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

April 16, 2020

Prepared for

Mason Transit Authority
790 East Johns Prairie Road
Shelton, Washington

LANDAU ASSOCIATES

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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
JWM&A ..... Jerome W. Morrissette & 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
TEQ ..... toxic equivalency
VCP ..... Voluntary Cleanup Program
VOC ..... volatile organic compound

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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 remedial 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 investigation 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 cleanup action activities occurring 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 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. Morrissette & 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 competed 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 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 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 Voluntary Cleanup Program (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 contaminates and requested that soil and groundwater additionally 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 below ground surface (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 SITE INVESTIGATION

LAI completed additional investigation activities to address Ecology's identified data gaps and 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.

3.1 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.

3.1.1 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 0-3 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 samples showed field-evidence of contamination, therefore, no additional sampling was conducted.
- Soil samples were analyzed for gasoline-range organics (GRO), DRO, and ORO; RCRA 8 metals[1]; PCBs, select VOCs, and cPAHs.

[1] Arsenic, barium, cadmium, total chromium, lead, mercury, selenium, and silver.

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.

3.1.2 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,[2] 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.

3.2 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. Analytical results were submitted through Ecology's Environmental Information Management system (EIM; required for the VCP program) on September 30, 2019.

3.2.1 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.

3.2.2 Soil Analytical Results

Soil analytical results for the 14 samples (6 shallow soil samples (0 to 3 ft bgs) and 8 samples collected directly above the water table) were compared to MTCA Method A CULs.

[2] Field parameters include conductivity, dissolved oxygen, oxidation-reduction potential, pH, and temperature.

3.2.2.1 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 detected concentrations exceeded CULs.
- Metals detected above the laboratory reporting limit in shallow soil samples included arsenic, barium, cadmium, chromium, lead, and mercury. No detected concentrations exceeded 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 the trivalent chromium cleanup levels.
- 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 MTCA Method A CULs in one sample collected from 0-3 ft bgs at B-06 (1.9 mg/kg and 2.8 mg/kg, respectively). The Method A CUL for both benzo(a)pyrene and the cPAH TEQ is 0.1 mg/kg.

3.2.2.2 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.

3.2.3 Groundwater Analytical Results

Groundwater analytical results for the three groundwater samples 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 respective regulatory criteria.

3.2.4 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, hazardous substances including VOCs, were not found in soil or groundwater above MTCA Method A 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.

4.0 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 MTCA Method A CULs for benzo(a)pyrene and cPAH TEQ. Because Site redevelopment already included the removal of the top 3 ft of soil, the cleanup, consisting of removal and disposal of contaminated soil and excavation confirmation sampling, was integrated into Site redevelopment.

4.1 Soil Disposal Activities

Construction and cleanup activities at the Site began in March 2020. Construction activities are currently on hold due to the Washington State's "stay-at-home" policy relative to the coronavirus. Based on final redevelopment plans, contractors initially excavated the top 1-ft of soil throughout the Site. The contractors are currently in the process of excavated the remaining 1- to 3-ft of soil, where necessary, to install the permeable pavement parking features. The following soil sampling was conducted to characterize soils for disposal. All samples were analyzed by TestAmerica. Equipment decontamination procedures and data QA/QC procedures were followed.

4.1.1 Stockpile Sampling

During the remedial action, the top 1-ft of soil was excavated from the Site and stockpiled in five separate stockpiles, named SP-A through SP-E, totaling approximately 150-cubic yards. 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 five stockpiles (sample ID: MTA-SP). All composite soil samples were analyzed for cPAHs and RCRA 8 metals in order to supplement previously collected soil data and coordinate disposal.

Stockpile soil analytical results are presented in Table 3. Analytical results for the 5 individual stockpiles samples and the composite stockpile sample were compared to MTCA Method A CULs.

- Metals were detected in all samples above the laboratory reporting limit. No detected metal concentrations exceeded CULs except for lead, which was detected at a concentration of 260 mg/kg from SP-E; the MTCA Method A CUL is 250 mg/kg.
- cPAHs were detected above the laboratory reporting limit in all six samples. Benzo(a)pyrene and the cPAH TEQ concentrations exceeded CULs in one sample collected from SP-B (0.12 mg/kg and 0.176 mg/kg, respectively). The Method A CUL is 0.1 mg/kg for both benzo(a)pyrene and the cPAH TEQ.

4.1.2 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 treated as non-hazardous waste, and how much could be reused as clean soil. Four 2-ft deep test pits were excavated. 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 are presented in Table 1. Analytical results for the four test pit samples were also compared to MTCA Method A CULs. cPAHs were detected above the laboratory reporting limit in three of the four samples. No detected concentrations exceeded CULs.

4.1.3 Soil Disposal

The owner was advised to dispose of excess soil from the site at an appropriate permitted landfill facility. LAI can provide additional information about final disposal of soil at the Site to Ecology after the construction activities are completed.

4.1.4 Summary of Cleanup Activities

Contaminant concentrations in soil that was left in place after the initial 1-ft of excavation, were below CULs. Contaminants are associated with fill or surface soil concentrations, based on the 2019 investigation results described in Section 3.0. Therefore, since all concentrations of contamination remaining in place are below CULs, there is no expectation that contaminant concentrations would exceed CULs in deeper soil. In addition, soil down to 3-ft depth is planned to be excavated as part of redevelopment activities, removing other non-native soil. Once the additional soils are removed as part of the redevelopment activities, no additional soil sampling is warranted.

5.0 SUMMARY AND CONCLUSIONS

LAI completed a subsurface investigation in support of the proposed MTA Transit-Community Center (T-CC) parking lot redevelopment project, located at 536 Railroad Avenue in Shelton, Washington. The Site is enrolled in Ecology's VCP due to apparent releases of cPAHs and metals to soil. The source of the releases appear to be related to one or more historical site uses, 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 construction. 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.

Analytical results indicate that concentrations of GRO, DRO, ORO, RCRA 8 metals, PCBs, and VOCs are 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. Removal of cPAH contaminated soil was completed as part of Site redevelopment activities. Based on the completed cleanup action and analytical results, the Site no longer contains concentrations of cPAHs or other analytes above the MTCA Method A cleanup levels for unrestricted land use. On behalf of MTA, LAI requests that Ecology issue an NFA determination for the Site.

6.0 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.

7.0 REFERENCES

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.

JWM&A. 2012. Professional Services Report: PN 12101; Project Site at 536 and 530 West Railroad Avenue, Shelton, Washington; Tax Parcel Number 32019-65-03905 and 32019-65-03005; Phase II Soil Sampling - screening for pollutants. Prepared by Jerome W. Morrissette & Associates Inc. (JWM&A) for Robert Johnson. March 15.

MTC. 2017. Letter: Phase II Environmental Site Assessment; MTA Community Center - Proposed Parking Area; 536 West Railroad Avenue (Parcels #32019-65-03905, #32019-65-03005); Shelton, Washington. From Materials Testing & Consulting (MTA) to Danette Brannin, MTA. November 30.

Schasse, H.W., R.L. Logan, M. Polenz, and T.J. Walsh. 2003. Geologic Map of the Shelton 7.5-Minute Quadrangle, Mason and Thurston Counties, Washington. Washington Division of Geology and Earth Resources.

N

0 0.5 1

Miles

Data Source: Esri 2012

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

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Legend

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

0 30 60

Scale in Feet

Note

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

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Data Source: Google Earth Pro.

Mason Transit Authority
T-CC Parking Lot
Shelton, WA

Historical Site Plan

Figure
2

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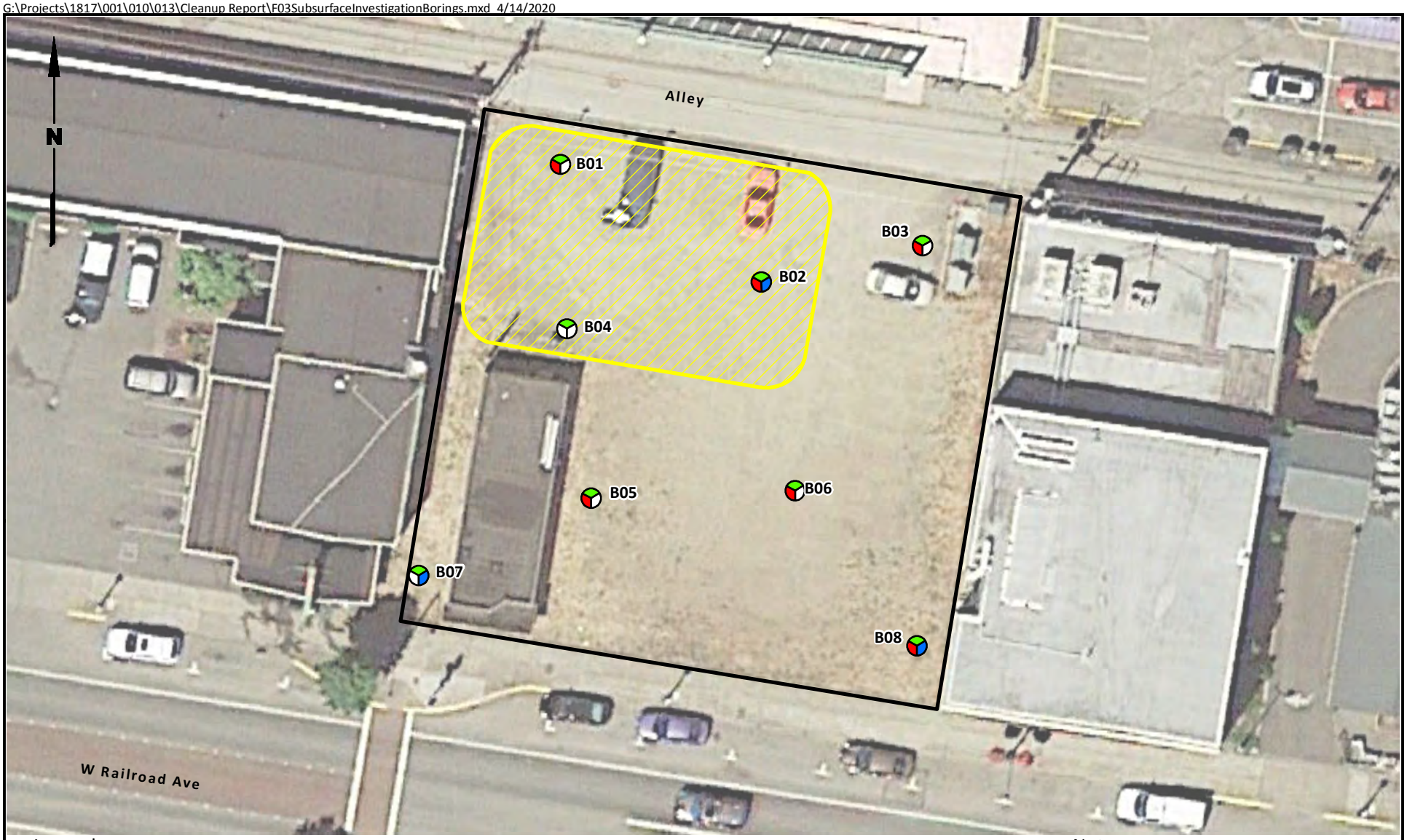

Legend

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

0 30 60

Scale in Feet

Data Source: Google Earth Pro.

Note

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

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Mason Transit Authority
T-CC Parking Lot
Shelton, WA

2019 Subsurface Investigation Boring Locations

Figure 3

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Legend

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

0 30 60

Scale in Feet

Note

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

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Data Source: Google Earth Pro.

