: MTA-SP-E (580-93490-10).

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-4

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-93490-10	MTA-SP-E	Solid	03/16/20 15:27	03/16/20 16:37	

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Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☒ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080

Date 3/16/20
Page 1 of 1

Turnaround Time:
Standard 3-5 Day
Accelerated 3-Day

Project Name MTA Project No. 1817001.010.011

Project Location/Event MTA T-CC Parking Lot

Sampler's Name SEF/KMG

Project Contact Sarah Fees

Send Results To djorgenson@landauinc.com

sfees@landauinc.com

Sample I.D. Date Time Matrix No. of Containers

Sample I.D.	Date	Time	Matrix	No. of Containers
-1 MTA-B09(1-3)	3/16/20	1310	Soil	1
-3 MTA-B09(1-3)	3/16/20	1325	↓	1
MTA-B11(1-3)	3/16/20	1340	↓	1
MTA-B12(1-3)	3/16/20	1303	↓	1
-5 MTA-SP-COMP	3/16/20	1235	↓	1
MTA-SP-A	3/16/20	1509	↓	1
-7 MTA-SP-B	3/16/20	1513	↓	1
MTA-SP-C	3/16/20	1518	↓	1
-9 MTA-SP-D	3/16/20	1523	↓	1
MTA-SP-E	3/16/20	1527	Soil	1

Testing Parameters

93490

Special Handling Requirements:

Shipment Method:

Stored on ice: ☒ Yes / ☐ No

Observations/Comments

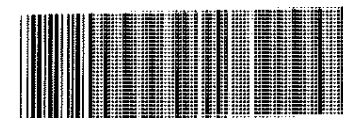
Allow water samples to settle, collect aliquot from clear portion ☐

NWTPH-DX - Acid wash cleanup ☐

- Silica gel cleanup ☐

Dissolved metal samples were field filtered

Other



580-93490 Chain of Custody

Therm. ID: R6 Cor: 1.6 ° Unc: 1.2 °

Cooler Desc: Small Blue

Packing: Ice

FedEx:

Cust. Seal: Yes ☒ No ☒

UPS:

Blue Ice: Wet, Dry, None

Lab Cour:

Other: clicko

Relinquished by

Signature Katrin Ganglitz

Printed Name Katrin Ganglitz

Company Landau Associates

Date 3/16/20 Time 16:37

Received by

Signature Tom Blankinship

Printed Name Blankinship

Company TA-Sea

Date 3/16/20 Time 16:37

Relinquished by

Signature

Printed Name

Company

Date Time

Received by

Signature

Printed Name

Company

Date Time

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-93490-4

Login Number: 93490

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-4

Method: 6010D - Metals (ICP) - TCLP

Client Sample ID: MTA-SP-E
Date Collected: 03/16/20 15:27
Date Received: 03/16/20 16:37

Lab Sample ID: 580-93490-10
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.13		0.030	0.0027	mg/L		04/14/20 15:19	04/15/20 20:36	1

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-4

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 580-326702/10-A
Matrix: Solid
Analysis Batch: 326865

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 326702

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.030	0.0027	mg/L		04/14/20 15:19	04/15/20 19:56	1

Lab Sample ID: LCS 580-326702/11-A
Matrix: Solid
Analysis Batch: 326865

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 326702

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	1.00	0.962		mg/L		96	80 - 120

Lab Sample ID: LCSD 580-326702/12-A
Matrix: Solid
Analysis Batch: 326865

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 326702

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	1.00	0.963		mg/L		96	80 - 120	0	20

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-4

Client Sample ID: MTA-SP-E

Lab Sample ID: 580-93490-10

Date Collected: 03/16/20 15:27

Matrix: Solid

Date Received: 03/16/20 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			326607	04/13/20 13:46	TMH	TAL SEA
TCLP	Prep	3010A			326702	04/14/20 15:19	ART	TAL SEA
TCLP	Analysis	6010D		1	326865	04/15/20 20:36	TMH	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Project/Site: MTA T-CC Parking Lot

Job ID: 580-93490-4

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-024	01-14-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-20-23
California	State	2901	11-05-20
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-06-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-20-00031	02-10-23
Washington	State	C553	02-18-21

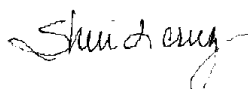
ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-94618-1
Client Project/Site: Mason Transit Authority

For:
Landau & Associates, Inc.
2107 South C Street
Tacoma, Washington 98402

Attn: Sarah Fees



Authorized for release by:
5/14/2020 11:39:11 AM

Sheri Cruz, Project Manager I
(253)922-2310
sheri.cruz@testamericainc.com

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Job ID: 580-94618-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-94618-1

Comments

No additional comments.

Receipt

The samples were received on 5/11/2020 2:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6° C.

GC/MS Semi VOA

Method 8270D SIM: Surrogate recovery for the following samples were outside control limits: MTA-SP-H (580-94618-6) and MTA-SP-I (580-94618-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 580-328086 and analytical batch 580-328200 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method 8082A: The following samples required a TBA clean-up to reduce matrix interferences caused by sulfur: MTA-B13 (1) (580-94618-1), MTA-B14 (1) (580-94618-2), MTA-B15 (1) (580-94618-3), (580-94618-A-3-F MS) and (580-94618-A-3-G MSD).

Method 8082A: The following continuing calibration verification (CCV) associated with analytical batch 580-328173 recovered outside acceptance criteria on the confirmation column for PCB-1232. The associated sample results for those analytes were reported from the primary column which met acceptance criteria. The following samples are impacted: MTA-B13 (1) (580-94618-1), MTA-B14 (1) (580-94618-2), MTA-B15 (1) (580-94618-3) and (CCV 580-328173/3)

Method NWTPH-Dx: (CCV 580-328185/14) recovered outside drift criteria for o-Terphenyl surrogate. This surrogate recovered within control limits in the associated QC and client samples; therefore, the data is reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
X	Surrogate recovery exceeds control limits

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-94618-1	MTA-B13 (1)	Solid	05/11/20 10:55	05/11/20 14:15	
580-94618-2	MTA-B14 (1)	Solid	05/11/20 11:12	05/11/20 14:15	
580-94618-3	MTA-B15 (1)	Solid	05/11/20 11:20	05/11/20 14:15	
580-94618-4	MTA-SP-F	Solid	05/11/20 12:20	05/11/20 14:15	
580-94618-5	MTA-SP-G	Solid	05/11/20 12:30	05/11/20 14:15	
580-94618-6	MTA-SP-H	Solid	05/11/20 12:43	05/11/20 14:15	
580-94618-7	MTA-SP-I	Solid	05/11/20 12:50	05/11/20 14:15	
580-94618-8	MTA-SP-J	Solid	05/11/20 12:58	05/11/20 14:15	



Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☒ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080

Date 5/11/2020
Page 1 of 1

Turnaround Time:
Standard _____
Accelerated 72 hr

Project Name Mason Transit Authority Project No. 1817001.010.012
Project Location/Event Shelton, WA / confirmation sampling
Sampler's Name Katie Gauglitz
Project Contact Sarah Fees
Send Results To S. Fees, D. Jorgensen

Testing Parameters

94618
Special Handling Requirements:
Shipment Method drop off
Stored on ice: Yes / No

	Sample I.D.	Date	Time	Matrix	No. of Containers	CPAH 8270D SIM	PCBs 8032A	PERA 8 Metals 60204	NWTPH-Dx	Observations/Comments
-1	MTA-B13(1)	5/11/20	1055	Soil	1	X	X	X	X	Allow water samples to settle, collect aliquot from clear portion ☐
	MTA-B14(1)		11:12		1	X	X	X	X	
-3	MTA-B15(1)		11:20		1	X	X	X	X	NWTPH-Dx - Acid wash cleanup ☐
	MTA-B16(1)				1	X	X	X	X	- Silica gel cleanup ☐
	MTA-SP-F		12:20		1	X	X	X	X	Dissolved metal samples were field filtered
-5	MTA-SP-G		12:30		1	X	X	X	X	
	MTA-SP-H		12:43		1	X	X	X	X	
-7	MTA-SP-I		12:50		1	X	X	X	X	Other _____
	MTA-SP-J		12:58		1	X	X	X	X	



580-94618 Chain of Custody

Therm. ID: A1 Cpr: 3.6° Unc: 3.8°
Cooler Desc: Med blue
Packing: two FedEx: _____
Cust. Seal: Yes No * UPS: _____
Blue Ice: Yes Dry, None Lab Cour: _____
Other: Chloro

Relinquished by
Signature Katie Gauglitz
Printed Name Katie Gauglitz
Company Landau Associates
Date 5/11/2020 Time 14:15

Received by
Signature Tom Blankinship
Printed Name Blankinship
Company TA-Sea
Date 5/11/20 Time 1415

Relinquished by
Signature _____
Printed Name _____
Company _____
Date _____ Time _____

Received by
Signature _____
Printed Name _____
Company _____
Date _____ Time _____

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-94618-1

Login Number: 94618

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Client Sample ID: MTA-B13 (1)

Date Collected: 05/11/20 10:55

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-1

Matrix: Solid

Percent Solids: 87.8

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	95		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 11:58	5
Chrysene	120		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 11:58	5
Benzo[a]pyrene	82		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 11:58	5
Indeno[1,2,3-cd]pyrene	59		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 11:58	5
Dibenz(a,h)anthracene	ND		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 11:58	5
Benzo[b]fluoranthene	110		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 11:58	5
Benzo[k]fluoranthene	33		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 11:58	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	98		57 - 120	05/11/20 18:25	05/13/20 11:58	5

Client Sample ID: MTA-B14 (1)

Date Collected: 05/11/20 11:12

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-2

Matrix: Solid

Percent Solids: 86.2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		28	28	ug/Kg	☼	05/11/20 18:25	05/13/20 12:27	5
Chrysene	30		28	28	ug/Kg	☼	05/11/20 18:25	05/13/20 12:27	5
Benzo[a]pyrene	ND		28	28	ug/Kg	☼	05/11/20 18:25	05/13/20 12:27	5
Indeno[1,2,3-cd]pyrene	ND		28	28	ug/Kg	☼	05/11/20 18:25	05/13/20 12:27	5
Dibenz(a,h)anthracene	ND		28	28	ug/Kg	☼	05/11/20 18:25	05/13/20 12:27	5
Benzo[b]fluoranthene	28		28	28	ug/Kg	☼	05/11/20 18:25	05/13/20 12:27	5
Benzo[k]fluoranthene	ND		28	28	ug/Kg	☼	05/11/20 18:25	05/13/20 12:27	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	118		57 - 120	05/11/20 18:25	05/13/20 12:27	5

Client Sample ID: MTA-B15 (1)

Date Collected: 05/11/20 11:20

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-3

Matrix: Solid

Percent Solids: 83.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 12:52	5
Chrysene	ND		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 12:52	5
Benzo[a]pyrene	ND		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 12:52	5
Indeno[1,2,3-cd]pyrene	ND		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 12:52	5
Dibenz(a,h)anthracene	ND		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 12:52	5
Benzo[b]fluoranthene	ND		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 12:52	5
Benzo[k]fluoranthene	ND		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 12:52	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	89		57 - 120	05/11/20 18:25	05/13/20 12:52	5

Client Sample ID: MTA-SP-F

Date Collected: 05/11/20 12:20

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-4

Matrix: Solid

Percent Solids: 89.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	88		26	26	ug/Kg	☼	05/11/20 18:25	05/13/20 13:16	5
Chrysene	130		26	26	ug/Kg	☼	05/11/20 18:25	05/13/20 13:16	5
Benzo[a]pyrene	77		26	26	ug/Kg	☼	05/11/20 18:25	05/13/20 13:16	5
Indeno[1,2,3-cd]pyrene	72		26	26	ug/Kg	☼	05/11/20 18:25	05/13/20 13:16	5
Dibenz(a,h)anthracene	ND		26	26	ug/Kg	☼	05/11/20 18:25	05/13/20 13:16	5
Benzo[b]fluoranthene	160		26	26	ug/Kg	☼	05/11/20 18:25	05/13/20 13:16	5

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Client Sample ID: MTA-SP-F
Date Collected: 05/11/20 12:20
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-4
Matrix: Solid
Percent Solids: 89.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	44		26	26	ug/Kg	☼	05/11/20 18:25	05/13/20 13:16	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	102		57 - 120				05/11/20 18:25	05/13/20 13:16	5

Client Sample ID: MTA-SP-G
Date Collected: 05/11/20 12:30
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-5
Matrix: Solid
Percent Solids: 89.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	26		26	26	ug/Kg	☼	05/11/20 18:25	05/13/20 13:41	5
Chrysene	60		26	26	ug/Kg	☼	05/11/20 18:25	05/13/20 13:41	5
Benzo[a]pyrene	ND		26	26	ug/Kg	☼	05/11/20 18:25	05/13/20 13:41	5
Indeno[1,2,3-cd]pyrene	28		26	26	ug/Kg	☼	05/11/20 18:25	05/13/20 13:41	5
Dibenz(a,h)anthracene	ND		26	26	ug/Kg	☼	05/11/20 18:25	05/13/20 13:41	5
Benzo[b]fluoranthene	64		26	26	ug/Kg	☼	05/11/20 18:25	05/13/20 13:41	5
Benzo[k]fluoranthene	ND		26	26	ug/Kg	☼	05/11/20 18:25	05/13/20 13:41	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	99		57 - 120				05/11/20 18:25	05/13/20 13:41	5