Mason Transit Authority
T-CC Parking Lot
Shelton, WA

2020 Soil Disposal Characterization Sample Locations

Figure 4

Table 1
Soil Analytical Results
Mason Transit Authority
Shelton, Washington

Analyte	MTCA Method A CUL	Sample Location, Sample Depth Interval, Sample Date, Sample Type, Lab Sample ID													
		MTA-B01 0-3 ft 6/25/2019 N 580-87175-12	MTA-B01 7.3-8.3 ft 6/25/2019 N 580-87175-13	MTA-B02 0-3 ft 6/26/2019 N 580-87205-4	MTA-B02 5.5-6.5 ft 6/26/2019 N 580-87205-5	MTA-B03 0-3 ft 6/25/2019 N 580-87175-7	MTA-B03 7-10.5 ft 6/25/2019 N 580-87175-3	MTA-B04 10.5-11.5 ft 6/25/2019 N 580-87175-11	MTA-B05 0-2.4 ft 6/25/2019 N 580-87175-9	MTA-B05 8-9 ft 6/25/2019 N 580-87175-10	MTA-B06 0-3 ft 6/26/2019 N 580-87205-3	MTA-B06 7.5-8.5 ft 6/25/2019 N 580-87175-8	MTA-B07 6.5-7.5 ft 6/26/2019 N 580-87205-8	MTA-B08 0-2.5 ft 6/25/2019 N 580-87175-4	MTA-B08 7.5-8.5 ft 6/25/2019 N 580-87175-5
Petroleum Hydrocarbons (mg/kg; NWTPH-Gx, -Dx)															
Gasoline Range Organics	30/100	4.5 U	4.4 U	5.9 U	5.5 U	4.8 U	4.7 U	4.2 UJ	4.9 U	4.2 U	5.2 U	4.4 U	5.1 U	5.0 U	4.3 U
Diesel Range Organics	2,000	**10**	10 U	12 U	10 U	**13**	10 U	9.9 U	9.8 U	9.9 U	**45**	9.8 U	11 U	**87**	9.9 U
Oil Range Organics	2,000	**69**	25 U	29 U	25 U	**71**	25 U	25 U	**35**	25 U	**130**	25 U	27 U	**480**	25 U
Total Metals (mg/kg; SW-846 6020C, 7470A)															
Arsenic	20	2.2 U	2.1 U	2.8 U	2.3 U	**2.8**	2.3 U	2.2 U	2.2 U	**2.7**	2.4 U	**2.5**	2.5 U	2.2 U	2.2 U
Barium	N/A	**45**	**23**	**56**	**33**	**64**	**22**	**22**	**36**	**21**	**64**	**24**	**33**	**64**	**21**
Cadmium	2	**0.83**	0.71 U	**0.95**	0.77 U	**0.86**	**0.76**	**0.73**	**0.92**	0.68 U	0.81 U	0.81 U	0.82 U	**0.79**	0.74 U
Chromium, Total	2,000 (a)	**56**	**36**	**77**	**63**	**53**	**33**	**39**	**57**	**35**	**57**	**42**	**54 J**	**60**	**41**
Chromium, Hexavalent	19	--	--	5.9 U	--	--	--	--	--	--	--	--	--	5.1 UJ	--
Lead	250	**41**	**1.1**	**7.7**	**9.3**	**81**	**2.2**	1.1 U	**50**	**1.2**	**130**	1.2 U	1.2 U	**100**	1.1 U
Mercury	2	**0.028**	0.025 U	**0.037**	0.026 U	**0.034**	0.025 U	0.019 U	0.025 U	0.019 U	**0.044**	0.024 U	0.025 U	**0.040**	0.020 U
Selenium	N/A	3.7 U	3.5 U	4.7 U	3.8 U	3.6 U	3.8 U	3.6 U	3.6 U	3.4 U	4.1 U	4.1 U	4.1 U	3.6 U	3.7 U
Silver	N/A	1.9 U	1.8 U	2.4 U	1.9 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U	2.0 U	2.0 U	2.1 U	1.8 U	1.9 U
TCLP Metals (mg/L; SW-846 6020C)															
Lead	5	--	--	--	--	--	--	--	--	--	**0.033**	--	--	--	--
Polychlorinated Biphenyls (mg/kg; SW-846 8082A)															
Aroclor 1016	N/A	0.0096 U	0.01 U	0.012 U	0.011 U	0.01 U	0.0097 U	0.01 U	0.01 U	0.0096 U	0.01 U	0.0097 U	0.01 U	0.01 U	0.0098 U
Aroclor 1221	N/A	0.0096 U	0.01 U	0.012 U	0.011 U	0.01 U	0.0097 U	0.01 U	0.01 U	0.0096 U	0.01 U	0.0097 U	0.01 U	0.01 U	0.0098 U
Aroclor 1232	N/A	0.0096 U	0.01 U	0.012 U	0.011 U	0.01 U	0.0097 U	0.01 U	0.01 U	0.0096 U	0.01 U	0.0097 U	0.01 U	0.01 U	0.0098 U
Aroclor 1242	N/A	0.0096 U	0.01 U	0.012 U	0.011 U	0.01 U	0.0097 U	0.01 U	0.01 U	0.0096 U	0.01 U	0.0097 U	0.01 U	0.01 U	0.0098 U
Aroclor 1248	N/A	0.0096 U	0.01 U	0.012 U	0.011 U	0.01 U	0.0097 U	0.01 U	0.01 U	0.0096 U	0.01 U	0.0097 U	0.01 U	0.01 U	0.0098 U
Aroclor 1254	N/A	**0.01**	0.01 U	0.012 U	0.011 U	**0.021**	0.0097 U	0.01 U	0.01 U	0.0096 U	0.01 U	0.0097 U	0.01 U	0.01 U	0.0098 U
Aroclor 1260	N/A	0.0096 U	0.01 U	0.012 U	0.011 U	0.01 U	0.0097 U	0.01 U	0.01 U	0.0096 U	0.01 U	0.0097 U	0.01 U	0.01 U	0.0098 U
Total PCBs	1	**0.01**	ND	ND	ND	**0.021**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Select Volatile Organic Compounds (mg/kg; SW-846 8260C)															
1,2-Dibromoethane (EDB)	0.005	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	N/A	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	0.03	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	6	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	N/A	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	0.1	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	N/A	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	7	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	9	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	0.1	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	0.1	**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
mg/kg = milligrams 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 2
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 14 ft 6/26/2019 N 580-87205-6	MTA-B02 14 ft 6/26/2019 FD 580-87205-7	MTA-B07 14 ft 6/26/2019 N 580-87205-9	MTA-B08 14 ft 6/25/2019 N 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
EDB = ethylene dibromide
FD = field duplicate
ft = foot/feet
ID = Identification
µg/L = micrograms per liter
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

Table 3
Soil Disposal Anlaytical Results
Mason Transit Authority
Shelton, Washington

Analyte	MTCA Method A CUL	Location, Sample Date, Sample Type, Lab Sample ID									
		MTA-SP 3/16/2020 N 580-93490-5	MTA-SP-A 3/16/2020 N 580-93490-6	MTA-SP-B 3/16/2020 N 580-93490-7	MTA-SP-C 3/16/2020 N 580-93490-8	MTA-SP-D 3/16/2020 N 580-93490-9	MTA-SP-E 3/16/2020 N 580-93490-10	MTA-B09 1-3 ft 3/16/2020 N 580-93490-1	MTA-B10 1-3 ft 3/16/2020 N 580-93490-2	MTA-B11 1-3 ft 3/16/2020 N 580-93490-3	MTA-B12 1-3 ft 3/16/2020 N 580-93490-4
Semivolatile Organic Compounds (mg/kg; SW-846 8270D SIM)											
Benzo(a)anthracene	N/A	**0.015 J**	**0.04 J**	**0.1 J**	**0.014 J**	0.0057 UJ	0.0054 UJ	**0.016**	0.0061 U	**0.0079**	**0.052**
Benzo(a)pyrene	0.1	**0.014 J**	**0.048 J**	**0.12 J**	**0.016 J**	0.0057 UJ	0.0054 UJ	**0.0090**	0.0061 U	0.0059 U	**0.044**
Benzo(b)fluoranthene	N/A	**0.047 J**	**0.11 J**	**0.31 J**	**0.046 J**	0.0057 UJ	**0.012 J**	**0.043**	0.0061 U	**0.017**	**0.120**
Benzo(k)fluoranthene	N/A	**0.0092 J**	0.0052 UJ	0.0051 UJ	0.0054 UJ	0.0057 UJ	0.0054 UJ	**0.0094**	0.0061 U	0.0059 U	**0.026**
Chrysene	N/A	**0.037 J**	**0.07 J**	**0.15 J**	**0.031 J**	**0.0077 J**	**0.01 J**	**0.028**	0.0061 U	**0.013**	**0.063**
Dibenzo(a,h)anthracene	N/A	0.0053 UJ	**0.0064 J**	**0.028 J**	0.0054 UJ	0.0057 UJ	0.0054 UJ	0.0062 U	0.0061 U	0.0059 U	**0.011**
Indeno(1,2,3-cd)pyrene	N/A	**0.020 J**	**0.043 J**	**0.11 J**	**0.015 J**	0.0057 UJ	0.0054 UJ	**0.027**	0.0061 U	**0.011**	**0.059**
cPAH TEQ	0.1	**0.023 J**	**0.069 J**	**0.176 J**	**0.024 J**	**0.0001 J**	**0.0013 J**	**0.019**	ND	**0.004**	**0.071**
Total Metals (mg/kg; 6010C/7471A)											
Arsenic	20	**--**	**3.0**	**2.8**	**2.7**	**3.8**	**3.6**	--	--	--	--
Barium	N/A	**--**	**65**	**49**	**64**	**110**	**90**	--	--	--	--
Cadmium	2	**--**	0.85 U	0.68 U	0.82 U	**1.1**	0.99 U	--	--	--	--
Chromium	2,000 (a)	**--**	**42**	**39**	**46**	**77**	**54**	--	--	--	--
Lead	250	**--**	**160**	**120**	**230**	**250**	**260**	--	--	--	--
Mercury	2	**--**	**0.051**	**0.040**	**0.047**	**0.063**	**0.064**	--	--	--	--
Selenium	N/A	**--**	4.2 U	3.4 U	4.1 U	4.1 U	4.9 U	--	--	--	--
Silver	N/A	--	2.1 U	1.7 U	2.0 U	2.0 U	2.5 U	--	--	--	--

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.
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:
CUL = cleanup level
ID = Identification
mg/kg = milligrams per kilogram
MTCA = Model Toxics Control Act
N = primary sample
N/A = not applicable
-- = not analyzed
ND = not detected
SIM = selected ion monitoring
TEQ = toxicity equivalency quotient

APPENDIX A

Boring Logs

Soil Classification System

MAJOR DIVISIONS			GRAPHIC SYMBOL	USCS LETTER SYMBOL[1]	TYPICAL DESCRIPTIONS [2][3]
COARSE-GRAINED SOIL (More than 50% of material is larger than No. 200 sieve size)	GRAVEL AND GRAVELLY SOIL (More than 50% of coarse fraction retained on No. 4 sieve)	CLEAN GRAVEL (Little or no fines)		**GW**	Well-graded gravel; gravel/sand mixture(s); little or no fines
				GP	Poorly graded gravel; gravel/sand mixture(s); little or no fines
		GRAVEL WITH FINES (Appreciable amount of fines)		**GM**	Silty gravel; gravel/sand/silt mixture(s)
				GC	Clayey gravel; gravel/sand/clay mixture(s)
	SAND AND SANDY SOIL (More than 50% of coarse fraction passed through No. 4 sieve)	CLEAN SAND (Little or no fines)		**SW**	Well-graded sand; gravelly sand; little or no fines
				SP	Poorly graded sand; gravelly sand; little or no fines
		SAND WITH FINES (Appreciable amount of fines)		**SM**	Silty sand; sand/silt mixture(s)
				SC	Clayey sand; sand/clay mixture(s)
FINE-GRAINED SOIL (More than 50% of material is smaller than No. 200 sieve size)	SILT AND CLAY (Liquid limit less than 50)			**ML**	Inorganic silt and very fine sand; rock flour; silty or clayey fine sand or clayey silt with slight plasticity
				CL	Inorganic clay of low to medium plasticity; gravelly clay; sandy clay; silty clay; lean clay
				OL	Organic silt; organic, silty clay of low plasticity
	SILT AND CLAY (Liquid limit greater than 50)			**MH**	Inorganic silt; micaceous or diatomaceous fine sand
				CH	Inorganic clay of high plasticity; fat clay
				OH	Organic clay of medium to high plasticity; organic silt
	HIGHLY ORGANIC SOIL			**PT**	Peat; humus; swamp soil with high organic content

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

NOTES:

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:

Primary Constituent:	> 50% - "GRAVEL," "SAND," "SILT," "CLAY," etc.
Secondary Constituents:	> 30% and ≤ 50% - "very gravelly," "very sandy," "very silty," etc.
	> 15% and ≤ 30% - "gravelly," "sandy," "silty," etc.
Additional Constituents:	> 5% and ≤ 15% - "with gravel," "with sand," "with silt," etc.
	≤ 5% - "trace gravel," "trace sand," "trace silt," etc., or not noted.

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

Soil Classification System and Key

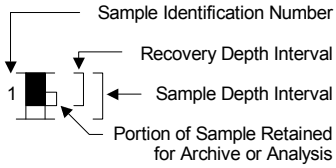
Figure A-1
(1 of 2)

Drilling and Sampling Key

SAMPLER TYPE

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

SAMPLE NUMBER & INTERVAL



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

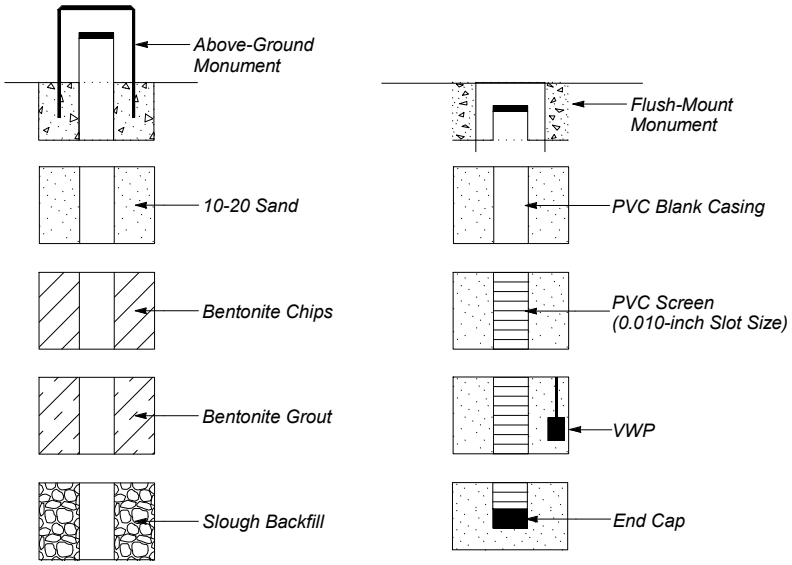
Groundwater

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

Soil Classification System and Key

Figure A-1 (2 of 2)

B01

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	PID (ppm)	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft): Not measured Drilled By: ESN Northwest	Water Level
0						GP-GM	Gray, sandy, fine to medium GRAVEL with silt; no odor, no sheen (medium dense, dry) **(FILL)**	
2		d3				SM	Red-brown, silty, fine SAND; no odor, no sheen (medium dense, damp) **(VASHON RECESSIONAL OUTWASH)**	
4				0		GP-GM	Brown, sandy, fine to coarse GRAVEL with silt; no odor, no sheen (medium dense, damp)	
6		d3		0			**Soil Sample: MTA-B01(7.3-8.3)-20190625 @ 7.3 to 8.3 ft bgs**	
8								
10								▽ ATD
12		d3						
14								
16								
18								
20								

Boring Completed 06/25/19
Total Depth of Boring = 15.0 ft.

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.
4. Water level shown for this boring is an estimate.

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

LANDAU ASSOCIATES

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

Log of Boring B01

Figure A-2

B02

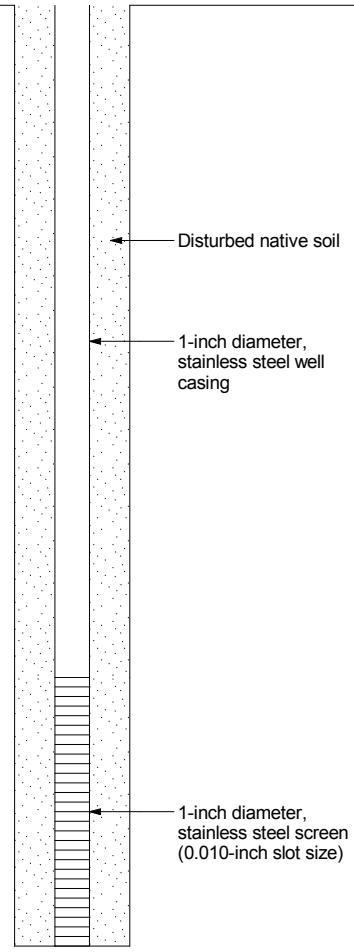
SAMPLE DATA | **SOIL PROFILE** | **GROUNDWATER**

Drilling Method: Geoprobe™
Ground Elevation (ft): Not measured
Drilled By: ESN Northwest

Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	PID (ppm)	Graphic Symbol	USCS Symbol	Soil Description
0						GP-GM	Gray, sandy, fine to coarse GRAVEL with silt; no odor, no sheen (medium dense, damp)
						SM	**(FILL)**
2		d3		0			Red-brown, very silty, fine SAND with medium to coarse sand and fine gravel; no odor, no sheen (medium dense, damp)
							(VASHON RECESSIONAL OUTWASH)
						GP	**Soil Sample: MTA-B02(0-3)-20190626 @ 0 to 3 ft bgs**
4							Gray, sandy, fine to coarse GRAVEL; no odor, no sheen (medium dense, damp)
				0			
6		d3					**Soil Sample: MTA-B02(5.5-6.5)-20190626 @ 5.5 to 6.5 ft bgs**
8							
10						GP-GM / SM	Brown, very sandy, GRAVEL with silt; no odor, no sheen (medium dense, wet)
		d3					Brown, silty, fine to medium SAND; no odor, no sheen (medium dense, wet)
12							
							Groundwater Sample: MTA-B02-14-20190626 screened @ 10 to 14 ft bgs
14							
16							
18							
20							

Water Level: ATD

Temporary Well Detail



Boring Completed 06/26/19
Total Depth of Boring = 15.0 ft.

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 7/23/19 N:\PROJECTS\1817001.010 MTA.GPJ WELL LOG

LANDAU ASSOCIATES

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

Log of Temporary Well B02

Figure A-3

B03

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	PID (ppm)	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft): Not measured Drilled By: ESN Northwest	Water Level
0						GP-GM	Brown, sandy, fine to coarse GRAVEL with silt; no odor, no sheen (medium dense, damp)	
							(FILL?)	
2		d3		0			**Soil Sample: MTA-B03(0-3)-20190625 @ 0 to 3 ft bgs**	
4								
6		d3		0			**Soil Sample: MTA-B03(7-10.5)-20190625 @ 7 to 10.5 ft bgs**	
8								
10								▽ ATD
						GP-GM	Red-brown, very sandy, fine to coarse GRAVEL with silt; no odor, no sheen (medium dense, wet)	
		d3				SM	**(VASHON RECESSIONAL OUTWASH)**	
12							Red-brown, silty, fine SAND; no odor, no sheen (medium dense, wet)	
14								
16								
18								
20								

Boring Completed 06/25/19
Total Depth of Boring = 15.0 ft.

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 SOIL BORING LOG

LANDAU ASSOCIATES

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

Log of Boring B03

Figure
A-4

B04

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	PID (ppm)	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft): Not measured Drilled By: ESN Northwest	Water Level
0						GP-GM	Gray, sandy, fine to medium GRAVEL with silt; no odor, no sheen (medium dense, damp)	
						SM	**(FILL)**	
2		d3		0			Red-brown, silty, fine SAND; no odor, no sheen (medium dense, damp) **(VASHON RECESSIONAL OUTWASH)**	
						SM	- grades to with gravel Red-brown, silty, fine to medium SAND; no odor, no sheen (medium dense, damp)	
4								
						GP-GM	Gray, sandy, fine to coarse GRAVEL with silt; no odor, no sheen (medium dense, damp)	
6				0		GP-GM	Brown, sandy, fine GRAVEL with silt; no odor, no sheen (medium dense, damp)	
		d3						
8								
10							- grades to fine to coarse gravel	
		d3					**Soil Sample: MTA-B04(10.5-11.5)-20190625 @ 10.5 to 11.5 ft bgs**	▽ ATD
12							- grades to wet	
14								
16								
18								
20								

Boring Completed 06/25/19
Total Depth of Boring = 15.0 ft.

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

LANDAU ASSOCIATES

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

Log of Boring B04

Figure A-5

B05

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	PID (ppm)	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft): Not measured Drilled By: ESN Northwest	Water Level
0		d3		0		GP-GM	Brown, fine to coarse GRAVEL with sand and silt; no odor, no sheen (medium dense, damp) **(FILL?)**	
2								
4								
6		d3						
8				0			**Soil Sample: MTA-B05(8-9)-20190625 @ 8 to 9 ft bgs**	
10		d3				SP-SM	Red-brown, fine to coarse SAND with abundant fine to coarse gravel and silt; no odor, no sheen (medium dense, wet) **(VASHON RECESSIONAL OUTWASH)**	▽ ATD
12								
14								
16								
18								
20								

Boring Completed 06/25/19
Total Depth of Boring = 15.0 ft.

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 SOIL BORING LOG

LANDAU ASSOCIATES

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

Log of Boring B05

Figure A-6

B06

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	PID (ppm)	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft): Not measured Drilled By: ESN Northwest	Water Level
0						GP-GM	Gray, sandy, fine to coarse GRAVEL with silt; no odor, no sheen (medium dense, dry) **(FILL)**	
2		d3		0		SM	Red-brown, very silty, fine SAND with medium to coarse sand and fine gravel; no odor, no sheen (medium dense, damp) **(VASHON RECESSIONAL OUTWASH)**	
							Soil Sample: MTA-B06(0-3)-20190626 @ 0 to 3 ft bgs	
4						GP-GM	Gray, sandy, fine to coarse GRAVEL with silt (medium dense, damp)	
6		d3		0				
8							**Soil Sample: MTA-B06(7.5-8.5)-20190625 @ 7.5 to 8.5 ft bgs**	
10								▽ ATD
						SP-SM	Brown, fine to coarse SAND with abundant gravel and silt; no odor, no sheen (medium dense, wet)	
12		d3				SP-SM	Red-brown, fine to medium SAND with silt; no odor, no sheen (medium dense, wet)	
14								
16								
18								
20								

Boring Completed 06/25/19
Total Depth of Boring = 15.0 ft.