Client Sample ID: MTA-SP-H
Date Collected: 05/11/20 12:43
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-6
Matrix: Solid
Percent Solids: 90.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	66		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 14:05	5
Chrysene	94		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 14:05	5
Benzo[a]pyrene	31		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 14:05	5
Indeno[1,2,3-cd]pyrene	ND		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 14:05	5
Dibenz(a,h)anthracene	ND		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 14:05	5
Benzo[b]fluoranthene	92		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 14:05	5
Benzo[k]fluoranthene	ND		27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 14:05	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	50	X	57 - 120				05/11/20 18:25	05/13/20 14:05	5

Client Sample ID: MTA-SP-I
Date Collected: 05/11/20 12:50
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-7
Matrix: Solid
Percent Solids: 89.2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		28	28	ug/Kg	☼	05/11/20 18:25	05/13/20 14:30	5
Chrysene	ND		28	28	ug/Kg	☼	05/11/20 18:25	05/13/20 14:30	5
Benzo[a]pyrene	ND		28	28	ug/Kg	☼	05/11/20 18:25	05/13/20 14:30	5
Indeno[1,2,3-cd]pyrene	ND		28	28	ug/Kg	☼	05/11/20 18:25	05/13/20 14:30	5
Dibenz(a,h)anthracene	ND		28	28	ug/Kg	☼	05/11/20 18:25	05/13/20 14:30	5
Benzo[b]fluoranthene	ND		28	28	ug/Kg	☼	05/11/20 18:25	05/13/20 14:30	5
Benzo[k]fluoranthene	ND		28	28	ug/Kg	☼	05/11/20 18:25	05/13/20 14:30	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	35	X	57 - 120				05/11/20 18:25	05/13/20 14:30	5

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Client Sample ID: MTA-SP-J
Date Collected: 05/11/20 12:58
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-8
Matrix: Solid
Percent Solids: 89.9

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND	F1	27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 14:55	5
Chrysene	28	F1	27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 14:55	5
Benzo[a]pyrene	ND	F1	27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 14:55	5
Indeno[1,2,3-cd]pyrene	ND	F1	27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 14:55	5
Dibenz(a,h)anthracene	ND	F1	27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 14:55	5
Benzo[b]fluoranthene	32	F1	27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 14:55	5
Benzo[k]fluoranthene	ND	F1	27	27	ug/Kg	☼	05/11/20 18:25	05/13/20 14:55	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	65		57 - 120				05/11/20 18:25	05/13/20 14:55	5

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: MTA-B13 (1)
Date Collected: 05/11/20 10:55
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-1
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.021	0.0079	mg/Kg	☼	05/12/20 09:48	05/13/20 00:48	1
PCB-1221	ND		0.021	0.0045	mg/Kg	☼	05/12/20 09:48	05/13/20 00:48	1
PCB-1232	ND		0.021	0.0052	mg/Kg	☼	05/12/20 09:48	05/13/20 00:48	1
PCB-1242	ND		0.021	0.0037	mg/Kg	☼	05/12/20 09:48	05/13/20 00:48	1
PCB-1248	ND		0.021	0.0031	mg/Kg	☼	05/12/20 09:48	05/13/20 00:48	1
PCB-1254	ND		0.021	0.0039	mg/Kg	☼	05/12/20 09:48	05/13/20 00:48	1
PCB-1260	ND		0.021	0.0079	mg/Kg	☼	05/12/20 09:48	05/13/20 00:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	103		39 - 142				05/12/20 09:48	05/13/20 00:48	1
Tetrachloro-m-xylene	92		35 - 129				05/12/20 09:48	05/13/20 00:48	1

Client Sample ID: MTA-B14 (1)
Date Collected: 05/11/20 11:12
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-2
Matrix: Solid
Percent Solids: 86.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.022	0.0082	mg/Kg	☼	05/12/20 09:48	05/13/20 01:06	1
PCB-1221	ND		0.022	0.0047	mg/Kg	☼	05/12/20 09:48	05/13/20 01:06	1
PCB-1232	ND		0.022	0.0055	mg/Kg	☼	05/12/20 09:48	05/13/20 01:06	1
PCB-1242	ND		0.022	0.0039	mg/Kg	☼	05/12/20 09:48	05/13/20 01:06	1
PCB-1248	ND		0.022	0.0032	mg/Kg	☼	05/12/20 09:48	05/13/20 01:06	1
PCB-1254	ND		0.022	0.0041	mg/Kg	☼	05/12/20 09:48	05/13/20 01:06	1
PCB-1260	ND		0.022	0.0082	mg/Kg	☼	05/12/20 09:48	05/13/20 01:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	82		39 - 142				05/12/20 09:48	05/13/20 01:06	1
Tetrachloro-m-xylene	85		35 - 129				05/12/20 09:48	05/13/20 01:06	1

Client Sample ID: MTA-B15 (1)
Date Collected: 05/11/20 11:20
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-3
Matrix: Solid
Percent Solids: 83.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.023	0.0085	mg/Kg	☼	05/12/20 09:48	05/13/20 01:24	1
PCB-1221	ND		0.023	0.0048	mg/Kg	☼	05/12/20 09:48	05/13/20 01:24	1
PCB-1232	ND		0.023	0.0056	mg/Kg	☼	05/12/20 09:48	05/13/20 01:24	1
PCB-1242	ND		0.023	0.0040	mg/Kg	☼	05/12/20 09:48	05/13/20 01:24	1
PCB-1248	ND		0.023	0.0033	mg/Kg	☼	05/12/20 09:48	05/13/20 01:24	1
PCB-1254	ND		0.023	0.0042	mg/Kg	☼	05/12/20 09:48	05/13/20 01:24	1
PCB-1260	ND		0.023	0.0085	mg/Kg	☼	05/12/20 09:48	05/13/20 01:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	85		39 - 142				05/12/20 09:48	05/13/20 01:24	1
Tetrachloro-m-xylene	77		35 - 129				05/12/20 09:48	05/13/20 01:24	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Client Sample ID: MTA-B13 (1)
Date Collected: 05/11/20 10:55
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-1
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO C10-C24	ND		53	53	mg/Kg	☼	05/11/20 18:06	05/12/20 20:12	1
Motor Oil (>C24-C36)	170		53	53	mg/Kg	☼	05/11/20 18:06	05/12/20 20:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150				05/11/20 18:06	05/12/20 20:12	1

Client Sample ID: MTA-B14 (1)
Date Collected: 05/11/20 11:12
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-2
Matrix: Solid
Percent Solids: 86.2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO C10-C24	ND		56	56	mg/Kg	☼	05/11/20 18:06	05/12/20 20:52	1
Motor Oil (>C24-C36)	220		56	56	mg/Kg	☼	05/11/20 18:06	05/12/20 20:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150				05/11/20 18:06	05/12/20 20:52	1

Client Sample ID: MTA-B15 (1)
Date Collected: 05/11/20 11:20
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-3
Matrix: Solid
Percent Solids: 83.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO C10-C24	ND		58	58	mg/Kg	☼	05/11/20 18:06	05/12/20 21:13	1
Motor Oil (>C24-C36)	120		58	58	mg/Kg	☼	05/11/20 18:06	05/12/20 21:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	74		50 - 150				05/11/20 18:06	05/12/20 21:13	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Method: 6010C - Metals (ICP)

Client Sample ID: MTA-B13 (1)
Date Collected: 05/11/20 10:55
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-1
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.3		2.1	2.1	mg/Kg	☼	05/12/20 08:44	05/13/20 12:35	1
Barium	86	F1	0.35	0.35	mg/Kg	☼	05/12/20 08:44	05/13/20 12:35	1
Cadmium	ND		0.70	0.70	mg/Kg	☼	05/12/20 08:44	05/13/20 12:35	1
Chromium	69		0.92	0.92	mg/Kg	☼	05/12/20 08:44	05/13/20 12:35	1
Lead	140		1.1	1.1	mg/Kg	☼	05/12/20 08:44	05/13/20 12:35	1
Selenium	ND		3.5	3.5	mg/Kg	☼	05/12/20 08:44	05/13/20 12:35	1
Silver	ND		1.8	1.8	mg/Kg	☼	05/12/20 08:44	05/13/20 12:35	1

Client Sample ID: MTA-B14 (1)
Date Collected: 05/11/20 11:12
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-2
Matrix: Solid
Percent Solids: 86.2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.4		2.4	2.4	mg/Kg	☼	05/12/20 08:44	05/13/20 13:09	1
Barium	93		0.40	0.40	mg/Kg	☼	05/12/20 08:44	05/13/20 13:09	1
Cadmium	ND		0.80	0.80	mg/Kg	☼	05/12/20 08:44	05/13/20 13:09	1
Chromium	94		1.0	1.0	mg/Kg	☼	05/12/20 08:44	05/13/20 13:09	1
Lead	170		1.2	1.2	mg/Kg	☼	05/12/20 08:44	05/13/20 13:09	1
Selenium	ND		4.0	4.0	mg/Kg	☼	05/12/20 08:44	05/13/20 13:09	1
Silver	ND		2.0	2.0	mg/Kg	☼	05/12/20 08:44	05/13/20 13:09	1

Client Sample ID: MTA-B15 (1)
Date Collected: 05/11/20 11:20
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-3
Matrix: Solid
Percent Solids: 83.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.1		2.4	2.4	mg/Kg	☼	05/12/20 08:44	05/13/20 13:13	1
Barium	95		0.41	0.41	mg/Kg	☼	05/12/20 08:44	05/13/20 13:13	1
Cadmium	ND		0.81	0.81	mg/Kg	☼	05/12/20 08:44	05/13/20 13:13	1
Chromium	95		1.1	1.1	mg/Kg	☼	05/12/20 08:44	05/13/20 13:13	1
Lead	62		1.2	1.2	mg/Kg	☼	05/12/20 08:44	05/13/20 13:13	1
Selenium	ND		4.1	4.1	mg/Kg	☼	05/12/20 08:44	05/13/20 13:13	1
Silver	ND		2.0	2.0	mg/Kg	☼	05/12/20 08:44	05/13/20 13:13	1

Client Sample ID: MTA-SP-F
Date Collected: 05/11/20 12:20
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-4
Matrix: Solid
Percent Solids: 89.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.2		2.3	2.3	mg/Kg	☼	05/12/20 08:44	05/13/20 13:17	1
Barium	55		0.38	0.38	mg/Kg	☼	05/12/20 08:44	05/13/20 13:17	1
Cadmium	ND		0.75	0.75	mg/Kg	☼	05/12/20 08:44	05/13/20 13:17	1
Chromium	52		0.98	0.98	mg/Kg	☼	05/12/20 08:44	05/13/20 13:17	1
Lead	150		1.1	1.1	mg/Kg	☼	05/12/20 08:44	05/13/20 13:17	1
Selenium	ND		3.8	3.8	mg/Kg	☼	05/12/20 08:44	05/13/20 13:17	1
Silver	ND		1.9	1.9	mg/Kg	☼	05/12/20 08:44	05/13/20 13:17	1

Client Sample ID: MTA-SP-G
Date Collected: 05/11/20 12:30
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-5
Matrix: Solid
Percent Solids: 89.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.0		2.0	2.0	mg/Kg	☼	05/12/20 08:44	05/13/20 13:21	1
Barium	69		0.33	0.33	mg/Kg	☼	05/12/20 08:44	05/13/20 13:21	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Method: 6010C - Metals (ICP) (Continued)

Client Sample ID: MTA-SP-G
Date Collected: 05/11/20 12:30
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-5
Matrix: Solid
Percent Solids: 89.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.65	0.65	mg/Kg	☼	05/12/20 08:44	05/13/20 13:21	1
Chromium	53		0.85	0.85	mg/Kg	☼	05/12/20 08:44	05/13/20 13:21	1
Lead	300		0.98	0.98	mg/Kg	☼	05/12/20 08:44	05/13/20 13:21	1
Selenium	ND		3.3	3.3	mg/Kg	☼	05/12/20 08:44	05/13/20 13:21	1
Silver	ND		1.6	1.6	mg/Kg	☼	05/12/20 08:44	05/13/20 13:21	1

Client Sample ID: MTA-SP-H
Date Collected: 05/11/20 12:43
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-6
Matrix: Solid
Percent Solids: 90.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.9		2.0	2.0	mg/Kg	☼	05/12/20 08:44	05/13/20 13:24	1
Barium	62		0.34	0.34	mg/Kg	☼	05/12/20 08:44	05/13/20 13:24	1
Cadmium	ND		0.67	0.67	mg/Kg	☼	05/12/20 08:44	05/13/20 13:24	1
Chromium	38		0.87	0.87	mg/Kg	☼	05/12/20 08:44	05/13/20 13:24	1
Lead	130		1.0	1.0	mg/Kg	☼	05/12/20 08:44	05/13/20 13:24	1
Selenium	ND		3.4	3.4	mg/Kg	☼	05/12/20 08:44	05/13/20 13:24	1
Silver	ND		1.7	1.7	mg/Kg	☼	05/12/20 08:44	05/13/20 13:24	1