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

LANDAU ASSOCIATES

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

Log of Boring B06

Figure A-7

B07

SAMPLE DATA | **SOIL PROFILE** | **GROUNDWATER**

Drilling Method: Geoprobe™
Ground Elevation (ft): Not measured
Drilled By: ESN Northwest

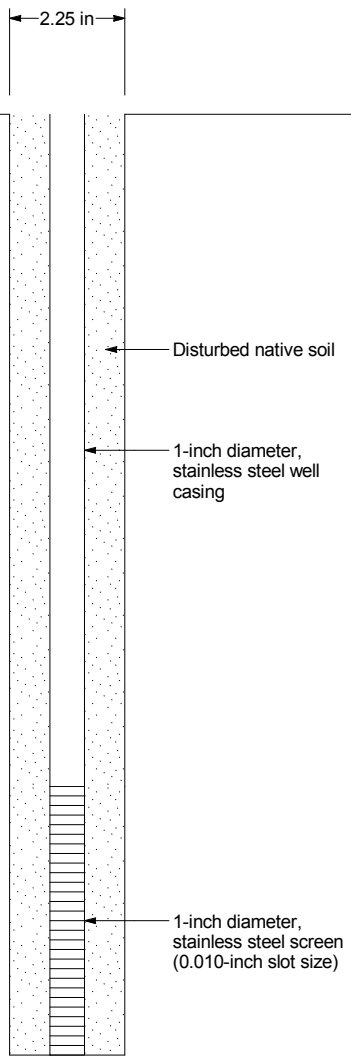
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	PID (ppm)	Graphic Symbol	USCS Symbol	Soil Profile
0						GP-GM	Brown, sandy, fine to coarse GRAVEL with silt; no odor, no sheen (medium dense, damp) **(FILL?)**
2		d5					0 to 4 feet was hand-augered. Soil was observed as it was removed from the boring and placed into a bucket.
4				0			
6		d3					**Soil Sample: MTA-B07(6.5-7.5)-20190626 @ 6.5 to 7.5 ft bgs**
8							
10				0			
		d3				SM	Brown, silty, fine to medium SAND; no odor, no sheen (medium dense, wet) **(VASHON RECESSIONAL OUTWASH)**
12							**Groundwater Sample: MTA-B07-14-20190626 screened @ 10 to 14 ft bgs**
14							
16							
18							
20							

Boring Completed 06/26/19
Total Depth of Boring = 15.0 ft.

GROUNDWATER

Water Level: ATD

Temporary Well Detail



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

B08

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	PID (ppm)	Graphic Symbol	USCS Symbol	Water Level
0		d3		0		SP-SM	
2							
4							
6		d3		0		GP	
8						SP-SM	
10						GP-GM	ATD
12							
14							
16							
18							
20							

Drilling Method: Geoprobe™

Ground Elevation (ft): Not measured

Drilled By: ESN Northwest

Brown, gravelly, fine to coarse SAND with silt; no odor, no sheen (medium dense, damp)

(FILL?)

Soil Sample: MTA-B08(0-2.5)-20190625 @ 0 to 2.5 ft bgs

Brown, sandy, fine to coarse GRAVEL; no odor, no sheen (medium dense, damp)

Soil Sample: MTA-B08(7.5-8.5)-20190625 @ 7.5 to 8.5 ft bgs

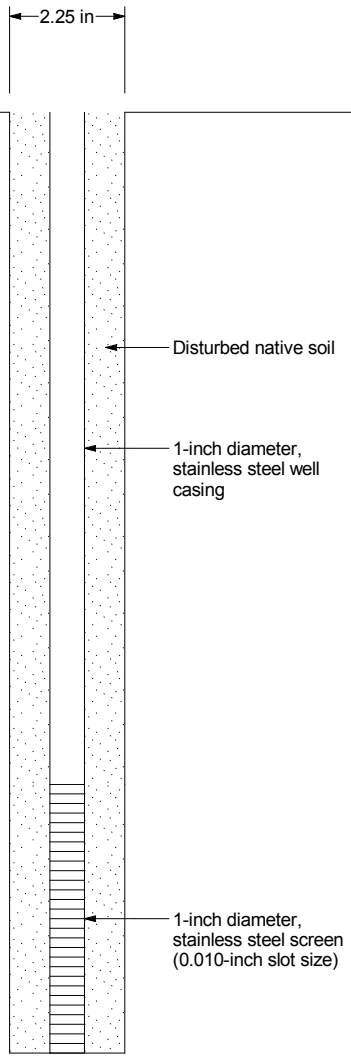
Red-brown, fine SAND with silt; no odor, no sheen (medium dense, damp)

(VASHON RECESSIONAL OUTWASH)

Red-brown, very sandy, fine to coarse GRAVEL with silt; no odor, no sheen (medium dense, wet)

Groundwater Sample: MTA-B08-14-20190625 screened @ 10 to 14 ft bgs

Temporary Well Detail



Boring Completed 06/25/19
Total Depth of Boring = 15.0 ft.

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 B08

Figure A-9

APPENDIX B

Laboratory Analytical Data Packages

eurofins | Environment Testing TestAmerica

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

Have a Question? Ask The Expert

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.

Table of Contents

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 3.2º C and 3.7º 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.

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

LANDAU ASSOCIATES

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 Gaugler
Project Contact Sarah Fees
Send Results To D. Jorgensen, S. Fees

Testing Parameters

Sample I.D.	Date	Time	Matrix	No. of Containers	RCRA 8 Metals 6020A/7471B	Hex. Chromium 7196A	BTEX, EDC, MTBE 8260C LL	TPH-G NWTPH-GX	TPH-D, TPH-O NWTPH-DX	cPAH 8270	PCBs 8082A	EDB 8260C LL	EDB 8011
TripBlank1-20190625	—	—	Soil	3			X					X	
TripBlank2-20190625	—	—	Ag	6			X					X	
MTA-B03(7-10.5)-20190625	6/25/19	915	Soil	5	X	X	X	X	X	X	X		
MTA-B08(0-2.5)-20190625		1000	Soil	5	X	X	X	X	X	X	X		
MTA-B04(7.5-8.5)-20190625		1020	Soil	5	X	X	X	X	X	X	X		
MTA-B08-14-20190625		1109	Ag	15	X	X	X	X	X	X	X		
MTA-B03(0-3)-20190625		1145	Soil	5	X	X	X	X	X	X	X		
MTA-B06(7.5-8.5)-20190625		1235	Soil	5	X	X	X	X	X	X	X		
MTA-B05(0-2.4)-20190625		1300	Soil	5	X	X	X	X	X	X	X		
MTA-B05(8-9)-20190625		1315	Soil	5	X	X	X	X	X	X	X		
MTA-B04(10.5-11.5)-20190625		1400	Soil	5	X	X	X	X	X	X	X		
MTA-B01(0-3)-20190625		1435	Soil	5	X	X	X	X	X	X	X		
MTA-B01(7.3-8.3)-20190625		1445	Soil	5	X	X	X	X	X	X	X		

580-87175 Chain of Custody

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 ☐

X Dissolved metal samples were field filtered

Other

Therm. ID: A2 Cor: 3.2 ° Unc: 3.5 °
Cooler Dsc: Lg Blue
Packing: bubb
Cust. Seal: Yes ___ No ★
Blue Ice, (Wet), Dry, None
FedEx: ___
UPS: ___
Lab Cour: ___
Other: ___

Therm. ID: A2 Cor: 3.7 ° Unc: 4.0 °
Cooler Dsc: Lg Blue
Packing: bub
Cust. Seal: Yes ___ No ★
Blue Ice, (Wet), Dry, None
FedEx: ___
UPS: ___
Lab Cour: ___
Other: Clidro

Relinquished by	Received by	Relinquished by	Received by
Signature Katie Gaugler	Signature Tom Blankinship	Signature	Signature
Printed Name Katie Gaugler	Printed Name Blankinship	Printed Name	Printed Name
Company Landau Associates	Company TA-Sea	Company	Company
Date 6/25/2019 Time 16:55	Date 6/25/19 Time 1655	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative 10/2018

Landau Associates — 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 Gaugh[illegible]
Project Contact: Sarah Fees
Send Results To: D. Jorgensen, S. Fees

Testing Parameters: [illegible]; * Hex Chromium

Sample I.D.	Date	Time	Matrix	No. of Containers
TripBlank1-20190625	—	—	Soil	2
TripBlank2-20190625	—	—	Aq	6
MTA-B03(9-10.5)-20190625	6/25/19	915	Soil	5
MTA-B02(0-2.5)-20190625		1000	Soil	5
MTA-B02(7.5-8.5)-20190625		1020	Soil	5
MTA-B02-14-20190625		1104	Aq	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(7.5-8.5)-20190625		1445	Soil	5

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)

Relinquished by	Received by	Relinquished by	Received by
Signature: Katie Gaugh[illegible]	Signature: [illegible]	Signature	Signature
Printed Name: Katie Gaugh[illegible]	Printed Name: [illegible]	Printed Name	Printed Name
Company: Landau Associates	Company: [illegible]	Company	Company
Date: 6/25/19 Time: 16:55	Date: [illegible] Time: [illegible]	Date Time	Date Time

LANDAU ASSOCIATES — 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 Mosen Transit Authority Project No. 181700.010.012
Project Location/Event Shelton, WA
Sampler's Name Katie Gaugliz
Project Contact Sarah Fees
Send Results To D. Jorgensen, S. Fees

Testing Parameters

Sample I.D.	Date	Time	Matrix	No. of Containers	RCRA 8 Metals 6010C SEF 6/26/19	Hex Chromium 7196A *	BTEX, EDC, MTBE 8260C LL	TPH-G NWTPH-GX	TPH-D, TPH-O NWTPH-Dx	CPAH 8270	PCBs 8082A	EDB 8260C LL	EDB 8011
TripBlank1-20190625	—	—	Soil	3			X				X	X	
TripBlank2-20190625	—	—	Aq	6			X						
MTA-B03(7-10.5)-20190625	6/25/19	915	Soil	5	X	X	X	X	X	X	X		
MTA-B06(0-2.5)-20190625		1000	Soil	5	X	X	X	X	X	X	X		
MTA-B04(7.5-8.5)-20190625		1020	Soil	5	X	X	X	X	X	X	X		
MTA-B08-14-20190625		1109	Aq	15	X	X	X	X	X	X	X	X	
MTA-B03(0-3)-20190625		1145	Soil	5	X	X	X	X	X	X	X		
MTA-B06(7.5-8.5)-20190625		1235	Soil	5	X	X	X	X	X	X	X		
MTA-B05(0-2.4)-20190625		1300	Soil	5	X	X	X	X	X	X	X		
MTA-B05(8-9)-20190625		1315	Soil	5	X	X	X	X	X	X	X		
MTA-B04(10.5-11.5)-20190625		1400	Soil	5	X	X	X	X	X	X	X		
MTA-B01(0-3)-20190625		1435	Soil	5	X	X	X	X	X	X	X		
MTA-B01(7.3-8.3)-20190625		1445	Soil	5	X	X	X	X	X	X	X		

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 ☐

X 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	Received by	Relinquished by	Received by
Signature Katelyn Jorgensen	Signature	Signature	Signature
Printed Name Katie Gaugliz	Printed Name Blair Smith	Printed Name	Printed Name
Company Landau Associates	Company TA-Sea	Company	Company
Date 6/25/2019 Time 16:55	Date 6/25/19 Time 1655	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

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 # 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? YES...NO...NA

If yes, how many and where: 1 Side

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 (intial) _____

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 #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) KD