Client Sample ID: MTA-SP-I
Date Collected: 05/11/20 12:50
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-7
Matrix: Solid
Percent Solids: 89.2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.7		2.1	2.1	mg/Kg	☼	05/12/20 08:44	05/13/20 13:28	1
Barium	75		0.34	0.34	mg/Kg	☼	05/12/20 08:44	05/13/20 13:28	1
Cadmium	ND		0.69	0.69	mg/Kg	☼	05/12/20 08:44	05/13/20 13:28	1
Chromium	44		0.90	0.90	mg/Kg	☼	05/12/20 08:44	05/13/20 13:28	1
Lead	210		1.0	1.0	mg/Kg	☼	05/12/20 08:44	05/13/20 13:28	1
Selenium	ND		3.4	3.4	mg/Kg	☼	05/12/20 08:44	05/13/20 13:28	1
Silver	ND		1.7	1.7	mg/Kg	☼	05/12/20 08:44	05/13/20 13:28	1

Client Sample ID: MTA-SP-J
Date Collected: 05/11/20 12:58
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-8
Matrix: Solid
Percent Solids: 89.9

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.2		2.1	2.1	mg/Kg	☼	05/12/20 08:44	05/13/20 13:31	1
Barium	56		0.34	0.34	mg/Kg	☼	05/12/20 08:44	05/13/20 13:31	1
Cadmium	ND		0.68	0.68	mg/Kg	☼	05/12/20 08:44	05/13/20 13:31	1
Chromium	41		0.89	0.89	mg/Kg	☼	05/12/20 08:44	05/13/20 13:31	1
Lead	110		1.0	1.0	mg/Kg	☼	05/12/20 08:44	05/13/20 13:31	1
Selenium	ND		3.4	3.4	mg/Kg	☼	05/12/20 08:44	05/13/20 13:31	1
Silver	ND		1.7	1.7	mg/Kg	☼	05/12/20 08:44	05/13/20 13:31	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: MTA-B13 (1)
Date Collected: 05/11/20 10:55
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-1
Matrix: Solid
Percent Solids: 87.8

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	F1 F2	0.027	0.027	mg/Kg	☼	05/12/20 07:38	05/12/20 11:57	1

Client Sample ID: MTA-B14 (1)
Date Collected: 05/11/20 11:12
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-2
Matrix: Solid
Percent Solids: 86.2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.027	0.027	mg/Kg	☼	05/12/20 07:38	05/12/20 12:11	1

Client Sample ID: MTA-B15 (1)
Date Collected: 05/11/20 11:20
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-3
Matrix: Solid
Percent Solids: 83.6

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.026	0.026	mg/Kg	☼	05/12/20 07:38	05/12/20 12:13	1

Client Sample ID: MTA-SP-F
Date Collected: 05/11/20 12:20
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-4
Matrix: Solid
Percent Solids: 89.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.074		0.028	0.028	mg/Kg	☼	05/12/20 07:38	05/12/20 12:15	1

Client Sample ID: MTA-SP-G
Date Collected: 05/11/20 12:30
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-5
Matrix: Solid
Percent Solids: 89.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.089		0.025	0.025	mg/Kg	☼	05/12/20 07:38	05/12/20 12:18	1

Client Sample ID: MTA-SP-H
Date Collected: 05/11/20 12:43
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-6
Matrix: Solid
Percent Solids: 90.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.056		0.026	0.026	mg/Kg	☼	05/12/20 07:38	05/12/20 12:20	1

Client Sample ID: MTA-SP-I
Date Collected: 05/11/20 12:50
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-7
Matrix: Solid
Percent Solids: 89.2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.070		0.025	0.025	mg/Kg	☼	05/12/20 07:38	05/12/20 12:22	1

Client Sample ID: MTA-SP-J
Date Collected: 05/11/20 12:58
Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-8
Matrix: Solid
Percent Solids: 89.9

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040		0.021	0.021	mg/Kg	☼	05/12/20 07:38	05/12/20 12:24	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 580-328086/1-A

Matrix: Solid

Analysis Batch: 328200

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 328086

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		5.0	5.0	ug/Kg		05/11/20 18:25	05/13/20 11:08	1
Chrysene	ND		5.0	5.0	ug/Kg		05/11/20 18:25	05/13/20 11:08	1
Benzo[a]pyrene	ND		5.0	5.0	ug/Kg		05/11/20 18:25	05/13/20 11:08	1
Indeno[1,2,3-cd]pyrene	ND		5.0	5.0	ug/Kg		05/11/20 18:25	05/13/20 11:08	1
Dibenz(a,h)anthracene	ND		5.0	5.0	ug/Kg		05/11/20 18:25	05/13/20 11:08	1
Benzo[b]fluoranthene	ND		5.0	5.0	ug/Kg		05/11/20 18:25	05/13/20 11:08	1
Benzo[k]fluoranthene	ND		5.0	5.0	ug/Kg		05/11/20 18:25	05/13/20 11:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	110		57 - 120	05/11/20 18:25	05/13/20 11:08	1

Lab Sample ID: LCS 580-328086/2-A

Matrix: Solid

Analysis Batch: 328200

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 328086

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzo[a]anthracene	1000	873		ug/Kg		87	66 - 120
Chrysene	1000	826		ug/Kg		83	63 - 120
Benzo[a]pyrene	1000	873		ug/Kg		87	72 - 124
Indeno[1,2,3-cd]pyrene	1000	899		ug/Kg		90	65 - 132
Dibenz(a,h)anthracene	1000	902		ug/Kg		90	70 - 133
Benzo[b]fluoranthene	1000	869		ug/Kg		87	63 - 132
Benzo[k]fluoranthene	1000	879		ug/Kg		88	63 - 131

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	105		57 - 120

Lab Sample ID: 580-94618-8 MS

Matrix: Solid

Analysis Batch: 328200

Client Sample ID: MTA-SP-J

Prep Type: Total/NA

Prep Batch: 328086

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Benzo[a]anthracene	ND	F1	1050	577	F1	ug/Kg	☼	55	66 - 120
Chrysene	28	F1	1050	600	F1	ug/Kg	☼	54	63 - 120
Benzo[a]pyrene	ND	F1	1050	494	F1	ug/Kg	☼	47	72 - 124
Indeno[1,2,3-cd]pyrene	ND	F1	1050	454	F1	ug/Kg	☼	43	65 - 132
Dibenz(a,h)anthracene	ND	F1	1050	415	F1	ug/Kg	☼	39	70 - 133
Benzo[b]fluoranthene	32	F1	1050	663	F1	ug/Kg	☼	60	63 - 132
Benzo[k]fluoranthene	ND	F1	1050	488	F1	ug/Kg	☼	46	63 - 131

Surrogate	MS %Recovery	MS Qualifier	Limits
Terphenyl-d14	84		57 - 120

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 580-94618-8 MSD

Matrix: Solid

Analysis Batch: 328200

Client Sample ID: MTA-SP-J

Prep Type: Total/NA

Prep Batch: 328086

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	ND	F1	1030	529	F1	ug/Kg	☼	51	66 - 120	9	14
Chrysene	28	F1	1030	541	F1	ug/Kg	☼	50	63 - 120	10	10
Benzo[a]pyrene	ND	F1	1030	482	F1	ug/Kg	☼	47	72 - 124	2	19
Indeno[1,2,3-cd]pyrene	ND	F1	1030	459	F1	ug/Kg	☼	45	65 - 132	1	15
Dibenz(a,h)anthracene	ND	F1	1030	411	F1	ug/Kg	☼	40	70 - 133	1	13
Benzo[b]fluoranthene	32	F1	1030	623	F1	ug/Kg	☼	57	63 - 132	6	25
Benzo[k]fluoranthene	ND	F1	1030	501	F1	ug/Kg	☼	49	63 - 131	3	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Terphenyl-d14	80		57 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 580-328124/1-A

Matrix: Solid

Analysis Batch: 328173

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 328124

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0074	mg/Kg		05/12/20 09:48	05/13/20 00:13	1
PCB-1221	ND		0.020	0.0042	mg/Kg		05/12/20 09:48	05/13/20 00:13	1
PCB-1232	ND		0.020	0.0049	mg/Kg		05/12/20 09:48	05/13/20 00:13	1
PCB-1242	ND		0.020	0.0035	mg/Kg		05/12/20 09:48	05/13/20 00:13	1
PCB-1248	ND		0.020	0.0029	mg/Kg		05/12/20 09:48	05/13/20 00:13	1
PCB-1254	ND		0.020	0.0037	mg/Kg		05/12/20 09:48	05/13/20 00:13	1
PCB-1260	ND		0.020	0.0074	mg/Kg		05/12/20 09:48	05/13/20 00:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	107		39 - 142	05/12/20 09:48	05/13/20 00:13	1
Tetrachloro-m-xylene	100		35 - 129	05/12/20 09:48	05/13/20 00:13	1

Lab Sample ID: LCS 580-328124/2-A

Matrix: Solid

Analysis Batch: 328173

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 328124

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.100	0.101		mg/Kg		101	41 - 138
PCB-1260	0.100	0.0931		mg/Kg		93	47 - 142

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	106		39 - 142
Tetrachloro-m-xylene	95		35 - 129

Lab Sample ID: 580-94618-3 MS

Matrix: Solid

Analysis Batch: 328173

Client Sample ID: MTA-B15 (1)

Prep Type: Total/NA

Prep Batch: 328124

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		0.116	0.0963		mg/Kg	☼	83	41 - 138

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 580-94618-3 MS

Matrix: Solid

Analysis Batch: 328173

Client Sample ID: MTA-B15 (1)

Prep Type: Total/NA

Prep Batch: 328124

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1260	ND		0.116	0.0960		mg/Kg	☼	83	47 - 142
Surrogate	MS %Recovery	MS Qualifier	Limits						
DCB Decachlorobiphenyl	90		39 - 142						
Tetrachloro-m-xylene	85		35 - 129						

Lab Sample ID: 580-94618-3 MSD

Matrix: Solid

Analysis Batch: 328173

Client Sample ID: MTA-B15 (1)

Prep Type: Total/NA

Prep Batch: 328124

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
PCB-1016	ND		0.109	0.0861		mg/Kg	☼	79	41 - 138	11	21
PCB-1260	ND		0.109	0.0794		mg/Kg	☼	73	47 - 142	10	19
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
DCB Decachlorobiphenyl	78		39 - 142								
Tetrachloro-m-xylene	76		35 - 129								

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-328085/1-A

Matrix: Solid

Analysis Batch: 328185

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 328085

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO C10-C24	ND		50	50	mg/Kg		05/11/20 18:06	05/12/20 19:12	1
Motor Oil (>C24-C36)	ND		50	50	mg/Kg		05/11/20 18:06	05/12/20 19:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	64		50 - 150				05/11/20 18:06	05/12/20 19:12	1

Lab Sample ID: LCS 580-328085/2-A

Matrix: Solid

Analysis Batch: 328185

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 328085

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO C10-C24	500	492		mg/Kg		98	70 - 125
Motor Oil (>C24-C36)	500	471		mg/Kg		94	70 - 129
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o-Terphenyl	79		50 - 150				

Lab Sample ID: LCSD 580-328085/3-A

Matrix: Solid

Analysis Batch: 328185

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 328085

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
DRO C10-C24	500	487		mg/Kg		97	70 - 125	1	16

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCSD 580-328085/3-A

Matrix: Solid

Analysis Batch: 328185

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 328085

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Motor Oil (>C24-C36)	500	473		mg/Kg		95	70 - 129	0	16
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o-Terphenyl	77		50 - 150						

Lab Sample ID: 580-94618-1 DU

Matrix: Solid

Analysis Batch: 328185

Client Sample ID: MTA-B13 (1)

Prep Type: Total/NA

Prep Batch: 328085

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
DRO C10-C24	ND		ND		mg/Kg	✱	NC	35
Motor Oil (>C24-C36)	170		159		mg/Kg	✱	8	35
Surrogate	DU %Recovery	DU Qualifier	Limits					
o-Terphenyl	79		50 - 150					

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 580-328112/13-A

Matrix: Solid

Analysis Batch: 328298

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 328112

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0	3.0	mg/Kg		05/12/20 08:44	05/13/20 12:26	1
Barium	ND		0.50	0.50	mg/Kg		05/12/20 08:44	05/13/20 12:26	1
Cadmium	ND		1.0	1.0	mg/Kg		05/12/20 08:44	05/13/20 12:26	1
Chromium	ND		1.3	1.3	mg/Kg		05/12/20 08:44	05/13/20 12:26	1
Lead	ND		1.5	1.5	mg/Kg		05/12/20 08:44	05/13/20 12:26	1
Selenium	ND		5.0	5.0	mg/Kg		05/12/20 08:44	05/13/20 12:26	1
Silver	ND		2.5	2.5	mg/Kg		05/12/20 08:44	05/13/20 12:26	1