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 (intial) KD

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 (intial) KD

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

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

BIS = Broken in shipment

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Phone: 253-922-2310 Fax: 253-922-5047

Chain of Custody Record

Loc: 580
87175

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Cruz, Sheri L		COC No: 580-67453.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sheri.cruz@testamericainc.com	Washington	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 580-87175-1
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#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7196A/3060A Hexavalent Chromium (CrVI) (Hold)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MTA-B03(7.-10.5)-20190625 (580-87175-3)	6/25/19	09:15 Pacific		Solid			X	1	
MTA-B08(0-2.5)-20190625 (580-87175-4)	6/25/19	10:00 Pacific		Solid			X	1	
MTA-B08(7.5-8.5)-20190625 (580-87175-5)	6/25/19	10:20 Pacific		Solid			X	1	
MTA-B03(0-3)-20190625 (580-87175-7)	6/25/19	11:45 Pacific		Solid			X	1	
MTA-B06(7.5-8.5)-20190625 (580-87175-8)	6/25/19	12:35 Pacific		Solid			X	1	
MTA-B05(0-2.4)-20190625 (580-87175-9)	6/25/19	13:00 Pacific		Solid			X	1	
MTA-B05(8-9)-20190625 (580-87175-10)	6/25/19	13:15 Pacific		Solid			X	1	
MTA-B04(10.5-11.5)-20190625 (580-87175-11)	6/25/19	14:00 Pacific		Solid			X	1	
MTA-B01(0-3)-20190625 (580-87175-12)	6/25/19	14:35 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 complicance 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	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Tom Blankenship	6/27/19	TA-Sea	[signature]	06-28-2019 09:55	TAWA8
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 5.9

Ver: 01/16/2019

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Phone: 253-922-2310 Fax: 253-922-5047

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Cruz, Sheri L	Carrier Tracking No(s):	COC No: 580-67453.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: sheri.cruz@testamericainc.com	State of Origin: Washington	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 580-87175-1
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#:			

Analysis Requested

Loc: 580
87175

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7196A/3060A Hexavalent Chromium (CrVI) (Hold)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MTA-B01(7.3-8.3)-20190625 (580-87175-13)	6/25/19	14:45 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Tom Blankenship	6/27/19			06-28-2019 09:55	TAL SEA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 5.9

Ver: 01/16/2019

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Phone: 253-922-2310 Fax: 253-922-5047

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Cruz, Sheri L	Carrier Tracking No(s):	COC No: 580-67452.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sheri.cruz@testamericainc.com	State of Origin: Washington	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 580-87175-1
Address: 11922 East 1st Ave.	Due Date Requested: 7/2/2019	**Analysis Requested**		Preservation Codes:
City: Spokane	TAT Requested (days):			
State, Zip: WA, 99206				
Phone: 509-924-9200(Tel) 509-924-9290(Fax)	PO #:			
Email:	WO #:			
Project Name: MTA Parking Lot, Shelton, WA	Project #: 58013965			
Site:	SSOW#:			

Preservation Codes:
A - HCL, M - Hexane, B - NaOH, N - None, C - Zn Acetate, O - AsNaO2, D - Nitric Acid, P - Na2O4S, E - NaHSO4, Q - Na2SO3, F - MeOH, R - Na2S2O3, G - Amchlor, S - H2SO4, H - Ascorbic Acid, T - TSP Dodecahydrate, I - Ice, U - Acetone, J - DI Water, V - MCAA, K - EDTA, W - pH 4-5, L - EDA, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	NWTPH_Dx/3550C DRO and RRO	8270D_SIM/3550C cPAHs	8082A/3550C_PCB_1YR PCBs, standard list	NWTPH_Dx/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:
			Preservation Code:											
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 out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For ______ Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Tom [signature]	6/27/19	TA-Spa	Maria Good	6/28/19 13:31	TASPO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.9

Ver: 01/16/2019

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Phone: 253-922-2310 Fax: 253-922-5047

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Cruz, Sheri L	Carrier Tracking No(s):	COC No: 580-67452.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: sheri.cruz@testamericainc.com	State of Origin: Washington	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 580-87175-1
Address: 11922 East 1st Ave,	Due Date Requested: 7/2/2019			
City: Spokane	TAT Requested (days):			
State, Zip: WA, 99206				
Phone: 509-924-9200(Tel) 509-924-9290(Fax)	PO #:			
Email:	WO #:			
Project Name: MTA Parking Lot, Shelton, WA	Project #: 58013965			
Site:	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	NWTPH_Dx/3550C DRO and RRO	8270D_SIM/3550C cPAHs	8082A/3550C_PCB_1YR PCBs, standard list	NWTPH_Dx/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:
			Preservation Code:											
MTA-B01(0-3)-20190625 (580-87175-12)	6/25/19	14:35 Pacific		Solid			X	X	X				1	
MTA-B01(7.3-8.3)-20190625 (580-87175-13)	6/25/19	14:45 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 out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Tom Blankenship	Date/Time: 6/27/19	Company	Received by: Maria Moore	Date/Time: 6/28/19 1315	Company TASPO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.9

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-87175-1

Login Number: 87175
List Number: 1
Creator: Vallelunga, Diana L

List Source: Eurofins TestAmerica, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: 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 </= 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 <6mm (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.

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*

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*

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

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*

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

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*

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*

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*

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*

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*

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*

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*

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: 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*

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

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

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

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*

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

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

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*
o-Terphenyl	*75*		*50 - 150*	*07/09/19 10:00*	*07/10/19 01:08*	*1*
n-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
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

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*
o-Terphenyl	*81*		*50 - 150*	*07/09/19 10:00*	*07/10/19 01:28*	*1*
n-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
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

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*
o-Terphenyl	*80*		*50 - 150*	*07/09/19 10:00*	*07/10/19 01:48*	*1*
n-Triacontane-d62	*83*		*50 - 150*	*07/09/19 10:00*	*07/10/19 01:48*	*1*

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

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*
o-Terphenyl	*91*		*50 - 150*	*07/09/19 15:19*	*07/10/19 11:24*	*1*
n-Triacontane-d62	*86*		*50 - 150*	*07/09/19 15:19*	*07/10/19 11:24*	*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

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

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*
o-Terphenyl	*86*		*50 - 150*	*07/09/19 10:00*	*07/10/19 02:08*	*1*
n-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*
o-Terphenyl	*81*		*50 - 150*	*07/09/19 10:00*	*07/10/19 02:47*	*1*
n-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*
o-Terphenyl	*96*		*50 - 150*	*07/09/19 10:00*	*07/10/19 03:07*	*1*
n-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*
o-Terphenyl	*73*		*50 - 150*	*07/09/19 10:00*	*07/10/19 03:27*	*1*
n-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

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

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

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
o-Terphenyl	89		50 - 150	07/09/19 10:00	07/10/19 04:26	1
n-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 — **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**

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
o-Terphenyl	80		50 - 150	07/09/19 10:00	07/10/19 04:46	1
n-Triacontane-d62	76		50 - 150	07/09/19 10:00	07/10/19 04:46	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

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

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: 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: 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

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

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

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	%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*

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	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*

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	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*

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

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline			1.00	0.905		mg/L		90	79 - 120		

Surrogate	*LCS %Recovery*	*LCS 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

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
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

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	%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

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	*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	%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

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*

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*

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*

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

Surrogate	*DU %Recovery*	*DU 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	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

Surrogate	*DU %Recovery*	*DU 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

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
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

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

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

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

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		
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		
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

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
Date Collected: 06/25/19 10:00
Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-4
Matrix: Solid

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
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	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
Date Collected: 06/25/19 10:20
Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-5
Matrix: Solid

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
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

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

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

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
Date Collected: 06/25/19 14:00
Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-11
Matrix: Solid

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
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

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
Date Collected: 06/25/19 14:35
Date Received: 06/25/19 16:55

Lab Sample ID: 580-87175-12
Matrix: Solid

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
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

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

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.
Job ID: 580-87175-1
Project/Site: MTA Parking Lot, Shelton, WA

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

eurofins | Environment Testing TestAmerica

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

Kristine D. Allen

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

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.

Table of Contents

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 3.2º C and 3.7º 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.
Job ID: 580-87175-2
Project/Site: MTA Parking Lot, Shelton, WA

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	

Chain-of-Custody Record

LANDAU ASSOCIATES

Seattle/Edmonds (425) 778-0907 | Spokane (509) 327-9737
X 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 Gaugler
Project Contact Sarah Fees
Send Results To D. Jorgensen, S. Fees

Testing Parameters

Sample I.D.	Date	Time	Matrix	No. of Containers	RCRA 8 Metals 6020A/7471B	Hex. Chromium 7196A	BTEX, EDC, MTBE 8260C LL	TPH-G NWTPH-GX	TPH-D, TPH-O NWTPH-DX	cPAH 8270	PCBs 8082A	EDB 8260C LL	EDB 8011
TripBlank1-20190625	—	—	Soil	3			X					X	
TripBlank2-20190625	—	—	Ag	6			X					X	
MTA-B03(7-10.5)-20190625	6/25/19	915	Soil	5	X	X	X	X	X	X	X		
MTA-B08(0-2.5)-20190625		1000	Soil	5	X	X	X	X	X	X	X		
MTA-B04(7.5-8.5)-20190625		1020	Soil	5	X	X	X	X	X	X	X		
MTA-B08-14-20190625		1109	Ag	15	X	X	X	X	X	X	X		
MTA-B03(0-3)-20190625		1145	Soil	5	X	X	X	X	X	X	X		
MTA-B06(7.5-8.5)-20190625		1235	Soil	5	X	X	X	X	X	X	X		
MTA-B05(0-2.4)-20190625		1300	Soil	5	X	X	X	X	X	X	X		
MTA-B05(8-9)-20190625		1315	Soil	5	X	X	X	X	X	X	X		
MTA-B04(10.5-11.5)-20190625		1400	Soil	5	X	X	X	X	X	X	X		
MTA-B01(0-3)-20190625		1435	Soil	5	X	X	X	X	X	X	X		
MTA-B01(7.3-8.3)-20190625		1445	Soil	5	X	X	X	X	X	X	X		

580-87175 Chain of Custody

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 ☐

X Dissolved metal samples were field filtered

Other

Therm. ID: A2 Cor: 3.2 ° Unc: 3.5 °
Cooler Dsc: Lg Blue
Packing: bubb
Cust. Seal: Yes ___ No X
Blue Ice, (Wet), Dry, None
FedEx: ___
UPS: ___
Lab Cour: ___
Other: ___

Therm. ID: A2 Cor: 3.7 ° Unc: 4.0 °
Cooler Dsc: Lg Blue
Packing: bub
Cust. Seal: Yes ___ No X
Blue Ice, (Wet), Dry, None
FedEx: ___
UPS: ___
Lab Cour: ___
Other: Cidre

Relinquished by	Received by	Relinquished by	Received by
Signature Katie Gaugler	Signature Tom Blankinship	Signature	Signature
Printed Name Katie Gaugler	Printed Name Blankinship	Printed Name	Printed Name
Company Landau Associates	Company TA-Sea	Company	Company
Date 6/25/2019 Time 16:55	Date 6/25/19 Time 1655	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative 10/2018

LANDAU ASSOCIATES

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. 1817021.010.012
Project Location/Event: Shelton, WA
Sampler's Name: Katie Gaughte
Project Contact: Steven Fees
Send Results To: D. Jorgensen, S. Fees

Testing Parameters

Sample I.D.	Date	Time	Matrix	No. of Containers
TripBlank1-20190625	—	—	Soil	3
TripBlank2-20190625	—	—	Aq	6
MTA-B03(7-10.5)-20190625	6/25/19	915	Soil	5
MTA-B06(0-2.5)-20190625		1000	Soil	5
MTA-B06(7.5-8.5)-20190625		1020	Soil	5
MTA-B04-14-20190625		1104	Aq	15
MTA-B07(0-3)-20190625		1145	Soil	5
MTA-B06(9.5-9.5)-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(9.5-11.5)-20190625		1445	Soil	5

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)

Relinquished by	Received by	Relinquished by	Received by
Signature: Katie Gaughte	Signature: [illegible]	Signature	Signature
Printed Name: Katie Gaughte	Printed Name: [illegible]	Printed Name	Printed Name
Company: Landau Associates	Company: [illegible]	Company	Company
Date: 6/25/19 Time: 16:55	Date: [illegible] Time: 1655	Date Time	Date Time

LANDAU ASSOCIATES — 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 Mosen Transit Authority Project No. 181700.010.012
Project Location/Event Shelton, WA
Sampler's Name Katie Gaugliz
Project Contact Sarah Fees
Send Results To D. Jorgensen, S. Fees

Testing Parameters

Sample I.D.	Date	Time	Matrix	No. of Containers	RCRA 8 Metals 6010C SEF 6/26/19	Hex Chromium 7196A *	BTEX, EDC, MTBE 8260C	TPH-G NWTPH-Gx	TPH-D, TPH-O NWTPH-Dx	cPAH 8270	PCBs 8082A	EDB 8260C LL	EDB 8011
TripBlank1-20190625	—	—	Soil	3		X	X				X	X	
TripBlank2-20190625	—	—	Ag	6		X	X						
MTA-B03(7-10.5)-20190625	6/25/19	915	Soil	5	X	X	X	X	X	X	X		
MTA-B06(0-2.5)-20190625		1000	Soil	5	X	X	X	X	X	X	X		
MTA-B04(7.5-8.5)-20190625		1020	Soil	5	X	X	X	X	X	X	X		
MTA-B08-14-20190625		1109	Ag	15		X	X					X	
MTA-B03(0-3)-20190625		1145	Soil	5	X	X	X	X	X	X	X		
MTA-B06(7.5-8.5)-20190625		1235	Soil	5	X	X	X	X	X	X	X		
MTA-B05(0-2.4)-20190625		1300	Soil	5	X	X	X	X	X	X	X		
MTA-B05(8-9)-20190625		1315	Soil	5	X	X	X	X	X	X	X		
MTA-B04(10.5-11.5)-20190625		1400	Soil	5	X	X	X	X	X	X	X		
MTA-B01(0-3)-20190625		1435	Soil	5	X	X	X	X	X	X	X		
MTA-B01(7.3-8.3)-20190625		1445	Soil	5	X	X	X	X	X	X	X		

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 ☐

X 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	Received by	Relinquished by	Received by
Signature Katelyn Jorgensen	Signature	Signature	Signature
Printed Name Katie Gaugliz	Printed Name Blair Smith	Printed Name	Printed Name
Company Landau Associates	Company TA-Sea	Company	Company
Date 6/25/2019 Time 16:55	Date 6/25/19 Time 1655	Date Time	Date Time

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10/2018

LANDAU ASSOCIATES — 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 Mosen Transit Authority Project No. 181700.010.012
Project Location/Event Shelton, WA
Sampler's Name Katie Gaugliz
Project Contact Sarah Fees
Send Results To D. Jorgensen, S. Fees

Testing Parameters

Sample I.D.	Date	Time	Matrix	No. of Containers	RCRA 8 Metals 6010C SEF 6/26/19	Hex Chromium 7196A *	BTEX, EDC, MTBE 8260C LL	TPH-G NWTPH-GX	TPH-D, TPH-O NWTPH-Dx	CPAH 8270	PCBs 8082A	EDB 8260C LL	EDB 8011
TripBlank1-20190625	—	—	Soil	3			X						
TripBlank2-20190625	—	—	Aq	6			X						
MTA-B03(7-10.5)-20190625	6/25/19	915	Soil	5	X	X	X	X	X	X	X	X	
MTA-B06(0-2.5)-20190625		1000	Soil	5	X	X	X	X	X	X	X		
MTA-B04(7.5-8.5)-20190625		1020	Soil	5	X	X	X	X	X	X	X		
MTA-B08-14-20190625		1109	Aq	15	X	X	X	X	X	X	X	X	
MTA-B03(0-3)-20190625		1145	Soil	5	X	X	X	X	X	X	X		
MTA-B06(7.5-8.5)-20190625		1235	Soil	5	X	X	X	X	X	X	X		
MTA-B05(0-2.4)-20190625		1300	Soil	5	X	X	X	X	X	X	X		
MTA-B05(8-9)-20190625		1315	Soil	5	X	X	X	X	X	X	X		
MTA-B04(10.5-11.5)-20190625		1400	Soil	5	X	X	X	X	X	X	X		
MTA-B01(0-3)-20190625		1435	Soil	5	X	X	X	X	X	X	X		
MTA-B01(7.3-8.3)-20190625		1445	Soil	5	X	X	X	X	X	X	X		

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

Relinquished by	Received by	Relinquished by	Received by
Signature Katie Gaugliz	Signature	Signature	Signature
Printed Name Katie Gaugliz	Printed Name Blair Smith	Printed Name	Printed Name
Company Landau Associates	Company TA-Sea	Company	Company
Date 6/25/2019 Time 16:55	Date 6/25/19 Time 1655	Date Time	Date Time

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10/2018

LANDAU ASSOCIATES — 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 Mosen Transit Authority Project No. 181700.010.012
Project Location/Event Shelton, WA
Sampler's Name Katie Gaugliz
Project Contact Sarah Fees
Send Results To D. Jorgensen, S. Fees

Testing Parameters

Sample I.D.	Date	Time	Matrix	No. of Containers	RCRA 8 Metals 6010C SEF 6/26/19	Hex Chromium 7196A *	BTEX, EDC, MTBE 8260C LL	TPH-G NWTPH-GX	TPH-D, TPH-O NWTPH-Dx	CPAH 8270	PCBs 8082A	EDB 8260C LL	EDB 8011
TripBlank1-20190625	—	—	Soil	3			X				X	X	
TripBlank2-20190625	—	—	Ag	6			X						
MTA-B03(7-10.5)-20190625	6/25/19	915	Soil	5	X	X	X	X	X	X	X		
MTA-B06(0-2.5)-20190625		1000	Soil	5	X	X	X	X	X	X	X		
MTA-B04(7.5-8.5)-20190625		1020	Soil	5	X	X	X	X	X	X	X		
MTA-B04-14-20190625		1109	Ag	15			X					X	
MTA-B03(0-3)-20190625		1145	Soil	5	X	X	X	X	X	X	X		
MTA-B06(7.5-8.5)-20190625		1235	Soil	5	X	X	X	X	X	X	X		
MTA-B05(0-2.4)-20190625		1300	Soil	5	X	X	X	X	X	X	X		
MTA-B05(8-9)-20190625		1315	Soil	5	X	X	X	X	X	X	X		
MTA-B04(10.5-11.5)-20190625		1400	Soil	5	X	X	X	X	X	X	X		
MTA-B01(0-3)-20190625		1435	Soil	5	X	X	X	X	X	X	X		
MTA-B01(7.3-8.3)-20190625		1445	Soil	5	X	X	X	X	X	X	X		

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 ☐

X 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	Received by	Relinquished by	Received by
Signature Katie Gaugliz	Signature	Signature	Signature
Printed Name Katie Gaugliz	Printed Name Blair Smith	Printed Name	Printed Name
Company Landau Associates	Company TA-Sea	Company	Company
Date 6/25/2019 Time 16:55	Date 6/25/19 Time 1655	Date Time	Date Time

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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 </= 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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client: Landau & Associates, Inc.
Job ID: 580-87175-2
Project/Site: MTA Parking Lot, Shelton, WA

General Chemistry

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

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

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.
Job ID: 580-87175-2
Project/Site: MTA Parking Lot, Shelton, WA

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	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.
Job ID: 580-87175-2
Project/Site: MTA Parking Lot, Shelton, WA

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(A2LA)	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.

Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Job ID: 580-87175-2
Project/Site: MTA Parking Lot, Shelton, WA

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 | Environment Testing TestAmerica

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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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.

Table of Contents

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 0.9º C and 3.3º 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.

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.
¤	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

LANDAU ASSOCIATES

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

87205

Project Name Mason Transit Authority Project No. 181700 1.010.012
Project Location/Event Shelton, WA / drilling
Sampler's Name Katie Gaughitt
Project Contact S. Fees
Send Results To D. Jorgensen, S. Fees

Special Handling Requirements:

Shipment Method:

Stored on ice: (Yes) / No

	Sample I.D.	Date	Time	Matrix	No. of Containers
1	TripBlank1-20190626	6/	—	Soil	3
	TripBlank2-20190626	—	—	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

Testing Parameters

RCRA 8 Metals 6010C/7471A
Hex. chromium 7196A/3060A
BTEX, EDC, MTBE 8260C LL
TPH-G NWTPH-Gx
TPH-D, TPH-D, NWTPH-Dx
cPAH 8270
PCBs 8082A
EDB 8260C LL
EDB 8011
TCLP 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 0.45 um 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: Lg Blue
Packing: Bubble
Cust. Seal: Yes ___ No X
Blue Ice, (Wet), Dry, None
FedEx: ___ UPS: ___ Lab Cour: ___ Other: Client

Therm. ID: A2 Cor: 3.3c° Unc: 3.6c°
Cooler Dsc: Lg Blue
Packing: bubble
Cust. Seal: Yes ___ No X
Blue Ice, (Wet), Dry, None
FedEx: ___ UPS: ___ Lab Cour: ___ Other: Client

Relinquished by	Received by	Relinquished by	Received by
Signature Katie M Gaughitt	Signature	Signature	Signature
Printed Name Katie Gaughitt	Printed Name Lawrence Harris	Printed Name	Printed Name
Company Landau Associates	Company T.A.	Company	Company
Date 6/26/19 Time 14:15	Date 6/26/19 Time 1414	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

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? YES NO NA

If yes, how many and where: 1 Side

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 (intial) _____

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 # 1

I certify that I unloaded the cooler and answered questions 7-14 (intial) KI

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 (intial) KI

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 (intial) KI

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

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

BIS = Broken in shipment

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Phone: 253-922-2310 Fax: 253-922-5047

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Cruz, Sheri L	COC No: 580-67453.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sheri.cruz@testamericainc.com	State of Origin: Washington	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):	Job #: 580-87205-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 7/9/2019	**Analysis Requested**	**Preservation Codes:**
City: Nashville	TAT Requested (days):		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		Other:
Project Name: Mason Transit Authority, 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=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7196A/3060A Hexavalent Chromium (CrVI) (Hold)	Loc: 580 87205	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MTA-B06(0-3)-20190626 (580-87205-3)	6/26/19	08:20 Pacific		Solid			X		1	
MTA-B02(0-3)-20190626 (580-87205-4)	6/26/19	08:45 Pacific		Solid			X		1	
MTA-B02(5.5-6.5)-20190626 (580-87205-5)	6/26/19	09:30 Pacific		Solid			X		1	
MTA-B07(6.5-7.5)-20190626 (580-87205-8)	6/26/19	10:55 Pacific		Solid			X		1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 6/27/19	Company TA-Sea	Received by:	Date/Time: 06-28-2019 09:55	Company TAMS	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 5.9			

Ver: 01/16/2019

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Phone: 253-922-2310 Fax: 253-922-5047