Lab Sample ID: LCS 580-328112/14-A

Matrix: Solid

Analysis Batch: 328298

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 328112

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	48.5		mg/Kg		97	80 - 120
Barium	50.0	43.5		mg/Kg		87	80 - 120
Cadmium	50.0	50.1		mg/Kg		100	80 - 120
Chromium	50.0	49.2		mg/Kg		98	80 - 120
Lead	50.0	50.7		mg/Kg		101	80 - 120
Selenium	50.0	48.9		mg/Kg		98	80 - 120
Silver	50.0	49.6		mg/Kg		99	80 - 120

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSD 580-328112/15-A

Matrix: Solid

Analysis Batch: 328298

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 328112

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	50.0	48.7		mg/Kg		97	80 - 120	0	20
Barium	50.0	43.7		mg/Kg		87	80 - 120	1	20
Cadmium	50.0	50.2		mg/Kg		100	80 - 120	0	20
Chromium	50.0	49.5		mg/Kg		99	80 - 120	1	20
Lead	50.0	50.9		mg/Kg		102	80 - 120	0	20
Selenium	50.0	49.3		mg/Kg		99	80 - 120	1	20
Silver	50.0	49.3		mg/Kg		99	80 - 120	1	20

Lab Sample ID: 580-94618-1 MS

Matrix: Solid

Analysis Batch: 328298

Client Sample ID: MTA-B13 (1)

Prep Type: Total/NA

Prep Batch: 328112

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	7.3		31.3	36.9		mg/Kg	☼	95	80 - 120		
Barium	86	F1	31.3	98.1	F1	mg/Kg	☼	40	80 - 120		
Cadmium	ND		31.3	32.3		mg/Kg	☼	103	80 - 120		
Chromium	69		31.3	96.5		mg/Kg	☼	89	80 - 120		
Lead	140		31.3	158	4	mg/Kg	☼	72	80 - 120		
Selenium	ND		31.3	28.6		mg/Kg	☼	91	80 - 120		
Silver	ND		31.3	30.5		mg/Kg	☼	98	80 - 120		

Lab Sample ID: 580-94618-1 MSD

Matrix: Solid

Analysis Batch: 328298

Client Sample ID: MTA-B13 (1)

Prep Type: Total/NA

Prep Batch: 328112

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	7.3		30.9	35.9		mg/Kg	☼	93	80 - 120	3	20
Barium	86	F1	30.9	100	F1	mg/Kg	☼	48	80 - 120	2	20
Cadmium	ND		30.9	31.4		mg/Kg	☼	101	80 - 120	3	20
Chromium	69		30.9	98.4		mg/Kg	☼	96	80 - 120	2	20
Lead	140		30.9	183	4	mg/Kg	☼	153	80 - 120	15	20
Selenium	ND		30.9	27.0		mg/Kg	☼	87	80 - 120	6	20
Silver	ND		30.9	29.4		mg/Kg	☼	95	80 - 120	4	20

Lab Sample ID: 580-94618-1 DU

Matrix: Solid

Analysis Batch: 328298

Client Sample ID: MTA-B13 (1)

Prep Type: Total/NA

Prep Batch: 328112

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	7.3		8.66		mg/Kg	☼	18	20
Barium	86	F1	85.6		mg/Kg	☼	0.06	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Chromium	69		72.7		mg/Kg	☼	6	20
Lead	140		154		mg/Kg	☼	13	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Silver	ND		ND		mg/Kg	☼	NC	20

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 580-328109/17-A

Matrix: Solid

Analysis Batch: 328143

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 328109

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.030	0.030	mg/Kg		05/12/20 07:38	05/12/20 11:50	1

Lab Sample ID: LCS 580-328109/18-A

Matrix: Solid

Analysis Batch: 328143

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 328109

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.198		mg/Kg		119	80 - 120

Lab Sample ID: LCSD 580-328109/19-A

Matrix: Solid

Analysis Batch: 328143

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 328109

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Mercury	0.167	0.193		mg/Kg		116	80 - 120	3	20

Lab Sample ID: 580-94618-1 MS

Matrix: Solid

Analysis Batch: 328143

Client Sample ID: MTA-B13 (1)

Prep Type: Total/NA

Prep Batch: 328109

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.10	F1 F2	0.145	0.268		mg/Kg	☼	114	80 - 120

Lab Sample ID: 580-94618-1 MSD

Matrix: Solid

Analysis Batch: 328143

Client Sample ID: MTA-B13 (1)

Prep Type: Total/NA

Prep Batch: 328109

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Mercury	0.10	F1 F2	0.156	0.218	F1 F2	mg/Kg	☼	74	80 - 120	21	20

Lab Sample ID: 580-94618-1 DU

Matrix: Solid

Analysis Batch: 328143

Client Sample ID: MTA-B13 (1)

Prep Type: Total/NA

Prep Batch: 328109

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.10	F1 F2	0.0779	F5	mg/Kg	☼	27	20

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Client Sample ID: MTA-B13 (1)

Date Collected: 05/11/20 10:55

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	328084	05/11/20 16:58	JCM	TAL SEA

Client Sample ID: MTA-B13 (1)

Date Collected: 05/11/20 10:55

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-1

Matrix: Solid

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			328086	05/11/20 18:25	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		5	328200	05/13/20 11:58	JCM	TAL SEA
Total/NA	Prep	3546			328124	05/12/20 09:48	HBP	TAL SEA
Total/NA	Analysis	8082A		1	328173	05/13/20 00:48	T1W	TAL SEA
Total/NA	Prep	3546			328085	05/11/20 18:06	HBP	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	328185	05/12/20 20:12	T1W	TAL SEA
Total/NA	Prep	3050B			328112	05/12/20 08:44	A1B	TAL SEA
Total/NA	Analysis	6010C		1	328298	05/13/20 12:35	TMH	TAL SEA
Total/NA	Prep	7471A			328109	05/12/20 07:38	A1B	TAL SEA
Total/NA	Analysis	7471A		1	328143	05/12/20 11:57	A1B	TAL SEA

Client Sample ID: MTA-B14 (1)

Date Collected: 05/11/20 11:12

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	328084	05/11/20 16:58	JCM	TAL SEA

Client Sample ID: MTA-B14 (1)

Date Collected: 05/11/20 11:12

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-2

Matrix: Solid

Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			328086	05/11/20 18:25	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		5	328200	05/13/20 12:27	JCM	TAL SEA
Total/NA	Prep	3546			328124	05/12/20 09:48	HBP	TAL SEA
Total/NA	Analysis	8082A		1	328173	05/13/20 01:06	T1W	TAL SEA
Total/NA	Prep	3546			328085	05/11/20 18:06	HBP	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	328185	05/12/20 20:52	T1W	TAL SEA
Total/NA	Prep	3050B			328112	05/12/20 08:44	A1B	TAL SEA
Total/NA	Analysis	6010C		1	328298	05/13/20 13:09	TMH	TAL SEA
Total/NA	Prep	7471A			328109	05/12/20 07:38	A1B	TAL SEA
Total/NA	Analysis	7471A		1	328143	05/12/20 12:11	A1B	TAL SEA

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Client Sample ID: MTA-B15 (1)

Date Collected: 05/11/20 11:20

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	328084	05/11/20 16:58	JCM	TAL SEA

Client Sample ID: MTA-B15 (1)

Date Collected: 05/11/20 11:20

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-3

Matrix: Solid

Percent Solids: 83.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			328086	05/11/20 18:25	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		5	328200	05/13/20 12:52	JCM	TAL SEA
Total/NA	Prep	3546			328124	05/12/20 09:48	HBP	TAL SEA
Total/NA	Analysis	8082A		1	328173	05/13/20 01:24	T1W	TAL SEA
Total/NA	Prep	3546			328085	05/11/20 18:06	HBP	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	328185	05/12/20 21:13	T1W	TAL SEA
Total/NA	Prep	3050B			328112	05/12/20 08:44	A1B	TAL SEA
Total/NA	Analysis	6010C		1	328298	05/13/20 13:13	TMH	TAL SEA
Total/NA	Prep	7471A			328109	05/12/20 07:38	A1B	TAL SEA
Total/NA	Analysis	7471A		1	328143	05/12/20 12:13	A1B	TAL SEA

Client Sample ID: MTA-SP-F

Date Collected: 05/11/20 12:20

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	328084	05/11/20 16:58	JCM	TAL SEA

Client Sample ID: MTA-SP-F

Date Collected: 05/11/20 12:20

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-4

Matrix: Solid

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			328086	05/11/20 18:25	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		5	328200	05/13/20 13:16	JCM	TAL SEA
Total/NA	Prep	3050B			328112	05/12/20 08:44	A1B	TAL SEA
Total/NA	Analysis	6010C		1	328298	05/13/20 13:17	TMH	TAL SEA
Total/NA	Prep	7471A			328109	05/12/20 07:38	A1B	TAL SEA
Total/NA	Analysis	7471A		1	328143	05/12/20 12:15	A1B	TAL SEA

Client Sample ID: MTA-SP-G

Date Collected: 05/11/20 12:30

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	328084	05/11/20 16:58	JCM	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Client Sample ID: MTA-SP-G

Date Collected: 05/11/20 12:30

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-5

Matrix: Solid

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			328086	05/11/20 18:25	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		5	328200	05/13/20 13:41	JCM	TAL SEA
Total/NA	Prep	3050B			328112	05/12/20 08:44	A1B	TAL SEA
Total/NA	Analysis	6010C		1	328298	05/13/20 13:21	TMH	TAL SEA
Total/NA	Prep	7471A			328109	05/12/20 07:38	A1B	TAL SEA
Total/NA	Analysis	7471A		1	328143	05/12/20 12:18	A1B	TAL SEA

Client Sample ID: MTA-SP-H

Date Collected: 05/11/20 12:43

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	328084	05/11/20 16:58	JCM	TAL SEA

Client Sample ID: MTA-SP-H

Date Collected: 05/11/20 12:43

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-6

Matrix: Solid

Percent Solids: 90.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			328086	05/11/20 18:25	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		5	328200	05/13/20 14:05	JCM	TAL SEA
Total/NA	Prep	3050B			328112	05/12/20 08:44	A1B	TAL SEA
Total/NA	Analysis	6010C		1	328298	05/13/20 13:24	TMH	TAL SEA
Total/NA	Prep	7471A			328109	05/12/20 07:38	A1B	TAL SEA
Total/NA	Analysis	7471A		1	328143	05/12/20 12:20	A1B	TAL SEA

Client Sample ID: MTA-SP-I

Date Collected: 05/11/20 12:50

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	328084	05/11/20 16:58	JCM	TAL SEA

Client Sample ID: MTA-SP-I

Date Collected: 05/11/20 12:50

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-7

Matrix: Solid

Percent Solids: 89.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			328086	05/11/20 18:25	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		5	328200	05/13/20 14:30	JCM	TAL SEA
Total/NA	Prep	3050B			328112	05/12/20 08:44	A1B	TAL SEA
Total/NA	Analysis	6010C		1	328298	05/13/20 13:28	TMH	TAL SEA
Total/NA	Prep	7471A			328109	05/12/20 07:38	A1B	TAL SEA
Total/NA	Analysis	7471A		1	328143	05/12/20 12:22	A1B	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Client Sample ID: MTA-SP-J

Date Collected: 05/11/20 12:58

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	328084	05/11/20 16:58	JCM	TAL SEA

Client Sample ID: MTA-SP-J

Date Collected: 05/11/20 12:58

Date Received: 05/11/20 14:15

Lab Sample ID: 580-94618-8

Matrix: Solid

Percent Solids: 89.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			328086	05/11/20 18:25	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		5	328200	05/13/20 14:55	JCM	TAL SEA
Total/NA	Prep	3050B			328112	05/12/20 08:44	A1B	TAL SEA
Total/NA	Analysis	6010C		1	328298	05/13/20 13:31	TMH	TAL SEA
Total/NA	Prep	7471A			328109	05/12/20 07:38	A1B	TAL SEA
Total/NA	Analysis	7471A		1	328143	05/12/20 12:24	A1B	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94618-1

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-024	01-14-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-20-23
California	State	2901	11-05-20
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-06-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-20-00031	02-10-23
Washington	State	C553	02-18-21

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

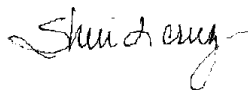
Laboratory Job ID: 580-94853-1

Client Project/Site: Mason Transit Authority
Revision: 1

For:

Landau & Associates, Inc.
2107 South C Street
Tacoma, Washington 98402

Attn: Sierra Mott



Authorized for release by:
5/27/2020 3:55:01 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Job ID: 580-94853-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-94853-1

Comments

Revised to report 6010D to RL only on 5/27/2020.

Receipt

The samples were received on 5/21/2020 4:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.5° C.

GC/MS Semi VOA

Method 8270D SIM: The following sample was diluted due to the nature of the sample matrix: MTA-B17 (3) (580-94853-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method 8082A: The following samples required a TBA clean-up to reduce matrix interferences caused by sulfur: MTA-B16 (1) (580-94853-1), MTA-B17 (3) (580-94853-2), MTA-B18 (3) (580-94853-3), MTA-B19 (3) (580-94853-4), MTA-B20 (3) (580-94853-5), MTA-B21 (3) (580-94853-6), (580-94853-A-6-D MS) and (580-94853-A-6-E MSD).