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Cruz, Sheri L	Carrier Tracking No(s):	COC No: 580-67452.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sheri.cruz@testamericainc.com	State of Origin: Washington	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 580-87205-1
Address: 11922 East 1st Ave,	Due Date Requested: 7/2/2019	Analysis Requested		Preservation Codes:
City: Spokane	TAT Requested (days):			
State, Zip: WA, 99206				
Phone: 509-924-9200(Tel) 509-924-9290(Fax)	PO #:			
Email:	WO #:			
Project Name: Mason Transit Authority, Shelton, WA	Project #: 58013965			
Site:	SSOW#:			Other:

Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	NWTPH_Dx/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:
				Preservation Code:							
MTA-B02-14-20190626 (580-87205-6)	6/26/19	09:40 Pacific		Water			X	X	X	6	
MTA-B99-20190626 (580-87205-7)	6/26/19	09:45 Pacific		Water			X	X	X	6	
MTA-B07-14-20190626 (580-87205-9)	6/26/19	11:33 Pacific		Water			X	X	X	6	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ______ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) | Primary Deliverable Rank: 2 | Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Tom Bl[illegible]	Date/Time: 6/27/19	Company: TA-Sea	Received by: Maria Grooe	Date/Time: 6/28/19 13:15	Company: TASPO
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.9

Ver: 01/16/2019 7/15/2019

Eurofins TestAmerica, Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone: 615-726-0177 Fax: 615-726-3404

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Cruz, Sheri L	Carrier Tracking No(s):	COC No: 490-92905.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sheri.cruz@testamericainc.com	State of Origin: Washington	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 580-87205-1
Address: 11922 East 1st Ave,	Due Date Requested: 7/2/2019			
City: Spokane	TAT Requested (days):			
State, Zip: WA, 99206				
Phone: 509-924-9200(Tel) 509-924-9290(Fax)	PO #:			
Email:	WO #:			
Project Name: Mason Transit Authority, Shelton, WA	Project #: 58013965			
Site:	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	NWTPH_Dx/3550C DRO and RRO	8270D_SIM/3550C cPAHs	8082A/3550C_PCB_1YR PCBs, standard list	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MTA-B06(0-3)-20190626 (580-87205-3)	6/26/19	08:20 Pacific		Solid			X	X	X	1	
MTA-B02(0-3)-20190626 (580-87205-4)	6/26/19	08:45 Pacific		Solid			X	X	X	1	
MTA-B02(5.5-6.5)-20190626 (580-87205-5)	6/26/19	09:30 Pacific		Solid			X	X	X	1	
MTA-B07(6.5-7.5)-20190626 (580-87205-8)	6/26/19	10:55 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 out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 complicance 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	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	7-1-19 @ 1210	TAMS	Maria 01006	7/2/19 9:40	TASPO
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.3°C

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-87205-1

Login Number: 87205
List Number: 1
Creator: Blankinship, Tom X

List Source: Eurofins TestAmerica, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: 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 </= 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 <6mm (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 </= 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	
Cooler Temperature is acceptable.	True	3.3
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 <6mm (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.

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*

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*

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*

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*

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*

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*

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*

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*

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*

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*

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: 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*

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

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

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

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-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*

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*
o-Terphenyl	*97*		*50 - 150*	*07/09/19 10:00*	*07/10/19 05:26*	*1*
n-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*
o-Terphenyl	*87*		*50 - 150*	*07/09/19 10:00*	*07/10/19 05:46*	*1*
n-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*
o-Terphenyl	*90*		*50 - 150*	*07/09/19 10:00*	*07/10/19 06:06*	*1*
n-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*
o-Terphenyl	*80*		*50 - 150*	*07/10/19 10:09*	*07/11/19 01:47*	*1*
n-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

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*
o-Terphenyl	*85*		*50 - 150*	*07/10/19 10:09*	*07/11/19 02:07*	*1*
n-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*
o-Terphenyl	*81*		*50 - 150*	*07/09/19 10:00*	*07/10/19 06:26*	*1*
n-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*
o-Terphenyl	*81*		*50 - 150*	*07/10/19 10:09*	*07/11/19 02:26*	*1*
n-Triacontane-d62	*76*		*50 - 150*	*07/10/19 10:09*	*07/11/19 02:26*	*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

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: 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

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

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

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*

Lab Sample ID: MB 580-304537/7
Matrix: Water
Analysis Batch: 304537

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			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

Surrogate	MB %Recovery	MB 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 Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. 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

Surrogate	LCS %Recovery	LCS 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*

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

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

Surrogate	LCS %Recovery	LCS 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

Surrogate	LCSD %Recovery	LCSD 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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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*

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	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

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	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*

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*

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics C6-C12			1.00	0.905		mg/L		90	79 - 120		

Surrogate	*LCS %Recovery*	*LCS 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 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	*MB %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

Analyte			Spike Added	LCS Result	LCS 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*

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
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

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	%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	%Rec. Limits	RPD	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	%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

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

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*

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (DRO) (C10-C25)			1.60	1.34		mg/L		84	50 - 150		
Residual Range Organics (RRO) (C25-C36)			1.60	1.55		mg/L		97	50 - 150		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	88		50 - 150
n-Triacontane-d62	96		50 - 150

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (DRO) (C10-C25)			1.60	1.26		mg/L		79	50 - 150	6	25
Residual Range Organics (RRO) (C25-C36)			1.60	1.46		mg/L		91	50 - 150	6	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
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

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

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	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	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

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

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	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
Date Collected: 06/26/19 00:01
Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-1
Matrix: Solid

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
Date Collected: 06/26/19 00:01
Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-2
Matrix: Water

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
Date Collected: 06/26/19 08:20
Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-3
Matrix: Solid

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
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

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

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

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

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

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

Date Collected: 06/26/19 11:33
Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-9

Matrix: Water

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.
Job ID: 580-87205-1
Project/Site: MTA Parking Lot, Shelton, WA

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

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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

Sheri Cruz

Authorized for release by:
8/1/2019 2:50:24 PM

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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.

Table of Contents

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 0.9º C and 3.3º 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	

Chain-of-Custody Record

LANDAU ASSOCIATES

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

87205

Project Name Mason Transit Authority Project No. 181700 1.010.012
Project Location/Event Shelton, WA / drilling
Sampler's Name Katie Gaughitt
Project Contact S. Fees
Send Results To D. Jorgensen, S. Fees

Special Handling Requirements:

Shipment Method:

Stored on ice: (Yes) / No

Testing Parameters

	Sample I.D.	Date	Time	Matrix	No. of Containers	RCRA 8 Metals 6010C/7471A	Hex. chromium 7196A/7199	BTEX, EDC, MTBE 8260C LL	TPH-G NWTPH-Gx	TPH-D, TPH-D, NWTPH-Dx	cPAH 8270	PCBs 8082A	EDB 8260C LL	EDB 8011	TCLP Metals *
1	TripBlank1-20190626			Soil	3			X	X			X			
2	TripBlank2-20190626			Aq	6			X	X				X		
3	MTA-B06(0-3)-20190626	6/26/19	820	Soil	5	X	X	X	X	X	X	X			
4	MTA-B02(0-3)-20190626		845	Soil	5	X	X	X	X	X	X	X			
5	MTA-B02(5.5-6.5)-20190626		930	Soil	5	X	X	X	X	X	X	X			
6	MTA-B02-14-20190626		940	Aq	15	X		X	X	X	X		X		
7	MTA-B09-20190626		945	Aq	15	X		X	X	X	X		X		
8	MTA-B07(6.5-7.5)-20190626		1055	Soil	5	X	X	X	X	X	X	X			
9	MTA-B07-14-20190626		1133	Aq	15	X		X	X	X	X		X		
10															
11	MTA-IDW-20190626	6/26/19	1115	Soil	2										X

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 0.45 um filter

Other

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

* TCLP Metals on hold pending RCRA 8 metals results

Therm. ID: A2 Cor: 0.9c° Unc: 1.2c°
Cooler Dsc: Lg Blue
Packing: Bubble
Cust. Seal: Yes ___ No X
Blue Ice, (Yes) Dry, None
FedEx: ___ UPS: ___ Lab Cour: ___ Other: Client

Therm. ID: A2 Cor: 3.3c° Unc: 3.6c°
Cooler Dsc: Lg Blue
Packing: bubble
Cust. Seal: Yes ___ No X
Blue Ice, (Yes) Dry, None
FedEx: ___ UPS: ___ Lab Cour: ___ Other: Client

580-87205 Chain of Custody

Relinquished by	Received by	Relinquished by	Received by
Signature Katie M Gaughitt	Signature	Signature	Signature
Printed Name Katie Gaughitt	Printed Name Terrence Harris	Printed Name	Printed Name
Company Landau Associates	Company T.A.	Company	Company
Date 6/26/19 Time 14:15	Date 6/26/19 Time 1414	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

LANDAU ASSOCIATES — 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 Mosn Transit Authority Project No. 1817001.010.012
Project Location/Event Shelton, WA / drilling
Sampler's Name Katie Gaughlitt
Project Contact S. Fees
Send Results To D Jorgensen, S. Fees

Special Handling Requirements: _____
Shipment Method: _____
Stored on ice: (Yes) / No

Testing Parameters

Sample I.D.	Date	Time	Matrix	No. of Containers	RCRA 8 Metals 6010C/7471A	Hex. chromium 7196A	BTEX, EDC, MTBE 8260C LL	TPH-G NWTPH-Gx	TPH-D, TPH-O, NWTPH-Dx	cPAH 8270	PCBs 8082A	EDB 8260C LL	EDB 8011	TCLP Metals *
TripBlank1-20190626	6/26/19	—	Soil	3			X	X				X		
TripBlank2-20190626	—	—	Ag	6			X	X				X		
MTA-B06(0-3)-20190626	6/26/19	820	Soil	5	X	X	X	X	X	X	X			
MTA-B02(0-3)-20190626		845	Soil	5	X	X	X	X	X	X	X			
MTA-B02(5.5-6.5)-20190626		930	Soil	5	X	X	X	X	X	X	X			
MTA-B02-14-20190626		940	Ag	15	X		X	X	X	X		X		
MTA-B99-20190626		945	Ag	15	X		X	X	X	X		X		
MTA-B07(6.5-7.5)-20190626		1055	Soil	5	X	X	X	X	X	X	X			
MTA-B07-14-20190626		1133	Ag	15	X		X	X	X	X		X		
MTA-IDW-20190626	6/26/19	1115	Soil	2										X

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 0.45 um filter

Other _____

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

* TCLP Metals on hold pending RCRA 8 metals results

Relinquished by	Received by	Relinquished by	Received by
Signature Katie M. Gaughlitt	Signature	Signature	Signature
Printed Name Katie Gaughlitt	Printed Name Terrence Harris	Printed Name	Printed Name
Company Landau Associates	Company T.A.	Company	Company
Date 6/26/19 Time 14:15	Date 6/26/19 Time 1414	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

580-87205 Chain of Custody

COOLER RECEIPT FORM

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 (intial) GH

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 #

I certify that I unloaded the cooler and answered questions 7-14 (intial) GH

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 (intial) GH

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 (intial) GH

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

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

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

8/1/2019 (Rev. 1)

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Phone: 253-922-2310 Fax: 253-922-5047

Chain of Custody Record 580-87205

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Cruz, Sheri L	COC No: 580-68397.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sheri.cruz@testamericainc.com	State of Origin: Washington	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):	Job #: 580-87205-2
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 7/30/2019		Preservation Codes:
City: Nashville	TAT Requested (days):		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:
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#:		

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7196A/3060A Hexavalent Chromium (CrVI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MTA-B02(0-3)-20190626 (580-87205-4)	6/26/19	08:45 Pacific		Solid			X	1	

Loc: 580
87205

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 complicance 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	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Tom Blunt	7/25/19	TA-Sea		7-26-19 0920	TA-NAS
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2-4

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-87205-2

Login Number: 87205
List Number: 1
Creator: Blankinship, Tom X

List Source: Eurofins TestAmerica, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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

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: LCSI 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	LCSI Result	LCSI 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: LCSI 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	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hex	64.7	53.3		mg/Kg		82	80 - 120

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	RPD Limit
Chromium, hex	ND	H F1		ND		mg/Kg	☼			NC	20

Lab Chronicle

Client: Landau & Associates, Inc.
Job ID: 580-87205-2
Project/Site: MTA Parking Lot, Shelton, WA

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.
Job ID: 580-87205-2
Project/Site: MTA Parking Lot, Shelton, WA

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(A2LA)	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.