Method NWTPH-Dx: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MTA-B17 (3) (580-94853-2), MTA-B18 (3) (580-94853-3), MTA-B19 (3) (580-94853-4), MTA-B20 (3) (580-94853-5), MTA-B21 (3) (580-94853-6) and (580-94853-A-4-B DU).

Method NWTPH-Dx: The %D of surrogate (o-Terphenyl) for CCV associated with batch 580-328955 was outside the lower control limits. All associated sample surrogate fell within acceptance criteria; therefore, the data have been reported. (CCV 580-328955/14) and (CCVRT 580-328955/3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-94853-1	MTA-B16 (1)	Solid	05/21/20 14:20	05/21/20 16:40	
580-94853-2	MTA-B17 (3)	Solid	05/21/20 14:31	05/21/20 16:40	
580-94853-3	MTA-B18 (3)	Solid	05/21/20 14:45	05/21/20 16:40	
580-94853-4	MTA-B19 (3)	Solid	05/21/20 14:55	05/21/20 16:40	
580-94853-5	MTA-B20 (3)	Solid	05/21/20 15:16	05/21/20 16:40	
580-94853-6	MTA-B21 (3)	Solid	05/21/20 15:05	05/21/20 16:40	



Chain-of-Custody Record

☐ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☒ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080

Date 5/21/2020
 Page 1 of 1

Turnaround Time:
 Standard _____
 Accelerated 72 hr

Project Name Mason Transit Authority Project No. 1817001.010.012
 Project Location/Event Shelton, WA
 Sampler's Name Heather Rogers
 Project Contact Sarah Fees
 Send Results To S. Fees, D. Jorgensen

CPAH 82700 SIM
 PCBs 8082 A
 RCRA 8 Metals 60100
 NWTPH-Dx

Testing Parameters

94853

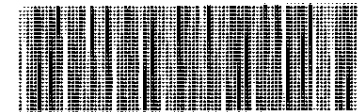
Special Handling Requirements:
 Shipment Method: drop off
 Stored on ice: ☒ Yes ☐ No

Sample I.D.	Date	Time	Matrix	No. of Containers
MTA - B16 (1)	5/21/20	1420	Soil	1
MTA - B17 (3)		1431		1
MTA - B18 (3)		1445		1
MTA - B19 (3)		1455		1
MTA - B20 (3)		1516		1
MTA - B21 (3)		1505		1

Observations/Comments

- Allow water samples to settle, collect aliquot from clear portion ☐
- NWTPH-Dx - Acid wash cleanup ☐
- Silica gel cleanup ☐
- Dissolved metal samples were field filtered

Other _____



530-94853 Chain of Custody

Therm. ID: IR-7 Cor: 4.5 Unc: 4.3
 Cooler Desc: Stra Blue FedEx: _____
 Packing: box UPS: _____
 Cust. Seal: Yes ☒ No ☐ Lab Cour: _____
 Blue Ice: ☒ Wet ☐ Dry ☐ None Other: Clida

Relinquished by

Signature [Signature]
 Printed Name Heather Rogers
 Company Landau Associates Inc
 Date 5/21/2020 Time 1640

Received by

Signature [Signature]
 Printed Name Blankinship
 Company TA-Sea
 Date 5/21/20 Time 1640

Relinquished by

Signature _____
 Printed Name _____
 Company _____
 Date _____ Time _____

Received by

Signature _____
 Printed Name _____
 Company _____
 Date _____ Time _____

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-94853-1

Login Number: 94853

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Client Sample ID: MTA-B16 (1)
Date Collected: 05/21/20 14:20
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-1
Matrix: Solid
Percent Solids: 94.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		4.9	4.9	ug/Kg	☼	05/22/20 09:27	05/23/20 15:48	1
Chrysene	6.7		4.9	4.9	ug/Kg	☼	05/22/20 09:27	05/23/20 15:48	1
Benzo[a]pyrene	ND		4.9	4.9	ug/Kg	☼	05/22/20 09:27	05/23/20 15:48	1
Indeno[1,2,3-cd]pyrene	ND		4.9	4.9	ug/Kg	☼	05/22/20 09:27	05/23/20 15:48	1
Dibenz(a,h)anthracene	ND		4.9	4.9	ug/Kg	☼	05/22/20 09:27	05/23/20 15:48	1
Benzo[b]fluoranthene	9.6		4.9	4.9	ug/Kg	☼	05/22/20 09:27	05/23/20 15:48	1
Benzo[k]fluoranthene	ND		4.9	4.9	ug/Kg	☼	05/22/20 09:27	05/23/20 15:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	100		57 - 120				05/22/20 09:27	05/23/20 15:48	1

Client Sample ID: MTA-B17 (3)
Date Collected: 05/21/20 14:31
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-2
Matrix: Solid
Percent Solids: 92.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		25	25	ug/Kg	☼	05/22/20 09:27	05/23/20 17:03	5
Chrysene	40		25	25	ug/Kg	☼	05/22/20 09:27	05/23/20 17:03	5
Benzo[a]pyrene	ND		25	25	ug/Kg	☼	05/22/20 09:27	05/23/20 17:03	5
Indeno[1,2,3-cd]pyrene	ND		25	25	ug/Kg	☼	05/22/20 09:27	05/23/20 17:03	5
Dibenz(a,h)anthracene	ND		25	25	ug/Kg	☼	05/22/20 09:27	05/23/20 17:03	5
Benzo[b]fluoranthene	42		25	25	ug/Kg	☼	05/22/20 09:27	05/23/20 17:03	5
Benzo[k]fluoranthene	ND		25	25	ug/Kg	☼	05/22/20 09:27	05/23/20 17:03	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	103		57 - 120				05/22/20 09:27	05/23/20 17:03	5

Client Sample ID: MTA-B18 (3)
Date Collected: 05/21/20 14:45
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-3
Matrix: Solid
Percent Solids: 92.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	34		5.2	5.2	ug/Kg	☼	05/22/20 09:27	05/23/20 17:28	1
Chrysene	43		5.2	5.2	ug/Kg	☼	05/22/20 09:27	05/23/20 17:28	1
Benzo[a]pyrene	27		5.2	5.2	ug/Kg	☼	05/22/20 09:27	05/23/20 17:28	1
Indeno[1,2,3-cd]pyrene	25		5.2	5.2	ug/Kg	☼	05/22/20 09:27	05/23/20 17:28	1
Dibenz(a,h)anthracene	5.9		5.2	5.2	ug/Kg	☼	05/22/20 09:27	05/23/20 17:28	1
Benzo[b]fluoranthene	43		5.2	5.2	ug/Kg	☼	05/22/20 09:27	05/23/20 17:28	1
Benzo[k]fluoranthene	16		5.2	5.2	ug/Kg	☼	05/22/20 09:27	05/23/20 17:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	98		57 - 120				05/22/20 09:27	05/23/20 17:28	1

Client Sample ID: MTA-B19 (3)
Date Collected: 05/21/20 14:55
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-4
Matrix: Solid
Percent Solids: 91.2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	49		5.2	5.2	ug/Kg	☼	05/22/20 09:27	05/23/20 17:53	1
Chrysene	72		5.2	5.2	ug/Kg	☼	05/22/20 09:27	05/23/20 17:53	1
Benzo[a]pyrene	37		5.2	5.2	ug/Kg	☼	05/22/20 09:27	05/23/20 17:53	1
Indeno[1,2,3-cd]pyrene	36		5.2	5.2	ug/Kg	☼	05/22/20 09:27	05/23/20 17:53	1
Dibenz(a,h)anthracene	8.3		5.2	5.2	ug/Kg	☼	05/22/20 09:27	05/23/20 17:53	1
Benzo[b]fluoranthene	76		5.2	5.2	ug/Kg	☼	05/22/20 09:27	05/23/20 17:53	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Client Sample ID: MTA-B19 (3)
Date Collected: 05/21/20 14:55
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-4
Matrix: Solid
Percent Solids: 91.2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	22		5.2	5.2	ug/Kg	☼	05/22/20 09:27	05/23/20 17:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	103		57 - 120	05/22/20 09:27	05/23/20 17:53	1

Client Sample ID: MTA-B20 (3)
Date Collected: 05/21/20 15:16
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-5
Matrix: Solid
Percent Solids: 91.0

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	26		5.1	5.1	ug/Kg	☼	05/22/20 09:27	05/23/20 18:18	1
Chrysene	33		5.1	5.1	ug/Kg	☼	05/22/20 09:27	05/23/20 18:18	1
Benzo[a]pyrene	17		5.1	5.1	ug/Kg	☼	05/22/20 09:27	05/23/20 18:18	1
Indeno[1,2,3-cd]pyrene	16		5.1	5.1	ug/Kg	☼	05/22/20 09:27	05/23/20 18:18	1
Dibenz(a,h)anthracene	ND		5.1	5.1	ug/Kg	☼	05/22/20 09:27	05/23/20 18:18	1
Benzo[b]fluoranthene	38		5.1	5.1	ug/Kg	☼	05/22/20 09:27	05/23/20 18:18	1
Benzo[k]fluoranthene	7.7		5.1	5.1	ug/Kg	☼	05/22/20 09:27	05/23/20 18:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	100		57 - 120	05/22/20 09:27	05/23/20 18:18	1

Client Sample ID: MTA-B21 (3)
Date Collected: 05/21/20 15:05
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-6
Matrix: Solid
Percent Solids: 90.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	11		5.3	5.3	ug/Kg	☼	05/22/20 09:27	05/23/20 18:43	1
Chrysene	19		5.3	5.3	ug/Kg	☼	05/22/20 09:27	05/23/20 18:43	1
Benzo[a]pyrene	7.6		5.3	5.3	ug/Kg	☼	05/22/20 09:27	05/23/20 18:43	1
Indeno[1,2,3-cd]pyrene	8.8		5.3	5.3	ug/Kg	☼	05/22/20 09:27	05/23/20 18:43	1
Dibenz(a,h)anthracene	ND		5.3	5.3	ug/Kg	☼	05/22/20 09:27	05/23/20 18:43	1
Benzo[b]fluoranthene	18		5.3	5.3	ug/Kg	☼	05/22/20 09:27	05/23/20 18:43	1
Benzo[k]fluoranthene	5.4		5.3	5.3	ug/Kg	☼	05/22/20 09:27	05/23/20 18:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	97		57 - 120	05/22/20 09:27	05/23/20 18:43	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: MTA-B16 (1)
Date Collected: 05/21/20 14:20
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-1
Matrix: Solid
Percent Solids: 94.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0075	mg/Kg	☼	05/22/20 09:17	05/23/20 14:48	1
PCB-1221	ND		0.020	0.0043	mg/Kg	☼	05/22/20 09:17	05/23/20 14:48	1
PCB-1232	ND		0.020	0.0050	mg/Kg	☼	05/22/20 09:17	05/23/20 14:48	1
PCB-1242	ND		0.020	0.0036	mg/Kg	☼	05/22/20 09:17	05/23/20 14:48	1
PCB-1248	ND		0.020	0.0030	mg/Kg	☼	05/22/20 09:17	05/23/20 14:48	1
PCB-1254	ND		0.020	0.0038	mg/Kg	☼	05/22/20 09:17	05/23/20 14:48	1
PCB-1260	ND		0.020	0.0075	mg/Kg	☼	05/22/20 09:17	05/23/20 14:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	114		39 - 142				05/22/20 09:17	05/23/20 14:48	1
Tetrachloro-m-xylene	94		35 - 129				05/22/20 09:17	05/23/20 14:48	1

Client Sample ID: MTA-B17 (3)
Date Collected: 05/21/20 14:31
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-2
Matrix: Solid
Percent Solids: 92.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.021	0.0079	mg/Kg	☼	05/22/20 09:17	05/23/20 15:06	1
PCB-1221	ND		0.021	0.0045	mg/Kg	☼	05/22/20 09:17	05/23/20 15:06	1
PCB-1232	ND		0.021	0.0053	mg/Kg	☼	05/22/20 09:17	05/23/20 15:06	1
PCB-1242	ND		0.021	0.0038	mg/Kg	☼	05/22/20 09:17	05/23/20 15:06	1
PCB-1248	ND		0.021	0.0031	mg/Kg	☼	05/22/20 09:17	05/23/20 15:06	1
PCB-1254	ND		0.021	0.0040	mg/Kg	☼	05/22/20 09:17	05/23/20 15:06	1
PCB-1260	ND		0.021	0.0079	mg/Kg	☼	05/22/20 09:17	05/23/20 15:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	105		39 - 142				05/22/20 09:17	05/23/20 15:06	1
Tetrachloro-m-xylene	93		35 - 129				05/22/20 09:17	05/23/20 15:06	1

Client Sample ID: MTA-B18 (3)
Date Collected: 05/21/20 14:45
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-3
Matrix: Solid
Percent Solids: 92.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.022	0.0080	mg/Kg	☼	05/22/20 09:17	05/23/20 15:24	1
PCB-1221	ND		0.022	0.0045	mg/Kg	☼	05/22/20 09:17	05/23/20 15:24	1
PCB-1232	ND		0.022	0.0053	mg/Kg	☼	05/22/20 09:17	05/23/20 15:24	1
PCB-1242	ND		0.022	0.0038	mg/Kg	☼	05/22/20 09:17	05/23/20 15:24	1
PCB-1248	ND		0.022	0.0031	mg/Kg	☼	05/22/20 09:17	05/23/20 15:24	1
PCB-1254	ND		0.022	0.0040	mg/Kg	☼	05/22/20 09:17	05/23/20 15:24	1
PCB-1260	ND		0.022	0.0080	mg/Kg	☼	05/22/20 09:17	05/23/20 15:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	114		39 - 142				05/22/20 09:17	05/23/20 15:24	1
Tetrachloro-m-xylene	96		35 - 129				05/22/20 09:17	05/23/20 15:24	1

Client Sample ID: MTA-B19 (3)
Date Collected: 05/21/20 14:55
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-4
Matrix: Solid
Percent Solids: 91.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.022	0.0080	mg/Kg	☼	05/22/20 09:17	05/23/20 15:41	1
PCB-1221	ND		0.022	0.0046	mg/Kg	☼	05/22/20 09:17	05/23/20 15:41	1
PCB-1232	ND		0.022	0.0053	mg/Kg	☼	05/22/20 09:17	05/23/20 15:41	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Client Sample ID: MTA-B19 (3)
Date Collected: 05/21/20 14:55
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-4
Matrix: Solid
Percent Solids: 91.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	ND		0.022	0.0038	mg/Kg	☼	05/22/20 09:17	05/23/20 15:41	1
PCB-1248	ND		0.022	0.0031	mg/Kg	☼	05/22/20 09:17	05/23/20 15:41	1
PCB-1254	ND		0.022	0.0040	mg/Kg	☼	05/22/20 09:17	05/23/20 15:41	1
PCB-1260	ND		0.022	0.0080	mg/Kg	☼	05/22/20 09:17	05/23/20 15:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	111		39 - 142				05/22/20 09:17	05/23/20 15:41	1
Tetrachloro-m-xylene	95		35 - 129				05/22/20 09:17	05/23/20 15:41	1

Client Sample ID: MTA-B20 (3)
Date Collected: 05/21/20 15:16
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-5
Matrix: Solid
Percent Solids: 91.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.022	0.0080	mg/Kg	☼	05/22/20 09:17	05/23/20 15:59	1
PCB-1221	ND		0.022	0.0045	mg/Kg	☼	05/22/20 09:17	05/23/20 15:59	1
PCB-1232	ND		0.022	0.0053	mg/Kg	☼	05/22/20 09:17	05/23/20 15:59	1
PCB-1242	ND		0.022	0.0038	mg/Kg	☼	05/22/20 09:17	05/23/20 15:59	1
PCB-1248	ND		0.022	0.0031	mg/Kg	☼	05/22/20 09:17	05/23/20 15:59	1
PCB-1254	ND		0.022	0.0040	mg/Kg	☼	05/22/20 09:17	05/23/20 15:59	1
PCB-1260	ND		0.022	0.0080	mg/Kg	☼	05/22/20 09:17	05/23/20 15:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	110		39 - 142				05/22/20 09:17	05/23/20 15:59	1
Tetrachloro-m-xylene	95		35 - 129				05/22/20 09:17	05/23/20 15:59	1

Client Sample ID: MTA-B21 (3)
Date Collected: 05/21/20 15:05
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-6
Matrix: Solid
Percent Solids: 90.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.021	0.0079	mg/Kg	☼	05/22/20 09:17	05/23/20 16:17	1
PCB-1221	ND		0.021	0.0045	mg/Kg	☼	05/22/20 09:17	05/23/20 16:17	1
PCB-1232	ND		0.021	0.0052	mg/Kg	☼	05/22/20 09:17	05/23/20 16:17	1
PCB-1242	ND		0.021	0.0037	mg/Kg	☼	05/22/20 09:17	05/23/20 16:17	1
PCB-1248	ND		0.021	0.0031	mg/Kg	☼	05/22/20 09:17	05/23/20 16:17	1
PCB-1254	ND		0.021	0.0039	mg/Kg	☼	05/22/20 09:17	05/23/20 16:17	1
PCB-1260	ND		0.021	0.0079	mg/Kg	☼	05/22/20 09:17	05/23/20 16:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	111		39 - 142				05/22/20 09:17	05/23/20 16:17	1
Tetrachloro-m-xylene	96		35 - 129				05/22/20 09:17	05/23/20 16:17	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Client Sample ID: MTA-B16 (1)
Date Collected: 05/21/20 14:20
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-1
Matrix: Solid
Percent Solids: 94.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO C10-C24	ND		52	52	mg/Kg	☼	05/22/20 08:56	05/22/20 22:04	1
Motor Oil (>C24-C36)	ND		52	52	mg/Kg	☼	05/22/20 08:56	05/22/20 22:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				05/22/20 08:56	05/22/20 22:04	1

Client Sample ID: MTA-B17 (3)
Date Collected: 05/21/20 14:31
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-2
Matrix: Solid
Percent Solids: 92.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO C10-C24	ND		51	51	mg/Kg	☼	05/22/20 08:56	05/22/20 22:25	1
Motor Oil (>C24-C36)	140		51	51	mg/Kg	☼	05/22/20 08:56	05/22/20 22:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				05/22/20 08:56	05/22/20 22:25	1

Client Sample ID: MTA-B18 (3)
Date Collected: 05/21/20 14:45
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-3
Matrix: Solid
Percent Solids: 92.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO C10-C24	ND		49	49	mg/Kg	☼	05/22/20 08:56	05/22/20 22:45	1
Motor Oil (>C24-C36)	54		49	49	mg/Kg	☼	05/22/20 08:56	05/22/20 22:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				05/22/20 08:56	05/22/20 22:45	1

Client Sample ID: MTA-B19 (3)
Date Collected: 05/21/20 14:55
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-4
Matrix: Solid
Percent Solids: 91.2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO C10-C24	ND		52	52	mg/Kg	☼	05/22/20 08:56	05/22/20 23:05	1
Motor Oil (>C24-C36)	170		52	52	mg/Kg	☼	05/22/20 08:56	05/22/20 23:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				05/22/20 08:56	05/22/20 23:05	1

Client Sample ID: MTA-B20 (3)
Date Collected: 05/21/20 15:16
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-5
Matrix: Solid
Percent Solids: 91.0

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO C10-C24	ND		51	51	mg/Kg	☼	05/22/20 08:56	05/22/20 23:45	1
Motor Oil (>C24-C36)	110		51	51	mg/Kg	☼	05/22/20 08:56	05/22/20 23:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				05/22/20 08:56	05/22/20 23:45	1

Client Sample ID: MTA-B21 (3)
Date Collected: 05/21/20 15:05
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-6
Matrix: Solid
Percent Solids: 90.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO C10-C24	ND		52	52	mg/Kg	☼	05/22/20 08:56	05/23/20 00:05	1
Motor Oil (>C24-C36)	97		52	52	mg/Kg	☼	05/22/20 08:56	05/23/20 00:05	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	<i>81</i>		<i>50 - 150</i>	<i>05/22/20 08:56</i>	<i>05/23/20 00:05</i>	<i>1</i>

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: 6010D - Metals (ICP)

Client Sample ID: MTA-B16 (1)
Date Collected: 05/21/20 14:20
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-1
Matrix: Solid
Percent Solids: 94.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		4.7	4.7	mg/Kg	☼	05/22/20 09:39	05/26/20 16:25	1
Barium	47		0.78	0.78	mg/Kg	☼	05/22/20 09:39	05/26/20 16:25	1
Cadmium	ND		1.6	1.6	mg/Kg	☼	05/22/20 09:39	05/26/20 16:25	1
Chromium	52		2.0	2.0	mg/Kg	☼	05/22/20 09:39	05/26/20 16:25	1
Lead	14	F2 F1	2.3	2.3	mg/Kg	☼	05/22/20 09:39	05/26/20 16:25	1
Selenium	ND		7.8	7.8	mg/Kg	☼	05/22/20 09:39	05/26/20 16:25	1
Silver	ND		3.9	3.9	mg/Kg	☼	05/22/20 09:39	05/26/20 16:25	1

Client Sample ID: MTA-B17 (3)
Date Collected: 05/21/20 14:31
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-2
Matrix: Solid
Percent Solids: 92.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		4.7	4.7	mg/Kg	☼	05/22/20 09:39	05/26/20 16:50	1
Barium	73		0.78	0.78	mg/Kg	☼	05/22/20 09:39	05/26/20 16:50	1
Cadmium	ND		1.6	1.6	mg/Kg	☼	05/22/20 09:39	05/26/20 16:50	1
Chromium	93		2.0	2.0	mg/Kg	☼	05/22/20 09:39	05/26/20 16:50	1
Lead	63		2.4	2.4	mg/Kg	☼	05/22/20 09:39	05/26/20 16:50	1
Selenium	ND		7.8	7.8	mg/Kg	☼	05/22/20 09:39	05/26/20 16:50	1
Silver	ND		3.9	3.9	mg/Kg	☼	05/22/20 09:39	05/26/20 16:50	1

Client Sample ID: MTA-B18 (3)
Date Collected: 05/21/20 14:45
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-3
Matrix: Solid
Percent Solids: 92.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		4.3	4.3	mg/Kg	☼	05/22/20 09:39	05/26/20 16:53	1
Barium	54		0.71	0.71	mg/Kg	☼	05/22/20 09:39	05/26/20 16:53	1
Cadmium	ND		1.4	1.4	mg/Kg	☼	05/22/20 09:39	05/26/20 16:53	1
Chromium	70		1.9	1.9	mg/Kg	☼	05/22/20 09:39	05/26/20 16:53	1
Lead	26		2.1	2.1	mg/Kg	☼	05/22/20 09:39	05/26/20 16:53	1
Selenium	ND		7.1	7.1	mg/Kg	☼	05/22/20 09:39	05/26/20 16:53	1
Silver	ND		3.6	3.6	mg/Kg	☼	05/22/20 09:39	05/26/20 16:53	1

Client Sample ID: MTA-B19 (3)
Date Collected: 05/21/20 14:55
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-4
Matrix: Solid
Percent Solids: 91.2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.1		4.7	4.7	mg/Kg	☼	05/22/20 09:39	05/26/20 16:56	1
Barium	80		0.78	0.78	mg/Kg	☼	05/22/20 09:39	05/26/20 16:56	1
Cadmium	ND		1.6	1.6	mg/Kg	☼	05/22/20 09:39	05/26/20 16:56	1
Chromium	82		2.0	2.0	mg/Kg	☼	05/22/20 09:39	05/26/20 16:56	1
Lead	56		2.4	2.4	mg/Kg	☼	05/22/20 09:39	05/26/20 16:56	1
Selenium	ND		7.8	7.8	mg/Kg	☼	05/22/20 09:39	05/26/20 16:56	1
Silver	ND		3.9	3.9	mg/Kg	☼	05/22/20 09:39	05/26/20 16:56	1

Client Sample ID: MTA-B20 (3)
Date Collected: 05/21/20 15:16
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-5
Matrix: Solid
Percent Solids: 91.0

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		4.7	4.7	mg/Kg	☼	05/22/20 09:39	05/26/20 16:59	1
Barium	78		0.78	0.78	mg/Kg	☼	05/22/20 09:39	05/26/20 16:59	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: 6010D - Metals (ICP) (Continued)

Client Sample ID: MTA-B20 (3)
Date Collected: 05/21/20 15:16
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-5
Matrix: Solid
Percent Solids: 91.0

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.6	1.6	mg/Kg	⚠	05/22/20 09:39	05/26/20 16:59	1
Chromium	94		2.0	2.0	mg/Kg	⚠	05/22/20 09:39	05/26/20 16:59	1
Lead	43		2.3	2.3	mg/Kg	⚠	05/22/20 09:39	05/26/20 16:59	1
Selenium	ND		7.8	7.8	mg/Kg	⚠	05/22/20 09:39	05/26/20 16:59	1
Silver	ND		3.9	3.9	mg/Kg	⚠	05/22/20 09:39	05/26/20 16:59	1

Client Sample ID: MTA-B21 (3)
Date Collected: 05/21/20 15:05
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-6
Matrix: Solid
Percent Solids: 90.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		4.6	4.6	mg/Kg	⚠	05/22/20 09:39	05/26/20 17:02	1
Barium	77		0.76	0.76	mg/Kg	⚠	05/22/20 09:39	05/26/20 17:02	1
Cadmium	ND		1.5	1.5	mg/Kg	⚠	05/22/20 09:39	05/26/20 17:02	1
Chromium	83		2.0	2.0	mg/Kg	⚠	05/22/20 09:39	05/26/20 17:02	1
Lead	35		2.3	2.3	mg/Kg	⚠	05/22/20 09:39	05/26/20 17:02	1
Selenium	ND		7.6	7.6	mg/Kg	⚠	05/22/20 09:39	05/26/20 17:02	1
Silver	ND		3.8	3.8	mg/Kg	⚠	05/22/20 09:39	05/26/20 17:02	1

Client Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: MTA-B16 (1)
Date Collected: 05/21/20 14:20
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-1
Matrix: Solid
Percent Solids: 94.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.025	0.025	mg/Kg	☼	05/22/20 09:44	05/22/20 12:31	1