Accreditation/Certification Summary

Client: Landau & Associates, Inc.
Job ID: 580-87205-2
Project/Site: MTA Parking Lot, Shelton, WA

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 | Environment Testing TestAmerica

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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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.

Table of Contents

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 0.9º C and 3.3º 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	

Eurofins TestAmerica, Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone: 509-924-9200 Fax: 509-924-9290

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Cruz, Sheri L	Carrier Tracking No(s):	COC No: 590-4594.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sheri.cruz@testamericainc.com	State of Origin: Washington	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 580-87205-1
Address: 5755 8th Street East,	Due Date Requested: 7/1/2019			
City: Tacoma	TAT Requested (days):			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel) 253-922-5047(Fax)	PO #:			
Email:	WO #:			
Project Name: MTA Parking Lot, Shelton, WA	Project #: 58013965			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	NWTPH_Gx/5035A_FM Northwest - GRO	8260C/5035A_FW (MOD) Volatiles, standard list, low leve	6010C/3050B RCRA Metals w/o Mercury	7471A/7471A_Prep	Moisture	Total Number of containers	Special Instructions/Note:
MTA-B06(0-3)-20190626 (580-87205-3)	6/26/19	08:20 Pacific		Solid				X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 complicance 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	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Maria Orozco	8/6/19 1554	DSPD	Tom Blankenship	8/7/19 0930	TA-Sea
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: IR 4 0.5 / 0.8

LANDAU ASSOCIATES — 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 Gaughlitz
Project Contact S. Fees
Send Results To D Jorgensen, S. Fees

Special Handling Requirements: _____
Shipment Method: _____
Stored on ice: (Yes) / No

Sample I.D.	Date	Time	Matrix	No. of Containers	RCRA 8 Metals 6010C/7471A	Hex. chromium 7196A*	BTEX, EDC, MTBE 8260C LL	TPH-G NWTPH-Gx	TPH-D, TPH-O, NWTPH-Dx	cPAH 8270	PCBs 8082A	EDB 8260C LL	EDB 8011	TCLP Metals *
TripBlank1-20190626	6/26/19	—	Soil	3			X	X			X			
TripBlank2-20190626	—	—	Ag	6			X	X			X	X		
MTA-B06(0-3)-20190626	6/26/19	820	Soil	5	X	X	X	X	X	X	X			
MTA-B02(0-3)-20190626		845	Soil	5	X	X	X	X	X	X	X			
MTA-B02(5.5-6.5)-20190626		930	Soil	5	X	X	X	X	X	X	X			
MTA-B02-14-20190626		940	Ag	15	X		X	X	X	X	X	X		
MTA-B09-20190626		945	Ag	15	X		X	X	X	X	X	X		
MTA-B07(6.5-7.5)-20190626		1055	Soil	5	X	X	X	X	X	X	X			
MTA-B07-14-20190626		1133	Ag	15	X		X	X	X	X	X	X		
MTA-IDW-20190626	6/26/19	1115	Soil	2									X	

Testing Parameters

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 0.45 um filter

Other

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

* TCLP Metals on hold pending RCRA 8 metals results

Relinquished by	Received by	Relinquished by	Received by
Signature Katie M. Gaughlitz	Signature	Signature	Signature
Printed Name Katie Gaughlitz	Printed Name Terrence Harris	Printed Name	Printed Name
Company Landau Associates	Company T.A.	Company	Company
Date 6/26/19 Time 14:15	Date 6/26/19 Time 1414	Date Time	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 Number: 1
Creator: Blankinship, Tom X

List Source: Eurofins TestAmerica, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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

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

Date Collected: 06/26/19 08:20
Date Received: 06/26/19 14:14

Lab Sample ID: 580-87205-3

Matrix: Solid

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.
Job ID: 580-87205-4
Project/Site: MTA Parking Lot, Shelton, WA

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

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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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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.

Table of Contents

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 1.6º 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

LANDAU ASSOCIATES

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

Date 3/16/20

Page 1 of 1

Turnaround Time: Standard ~~3-Day~~ Accelerated 3-Day

Project Name MTA Project No. 181700I.010.01I

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

93490

Special Handling Requirements:

Shipment Method:

Stored on ice: (Yes) / No

Testing Parameters

	Sample I.D.	Date	Time	Matrix	No. of Containers	CPAH - 8270 SIM	Hold
-1	MTA-B09(1-3)	3/16/20	1310	Soil	1	X	
	MTA-B10(1-3)	3/16/20	1325		1	X	
-3	MTA-B11(1-3)	3/16/20	1340		1	X	
	MTA-B12(1-3)	3/16/20	1503		1	X	
-5	MTA-SP-COMP	3/16/20	1235		1	X	
	MTA-SP-A	3/16/20	1509		1		X
-7	MTA-SP-B	3/16/20	1513		1		X
	MTA-SP-C	3/16/20	1518		1		X
-9	MTA-SP-D	3/16/20	1523		1		X
	MTA-SP-E	3/16/20	1527	Soil	1		X

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: IR6 Cor: 1.6 ° Unc: 1.2 °
Cooler Dsc: SmBlue
Packing: bub
Cust. Seal: Yes ___ No X
Blue Ice: (Wet) Dry, None
FedEx: ___
UPS: ___
Lab Cour: 1
Other: Client

Relinquished by	Received by	Relinquished by	Received by
Signature Katie M. Haughey	Signature Tom Blankinship	Signature	Signature
Printed Name Katie Haughey	Printed Name Blankinship	Printed Name	Printed Name
Company Landau Associates	Company TA-Sea	Company	Company
Date 3/16/2020 Time 16:37	Date 3/16/20 Time 1637	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-93490-1

Login Number: 93490
List Number: 1
Creator: Blankinship, Tom X

List Source: Eurofins TestAmerica, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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

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*

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	%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	%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*

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) — **Lab Sample ID: 580-93490-1**
Date Collected: 03/16/20 13:10 — **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-B09(1-3) — **Lab Sample ID: 580-93490-1**
Date Collected: 03/16/20 13:10 — **Matrix: Solid**
Date Received: 03/16/20 16:37 — **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) — **Lab Sample ID: 580-93490-2**
Date Collected: 03/16/20 13:25 — **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-B10(1-3) — **Lab Sample ID: 580-93490-2**
Date Collected: 03/16/20 13:25 — **Matrix: Solid**
Date Received: 03/16/20 16:37 — **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) — **Lab Sample ID: 580-93490-3**
Date Collected: 03/16/20 13:40 — **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-B11(1-3) — **Lab Sample ID: 580-93490-3**
Date Collected: 03/16/20 13:40 — **Matrix: Solid**
Date Received: 03/16/20 16:37 — **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) — **Lab Sample ID: 580-93490-4**
Date Collected: 03/16/20 15:03 — **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

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

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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
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LINKS

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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.

Table of Contents

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 1.6º 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

LANDAU ASSOCIATES

☐ 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 3-4 Days
Accelerated 3-Day

Project Name MTA
Project No. 181700.010.011
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

93490

Special Handling Requirements:

Shipment Method:

Stored on ice: (Yes) / No

Testing Parameters

	Sample I.D.	Date	Time	Matrix	No. of Containers	CPAH - 8270 SIM	Hold
-1	MTA-B09(1-3)	3/16/20	1310	Soil	1	X	
	MTA-B10(1-3)	3/16/20	1325		1	X	
-3	MTA-B11(1-3)	3/16/20	1340		1	X	
	MTA-B12(1-3)	3/16/20	1303		1	X	
-5	MTA-SP-COMP	3/16/20	1235		1	X	
	MTA-SP-A	3/16/20	1509		1		X
-7	MTA-SP-B	3/16/20	1513		1		X
	MTA-SP-C	3/16/20	1518		1		X
-9	MTA-SP-D	3/16/20	1523		1		X
	MTA-SP-E	3/16/20	1527	Soil	1		X

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: IR6 Cor: 1.6 ° Unc: 1.2 °
Cooler Dsc: SmBlue
Packing: bub
Cust. Seal: Yes ___ No X
Blue Ice: (Wet) Dry, None

FedEx: ___
UPS: ___
Lab Cour: 1
Other: Client

Relinquished by	Received by	Relinquished by	Received by
Signature Katie M. Haughey	Signature Tom Blankinship	Signature	Signature
Printed Name Katie Haughey	Printed Name Blankinship	Printed Name	Printed Name
Company Landau Associates	Company TA-Sea	Company	Company
Date 3/16/2020 Time 16:37	Date 3/16/20 Time 1637	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2019

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-93490-2

Login Number: 93490
List Number: 1
Creator: Blankinship, Tom X

List Source: Eurofins TestAmerica, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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

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*

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	%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

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

eurofins | Environment Testing TestAmerica

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.

Table of Contents

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 1.6º 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

LANDAU ASSOCIATES

☐ 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 3-4 Days
Accelerated 3-Day

Project Name MTA
Project No. 181700I.010.01I
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

93490

Special Handling Requirements:

Shipment Method:

Stored on ice: (Yes) / No

Testing Parameters

	Sample I.D.	Date	Time	Matrix	No. of Containers	CPAH - 8270 SIM	Hold
-1	MTA-B09(1-3)	3/16/20	1310	Soil	1	X	
	MTA-B10(1-3)	3/16/20	1325		1	X	
-3	MTA-B11(1-3)	3/16/20	1340		1	X	
	MTA-B12(1-3)	3/16/20	1503		1	X	
-5	MTA-SP-COMP	3/16/20	1235		1	X	
	MTA-SP-A	3/16/20	1509		1		X
-7	MTA-SP-B	3/16/20	1513		1		X
	MTA-SP-C	3/16/20	1518		1		X
-9	MTA-SP-D	3/16/20	1523		1		X
	MTA-SP-E	3/16/20	1527	Soil	1		X

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: IR6 Cor: 1.6 ° Unc: 1.2 °
Cooler Dsc: SmBlue
Packing: bub
Cust. Seal: Yes ___ No X
Blue Ice: (Wet) Dry, None

FedEx: ___
UPS: ___
Lab Cour: 1
Other: Client

Relinquished by	Received by	Relinquished by	Received by
Signature Katie M. Haughey	Signature Tom Blankinship	Signature	Signature
Printed Name Katie Haughey	Printed Name Blankinship	Printed Name	Printed Name
Company Landau Associates	Company TA-Sea	Company	Company
Date 3/16/2020 Time 16:37	Date 3/16/20 Time 1637	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

Login Sample Receipt Checklist

Client: Landau & Associates, Inc.

Job Number: 580-93490-3

Login Number: 93490
List Number: 1
Creator: Blankinship, Tom X

List Source: Eurofins TestAmerica, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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

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

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

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

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		
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			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

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

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