Client Sample ID: MTA-B17 (3)
Date Collected: 05/21/20 14:31
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-2
Matrix: Solid
Percent Solids: 92.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.027	0.027	mg/Kg	☼	05/22/20 09:44	05/22/20 12:40	1

Client Sample ID: MTA-B18 (3)
Date Collected: 05/21/20 14:45
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-3
Matrix: Solid
Percent Solids: 92.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.025	0.025	mg/Kg	☼	05/22/20 09:44	05/22/20 12:47	1

Client Sample ID: MTA-B19 (3)
Date Collected: 05/21/20 14:55
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-4
Matrix: Solid
Percent Solids: 91.2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.025	0.025	mg/Kg	☼	05/22/20 09:44	05/22/20 12:50	1

Client Sample ID: MTA-B20 (3)
Date Collected: 05/21/20 15:16
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-5
Matrix: Solid
Percent Solids: 91.0

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.026	0.026	mg/Kg	☼	05/22/20 09:44	05/22/20 12:52	1

Client Sample ID: MTA-B21 (3)
Date Collected: 05/21/20 15:05
Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-6
Matrix: Solid
Percent Solids: 90.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.029	0.029	mg/Kg	☼	05/22/20 09:44	05/22/20 12:54	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 580-328885/1-A

Matrix: Solid

Analysis Batch: 328957

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 328885

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		5.0	5.0	ug/Kg		05/22/20 09:27	05/23/20 14:58	1
Chrysene	ND		5.0	5.0	ug/Kg		05/22/20 09:27	05/23/20 14:58	1
Benzo[a]pyrene	ND		5.0	5.0	ug/Kg		05/22/20 09:27	05/23/20 14:58	1
Indeno[1,2,3-cd]pyrene	ND		5.0	5.0	ug/Kg		05/22/20 09:27	05/23/20 14:58	1
Dibenz(a,h)anthracene	ND		5.0	5.0	ug/Kg		05/22/20 09:27	05/23/20 14:58	1
Benzo[b]fluoranthene	ND		5.0	5.0	ug/Kg		05/22/20 09:27	05/23/20 14:58	1
Benzo[k]fluoranthene	ND		5.0	5.0	ug/Kg		05/22/20 09:27	05/23/20 14:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	105		57 - 120	05/22/20 09:27	05/23/20 14:58	1

Lab Sample ID: LCS 580-328885/2-A

Matrix: Solid

Analysis Batch: 328957

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 328885

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzo[a]anthracene	1000	987		ug/Kg		99	66 - 120
Chrysene	1000	985		ug/Kg		99	63 - 120
Benzo[a]pyrene	1000	1010		ug/Kg		101	72 - 124
Indeno[1,2,3-cd]pyrene	1000	1030		ug/Kg		103	65 - 132
Dibenz(a,h)anthracene	1000	1100		ug/Kg		110	70 - 133
Benzo[b]fluoranthene	1000	1030		ug/Kg		103	63 - 132
Benzo[k]fluoranthene	1000	983		ug/Kg		98	63 - 131

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	99		57 - 120

Lab Sample ID: 580-94853-1 MS

Matrix: Solid

Analysis Batch: 328957

Client Sample ID: MTA-B16 (1)

Prep Type: Total/NA

Prep Batch: 328885

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Benzo[a]anthracene	ND		973	965		ug/Kg	☼	99	66 - 120
Chrysene	6.7		973	962		ug/Kg	☼	98	63 - 120
Benzo[a]pyrene	ND		973	976		ug/Kg	☼	100	72 - 124
Indeno[1,2,3-cd]pyrene	ND		973	1010		ug/Kg	☼	104	65 - 132
Dibenz(a,h)anthracene	ND		973	1070		ug/Kg	☼	110	70 - 133
Benzo[b]fluoranthene	9.6		973	1020		ug/Kg	☼	104	63 - 132
Benzo[k]fluoranthene	ND		973	944		ug/Kg	☼	97	63 - 131

Surrogate	MS %Recovery	MS Qualifier	Limits
Terphenyl-d14	97		57 - 120

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 580-94853-1 MSD

Matrix: Solid

Analysis Batch: 328957

Client Sample ID: MTA-B16 (1)

Prep Type: Total/NA

Prep Batch: 328885

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	ND		989	1030		ug/Kg	☼	104	66 - 120	7	14
Chrysene	6.7		989	1000		ug/Kg	☼	101	63 - 120	4	10
Benzo[a]pyrene	ND		989	1010		ug/Kg	☼	102	72 - 124	3	19
Indeno[1,2,3-cd]pyrene	ND		989	1020		ug/Kg	☼	103	65 - 132	1	15
Dibenz(a,h)anthracene	ND		989	1080		ug/Kg	☼	109	70 - 133	0	13
Benzo[b]fluoranthene	9.6		989	1030		ug/Kg	☼	104	63 - 132	2	25
Benzo[k]fluoranthene	ND		989	960		ug/Kg	☼	97	63 - 131	2	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Terphenyl-d14	97		57 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 580-328883/1-A

Matrix: Solid

Analysis Batch: 328968

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 328883

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0074	mg/Kg		05/22/20 09:17	05/23/20 14:13	1
PCB-1221	ND		0.020	0.0042	mg/Kg		05/22/20 09:17	05/23/20 14:13	1
PCB-1232	ND		0.020	0.0049	mg/Kg		05/22/20 09:17	05/23/20 14:13	1
PCB-1242	ND		0.020	0.0035	mg/Kg		05/22/20 09:17	05/23/20 14:13	1
PCB-1248	ND		0.020	0.0029	mg/Kg		05/22/20 09:17	05/23/20 14:13	1
PCB-1254	ND		0.020	0.0037	mg/Kg		05/22/20 09:17	05/23/20 14:13	1
PCB-1260	ND		0.020	0.0074	mg/Kg		05/22/20 09:17	05/23/20 14:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	116		39 - 142	05/22/20 09:17	05/23/20 14:13	1
Tetrachloro-m-xylene	94		35 - 129	05/22/20 09:17	05/23/20 14:13	1

Lab Sample ID: LCS 580-328883/2-A

Matrix: Solid

Analysis Batch: 328968

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 328883

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.100	0.105		mg/Kg		105	41 - 138
PCB-1260	0.100	0.107		mg/Kg		107	47 - 142

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	118		39 - 142
Tetrachloro-m-xylene	95		35 - 129

Lab Sample ID: 580-94853-6 MS

Matrix: Solid

Analysis Batch: 328968

Client Sample ID: MTA-B21 (3)

Prep Type: Total/NA

Prep Batch: 328883

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		0.110	0.108		mg/Kg	☼	99	41 - 138

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 580-94853-6 MS

Matrix: Solid

Analysis Batch: 328968

Client Sample ID: MTA-B21 (3)

Prep Type: Total/NA

Prep Batch: 328883

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1260	ND		0.110	0.115		mg/Kg	☼	105	47 - 142
Surrogate	MS %Recovery	MS Qualifier	Limits						
DCB Decachlorobiphenyl	110		39 - 142						
Tetrachloro-m-xylene	96		35 - 129						

Lab Sample ID: 580-94853-6 MSD

Matrix: Solid

Analysis Batch: 328968

Client Sample ID: MTA-B21 (3)

Prep Type: Total/NA

Prep Batch: 328883

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
PCB-1016	ND		0.106	0.109		mg/Kg	☼	103	41 - 138	1	21
PCB-1260	ND		0.106	0.112		mg/Kg	☼	106	47 - 142	2	19
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
DCB Decachlorobiphenyl	111		39 - 142								
Tetrachloro-m-xylene	96		35 - 129								

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-328880/1-A

Matrix: Solid

Analysis Batch: 328955

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 328880

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO C10-C24	ND		50	50	mg/Kg		05/22/20 08:56	05/22/20 21:04	1
Motor Oil (>C24-C36)	ND		50	50	mg/Kg		05/22/20 08:56	05/22/20 21:04	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	80		50 - 150				05/22/20 08:56	05/22/20 21:04	1

Lab Sample ID: LCS 580-328880/2-A

Matrix: Solid

Analysis Batch: 328955

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 328880

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO C10-C24	500	539		mg/Kg		108	70 - 125
Motor Oil (>C24-C36)	500	534		mg/Kg		107	70 - 129
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o-Terphenyl	83		50 - 150				

Lab Sample ID: LCSD 580-328880/3-A

Matrix: Solid

Analysis Batch: 328955

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 328880

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
DRO C10-C24	500	550		mg/Kg		110	70 - 125	2	16

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCSD 580-328880/3-A

Matrix: Solid

Analysis Batch: 328955

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 328880

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Motor Oil (>C24-C36)	500	553		mg/Kg		111	70 - 129	3	16
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o-Terphenyl	81		50 - 150						

Lab Sample ID: 580-94853-4 DU

Matrix: Solid

Analysis Batch: 328955

Client Sample ID: MTA-B19 (3)

Prep Type: Total/NA

Prep Batch: 328880

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
DRO C10-C24	ND		ND		mg/Kg	☼	NC	35
Motor Oil (>C24-C36)	170		130		mg/Kg	☼	24	35
Surrogate	%Recovery	DU Qualifier	DU Limits					
<i>o</i> -Terphenyl	78		50 - 150					

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 580-328886/10-A

Matrix: Solid

Analysis Batch: 329127

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 328886

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0	3.0	mg/Kg		05/22/20 09:39	05/26/20 16:16	1
Barium	ND		0.50	0.50	mg/Kg		05/22/20 09:39	05/26/20 16:16	1
Cadmium	ND		1.0	1.0	mg/Kg		05/22/20 09:39	05/26/20 16:16	1
Chromium	ND		1.3	1.3	mg/Kg		05/22/20 09:39	05/26/20 16:16	1
Lead	ND		1.5	1.5	mg/Kg		05/22/20 09:39	05/26/20 16:16	1
Selenium	ND		5.0	5.0	mg/Kg		05/22/20 09:39	05/26/20 16:16	1
Silver	ND		2.5	2.5	mg/Kg		05/22/20 09:39	05/26/20 16:16	1

Lab Sample ID: LCS 580-328886/11-A

Matrix: Solid

Analysis Batch: 329127

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 328886

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	44.8		mg/Kg		90	80 - 120
Barium	50.0	46.3		mg/Kg		93	80 - 120
Cadmium	50.0	46.0		mg/Kg		92	80 - 120
Chromium	50.0	49.2		mg/Kg		98	80 - 120
Lead	50.0	46.9		mg/Kg		94	80 - 120
Selenium	50.0	44.6		mg/Kg		89	80 - 120
Silver	50.0	46.9		mg/Kg		94	80 - 120

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCSD 580-328886/12-A

Matrix: Solid

Analysis Batch: 329127

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 328886

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	50.0	46.4		mg/Kg		93	80 - 120	3	20
Barium	50.0	48.4		mg/Kg		97	80 - 120	4	20
Cadmium	50.0	47.7		mg/Kg		95	80 - 120	4	20
Chromium	50.0	51.2		mg/Kg		102	80 - 120	4	20
Lead	50.0	48.5		mg/Kg		97	80 - 120	3	20
Selenium	50.0	46.5		mg/Kg		93	80 - 120	4	20
Silver	50.0	49.4		mg/Kg		99	80 - 120	5	20

Lab Sample ID: 580-94853-1 MS

Matrix: Solid

Analysis Batch: 329127

Client Sample ID: MTA-B16 (1)

Prep Type: Total/NA

Prep Batch: 328886

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		68.7	63.5		mg/Kg	✱	92	80 - 120		
Barium	47		68.7	127		mg/Kg	✱	116	80 - 120		
Cadmium	ND		68.7	68.3		mg/Kg	✱	99	80 - 120		
Chromium	52		68.7	122		mg/Kg	✱	101	80 - 120		
Lead	14	F2 F1	68.7	81.5		mg/Kg	✱	98	80 - 120		
Selenium	ND		68.7	63.1		mg/Kg	✱	92	80 - 120		
Silver	ND		68.7	66.2		mg/Kg	✱	96	80 - 120		

Lab Sample ID: 580-94853-1 MSD

Matrix: Solid

Analysis Batch: 329127

Client Sample ID: MTA-B16 (1)

Prep Type: Total/NA

Prep Batch: 328886

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		71.6	75.8		mg/Kg	✱	106	80 - 120	18	20
Barium	47		71.6	117		mg/Kg	✱	98	80 - 120	8	20
Cadmium	ND		71.6	68.7		mg/Kg	✱	96	80 - 120	1	20
Chromium	52		71.6	115		mg/Kg	✱	87	80 - 120	6	20
Lead	14	F2 F1	71.6	895	F1 F2	mg/Kg	✱	1231	80 - 120	167	20
Selenium	ND		71.6	64.1		mg/Kg	✱	90	80 - 120	2	20
Silver	ND		71.6	68.2		mg/Kg	✱	95	80 - 120	3	20

Lab Sample ID: 580-94853-1 DU

Matrix: Solid

Analysis Batch: 329127

Client Sample ID: MTA-B16 (1)

Prep Type: Total/NA

Prep Batch: 328886

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	ND		ND		mg/Kg	✱	NC	20
Barium	47		46.2		mg/Kg	✱	1	20
Cadmium	ND		ND		mg/Kg	✱	NC	20
Chromium	52		45.3		mg/Kg	✱	15	20
Lead	14	F2 F1	16.4		mg/Kg	✱	13	20
Selenium	ND		ND		mg/Kg	✱	NC	20
Silver	ND		ND		mg/Kg	✱	NC	20

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 580-328887/17-A

Matrix: Solid

Analysis Batch: 328934

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 328887

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.030	0.030	mg/Kg		05/22/20 09:44	05/22/20 12:20	1

Lab Sample ID: LCS 580-328887/18-A

Matrix: Solid

Analysis Batch: 328934

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 328887

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.156		mg/Kg		94	80 - 120

Lab Sample ID: LCSD 580-328887/19-A

Matrix: Solid

Analysis Batch: 328934

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 328887

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.167	0.156		mg/Kg		93	80 - 120	0	20

Lab Sample ID: 580-94853-1 MS

Matrix: Solid

Analysis Batch: 328934

Client Sample ID: MTA-B16 (1)

Prep Type: Total/NA

Prep Batch: 328887

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	ND		0.126	0.135		mg/Kg	☼	107	80 - 120

Lab Sample ID: 580-94853-1 MSD

Matrix: Solid

Analysis Batch: 328934

Client Sample ID: MTA-B16 (1)

Prep Type: Total/NA

Prep Batch: 328887

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	ND		0.149	0.150		mg/Kg	☼	101	80 - 120	11	20

Lab Sample ID: 580-94853-1 DU

Matrix: Solid

Analysis Batch: 328934

Client Sample ID: MTA-B16 (1)

Prep Type: Total/NA

Prep Batch: 328887

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	ND		ND		mg/Kg	☼	NC	20

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Client Sample ID: MTA-B16 (1)

Date Collected: 05/21/20 14:20

Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	328915	05/22/20 11:34	JKM	TAL SEA

Client Sample ID: MTA-B16 (1)

Date Collected: 05/21/20 14:20

Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-1

Matrix: Solid

Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			328885	05/22/20 09:27	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	328957	05/23/20 15:48	JKM	TAL SEA
Total/NA	Prep	3546			328883	05/22/20 09:17	ACV	TAL SEA
Total/NA	Analysis	8082A		1	328968	05/23/20 14:48	TL1	TAL SEA
Total/NA	Prep	3546			328880	05/22/20 08:56	HBP	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	328955	05/22/20 22:04	W1T	TAL SEA
Total/NA	Prep	3050B			328886	05/22/20 09:39	A1B	TAL SEA
Total/NA	Analysis	6010D		1	329127	05/26/20 16:25	TMH	TAL SEA
Total/NA	Prep	7471A			328887	05/22/20 09:44	A1B	TAL SEA
Total/NA	Analysis	7471A		1	328934	05/22/20 12:31	A1B	TAL SEA

Client Sample ID: MTA-B17 (3)

Date Collected: 05/21/20 14:31

Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	328915	05/22/20 11:34	JKM	TAL SEA

Client Sample ID: MTA-B17 (3)

Date Collected: 05/21/20 14:31

Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-2

Matrix: Solid

Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			328885	05/22/20 09:27	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		5	328957	05/23/20 17:03	JKM	TAL SEA
Total/NA	Prep	3546			328883	05/22/20 09:17	ACV	TAL SEA
Total/NA	Analysis	8082A		1	328968	05/23/20 15:06	TL1	TAL SEA
Total/NA	Prep	3546			328880	05/22/20 08:56	HBP	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	328955	05/22/20 22:25	W1T	TAL SEA
Total/NA	Prep	3050B			328886	05/22/20 09:39	A1B	TAL SEA
Total/NA	Analysis	6010D		1	329127	05/26/20 16:50	TMH	TAL SEA
Total/NA	Prep	7471A			328887	05/22/20 09:44	A1B	TAL SEA
Total/NA	Analysis	7471A		1	328934	05/22/20 12:40	A1B	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Client Sample ID: MTA-B18 (3)

Date Collected: 05/21/20 14:45

Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	328915	05/22/20 11:34	JKM	TAL SEA

Client Sample ID: MTA-B18 (3)

Date Collected: 05/21/20 14:45

Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-3

Matrix: Solid

Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			328885	05/22/20 09:27	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	328957	05/23/20 17:28	JKM	TAL SEA
Total/NA	Prep	3546			328883	05/22/20 09:17	ACV	TAL SEA
Total/NA	Analysis	8082A		1	328968	05/23/20 15:24	TL1	TAL SEA
Total/NA	Prep	3546			328880	05/22/20 08:56	HBP	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	328955	05/22/20 22:45	W1T	TAL SEA
Total/NA	Prep	3050B			328886	05/22/20 09:39	A1B	TAL SEA
Total/NA	Analysis	6010D		1	329127	05/26/20 16:53	TMH	TAL SEA
Total/NA	Prep	7471A			328887	05/22/20 09:44	A1B	TAL SEA
Total/NA	Analysis	7471A		1	328934	05/22/20 12:47	A1B	TAL SEA

Client Sample ID: MTA-B19 (3)

Date Collected: 05/21/20 14:55

Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	328915	05/22/20 11:34	JKM	TAL SEA

Client Sample ID: MTA-B19 (3)

Date Collected: 05/21/20 14:55

Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-4

Matrix: Solid

Percent Solids: 91.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			328885	05/22/20 09:27	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	328957	05/23/20 17:53	JKM	TAL SEA
Total/NA	Prep	3546			328883	05/22/20 09:17	ACV	TAL SEA
Total/NA	Analysis	8082A		1	328968	05/23/20 15:41	TL1	TAL SEA
Total/NA	Prep	3546			328880	05/22/20 08:56	HBP	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	328955	05/22/20 23:05	W1T	TAL SEA
Total/NA	Prep	3050B			328886	05/22/20 09:39	A1B	TAL SEA
Total/NA	Analysis	6010D		1	329127	05/26/20 16:56	TMH	TAL SEA
Total/NA	Prep	7471A			328887	05/22/20 09:44	A1B	TAL SEA
Total/NA	Analysis	7471A		1	328934	05/22/20 12:50	A1B	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Client Sample ID: MTA-B20 (3)

Date Collected: 05/21/20 15:16

Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	328915	05/22/20 11:34	JKM	TAL SEA

Client Sample ID: MTA-B20 (3)

Date Collected: 05/21/20 15:16

Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-5

Matrix: Solid

Percent Solids: 91.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			328885	05/22/20 09:27	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	328957	05/23/20 18:18	JKM	TAL SEA
Total/NA	Prep	3546			328883	05/22/20 09:17	ACV	TAL SEA
Total/NA	Analysis	8082A		1	328968	05/23/20 15:59	TL1	TAL SEA
Total/NA	Prep	3546			328880	05/22/20 08:56	HBP	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	328955	05/22/20 23:45	W1T	TAL SEA
Total/NA	Prep	3050B			328886	05/22/20 09:39	A1B	TAL SEA
Total/NA	Analysis	6010D		1	329127	05/26/20 16:59	TMH	TAL SEA
Total/NA	Prep	7471A			328887	05/22/20 09:44	A1B	TAL SEA
Total/NA	Analysis	7471A		1	328934	05/22/20 12:52	A1B	TAL SEA

Client Sample ID: MTA-B21 (3)

Date Collected: 05/21/20 15:05

Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	328915	05/22/20 11:34	JKM	TAL SEA

Client Sample ID: MTA-B21 (3)

Date Collected: 05/21/20 15:05

Date Received: 05/21/20 16:40

Lab Sample ID: 580-94853-6

Matrix: Solid

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			328885	05/22/20 09:27	HBP	TAL SEA
Total/NA	Analysis	8270D SIM		1	328957	05/23/20 18:43	JKM	TAL SEA
Total/NA	Prep	3546			328883	05/22/20 09:17	ACV	TAL SEA
Total/NA	Analysis	8082A		1	328968	05/23/20 16:17	TL1	TAL SEA
Total/NA	Prep	3546			328880	05/22/20 08:56	HBP	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	328955	05/23/20 00:05	W1T	TAL SEA
Total/NA	Prep	3050B			328886	05/22/20 09:39	A1B	TAL SEA
Total/NA	Analysis	6010D		1	329127	05/26/20 17:02	TMH	TAL SEA
Total/NA	Prep	7471A			328887	05/22/20 09:44	A1B	TAL SEA
Total/NA	Analysis	7471A		1	328934	05/22/20 12:54	A1B	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Eurofins TestAmerica, Seattle

Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Project/Site: Mason Transit Authority

Job ID: 580-94853-1

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-024	01-14-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-20-23
California	State	2901	11-05-20
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-06-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-20-00031	02-10-23
Washington	State	C553	02-18-21

Voluntary Cleanup Program Terrestrial Ecological Evaluation Form



Voluntary Cleanup Program

Washington State Department of Ecology Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation>.

Step 1: IDENTIFY HAZARDOUS WASTE SITE

Please identify below the hazardous waste site for which you are documenting an evaluation.

Facility/Site Name: Mason County Public Trans Site

Facility/Site Address: 536 W Railroad Ave., Shelton, Mason County, WA 98584

Facility/Site No: 69807

VCP Project No.: SW1634

Step 2: IDENTIFY EVALUATOR

Please identify below the person who conducted the evaluation and their contact information.

Name: Sarah Fees, LG

Title: Associate Geologist

Organization: Landau Associates, Inc.

Mailing address: 2107 South C Street

City: Tacoma

State: WA

Zip code: 98402

Phone: 253-284-4877

Fax: n/a

E-mail: sfees@landauinc.com

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

- ☒ Yes *If you answered "YES," then answer **Question 2**.*
- ☐ No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? Check all that apply. Then skip to **Step 4** of this form.

Point of Compliance: WAC 173-340-7491(1)(a)

- ☐ All soil contamination is, or will be,* at least 15 feet below the surface.
- ☐ All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

- ☒ All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

- ☒ There is less than 0.25 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.
- ☐ For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

- ☐ Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

± "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

"Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

- ☐ Yes *If you answered "YES," then answer **Question 2** below.*
- ☐ No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

- ☐ Yes *If you answered "YES," then answer **Question 3** below.*
- ☐ No *If you answered "NO," then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

- ☐ Yes *If you answered "YES," then answer **Question 4** below.*
- ☐ No *If you answered "NO," then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

- ☐ Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*
- ☐ Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? Check all that apply. Then skip to **Step 4** of this form.

Exposure Analysis: WAC 173-340-7492(2)(a)

- ☐ Area of soil contamination at the Site is not more than 350 square feet.
- ☐ Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

- ☐ No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

- ☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.
- ☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.
- ☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.
- ☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. See WAC 173-340-7493(1)(c).

1. Was there a problem? See WAC 173-340-7493(2).

- ☐ Yes *If you answered “YES,” then answer **Question 2** below.*
- ☐ No *If you answered “NO,” then identify the reason here and then skip to **Question 5** below:*
- ☐ No issues were identified during the problem formulation step.
- ☐ While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? See WAC 173-340-7493(3).

- ☐ Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*
- ☐ Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?
Check all that apply. See WAC 173-340-7493(3).

- ☐ Literature surveys.
- ☐ Soil bioassays.
- ☐ Wildlife exposure model.
- ☐ Biomarkers.
- ☐ Site-specific field studies.
- ☐ Weight of evidence.
- ☐ Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

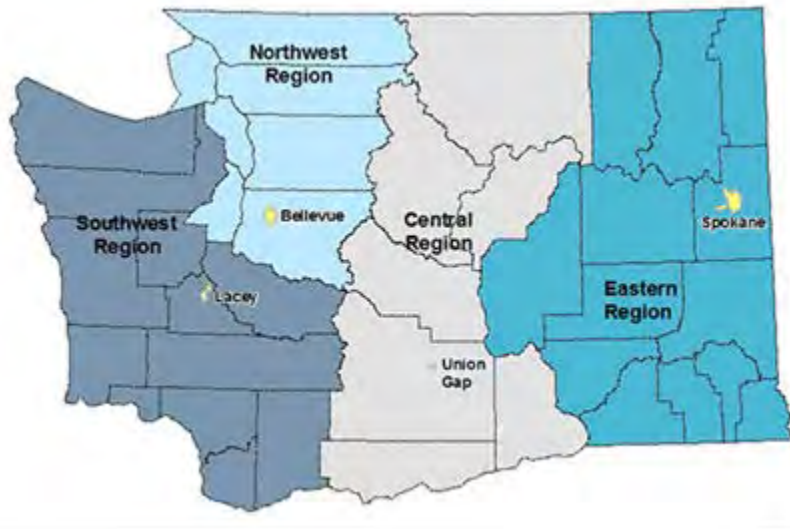
- ☐ Confirmed there was no problem.
- ☐ Confirmed there was a problem and established site-specific cleanup levels.

5. Have you already obtained Ecology’s approval of both your problem formulation and problem resolution steps?

- ☐ Yes If so, please identify the Ecology staff who approved those steps:
- ☐ No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.



Northwest Region: Attn: VCP Coordinator 3190 160 th Ave. SE Bellevue, WA 98008-5452	Central Region: Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009
Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775	Eastern Region: Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295

If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call 877-833-6341.