



Mr. Steve Teel
Washington State Department of Ecology
Southwest Regional Office – Toxics Cleanup Program
P.O. Box 47775
Olympia, Washington 98504-7775

Subject: **Soil Sampling Assessment Summary Report**
Cowlitz BP / Cowlitz Food and Fuel /
Former Texaco Service Station No. 211556
101 Mulford Road
Toledo, Washington

Dear Mr. Teel:

Leidos Engineering, LLC (Leidos; formerly SAIC Energy, Environment & Infrastructure, LLC [SAIC]), on behalf of Chevron Environmental Management Company (CEMC), prepared this report to summarize the results of soil sampling activities performed in November 2013 at the above-referenced site (the Site) in Toledo, Washington.

The objective of this assessment was to evaluate current petroleum hydrocarbon concentrations in soil on the active service station portion of the Site and at the base of the two interim remedial action (IRA) excavations performed in 2010.

The scope of work and procedures employed to complete these activities were generally consistent with those described in SAIC's September 2013 work plan¹, which was conditionally approved by Ecology in a letter dated October 2, 2013. Where deviations exist in the work scope or procedures employed, a description and justification for the changes are provided in this report.

SOIL BORING AND SAMPLING ACTIVITIES

From November 4 to November 8, 2013, Leidos directed and observed completion of the following 13 soil borings at the Site (Figures 1 and 2):

1. SAIC, 2013. *Soil Sampling and Natural Attenuation Assessment Work Plan – Final, Cowlitz BP / Cowlitz Food and Fuel / Former Texaco Service Station No. 211556, 101 Mulford Road, Toledo, Washington.* September 25.

- Soil borings SB-9, SB-10, and SB-14 through SB-21 were completed on the southern portion of the active service station property, immediately downgradient of the underground storage tank (UST) basin and pump island area;
- Soil borings SB-12 and SB-13 were completed within the boundaries of 2010 IRA Excavation #1, to the east of the active service station; and
- Soil boring SB-11 was completed within the boundaries of 2010 IRA Excavation #2 on the inactive service station property.

As described in the Work Plan, CEMC policy requires that each boring be cleared to a depth of at least 8 feet below ground surface (bgs) using a hand auger, or air knife excavation technology, to avoid damage to utilities or other subsurface infrastructure.

For borings completed in the vicinity of the UST basin and pump islands, Leidos geologists first attempted to advance and sample each boring from the ground surface to 8 feet bgs using a stainless steel hand auger, without the assistance of an air knife. This was done to limit the potential loss of volatile petroleum constituents in soil samples that could be caused by the compressed air wand and suction hose of the air knife. However, this was generally not possible due the consistent presence of large cobbles in the subsurface throughout this area. Therefore, the initial 8 feet of each boring were typically advanced using the assistance of an air knife, while soil samples were collected between the air knife zones at 2-foot intervals using a hand auger.

For soil borings SB-11, SB-12, and SB-13, which were completed within the boundaries of the 2010 IRA excavations, no soil samples were collected in the air knife interval.

Following clearance of each boring to a depth of at least 8 feet, a limited-access sonic rig was used to complete drilling and sample collection at each boring. Air knife and sonic drilling activities were performed by Cascade Drilling L.P. of Woodinville, Washington.

During the drilling activities, a Leidos geologist was present to log soil lithology and collect soil samples for field-screening and laboratory analysis. Soil samples were classified in accordance with the Unified Soil Classification System. In addition, each sample was field screened for the presence of petroleum hydrocarbons by visual and olfactory observations. Sheen tests were conducted, and headspace vapor measurements were recorded using a flame-ionization detector and a photo-ionization detector.

Soil lithology encountered was consistent with previous investigations at the Site. The Site is generally underlain by gravelly alluvial deposits with cobbles and varying percentages of sand and silt. The gravelly alluvial deposits are interbedded with layers of sand and silt. A sandy silt layer, approximately 3 to 7 feet thick, is present just beneath the asphalt and overlies the alluvial deposits in the vicinity south-southwest of the southern-most pump island. The upper alluvial lithology varies in thickness from approximately 12 to 17 feet. A thick, continuous silt/clay layer of undetermined thickness is present beneath the gravelly alluvial deposits, forming the base of the shallow aquifer. Geologic logs for each boring are included in Attachment A.

Upon completion of sampling, each soil boring was backfilled with bentonite chips to a depth of approximately 1 foot bgs. The upper foot of the boring was then filled to the ground surface with black, ready-mix cement. Four borings (SB-18 through SB-21)

located in Lewis County rights of way (ROWs) for Mulford Road and Cowlitz Ridge Road were completed with temporary, 1-foot diameter, cold-asphalt patches. These patches were replaced with permanent, hot-asphalt patches on November 20, 2013, in accordance with the requirements of a Lewis County ROW permit obtained for the project.

LABORATORY ANALYSIS OF SOIL SAMPLES

At least two soil samples from each boring were collected and submitted for laboratory analysis. These samples generally included one from the capillary fringe and a second to confirm the maximum vertical extent of contamination. Additional soil samples were also submitted for sample intervals exhibiting indications of significant petroleum-range impact, based on the results of field screening analyses. Selected samples were submitted to Eurofins Lancaster Laboratories, Inc. for the following analyses:

- Gasoline-range organics (GRO) by ECY 97-602 NWTPH-Gx;
- Diesel-range organics (DRO) and heavy oils (HRO) by ECY 97-602 NWTPH-Dx;
- DRO and HRO by ECY 97-602 NWTPH-Dx with silica-gel cleanup;
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by SW-846 8021B;
- Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) by SW-846 8270C with selective ion monitoring; and
- Total lead by SW-846 6010B.

SUMMARY AND EVALUATION OF SOIL SAMPLING RESULTS

A summary of all soil sampling laboratory results is provided in Tables 1 and 2, and a complete laboratory analytical report is included as Attachment B. The following sections provide a brief summary and evaluation of soil sampling results for each of the three primary areas assessed.

UST BASIN AND PUMP ISLAND AREA

In the area south of the UST basin and pump islands (Figure 2), petroleum-range contamination exceeding proposed Site cleanup levels² was detected in nine of the 10 borings completed (no petroleum-range contamination was detected in soil boring SB-19). The following contaminants of concern (COCs) were detected:

- GRO in nine soil borings (SB-9, SB-10, SB-14 through SB-18, SB-20, and SB-21) at concentrations up to 5,900 milligrams per kilogram (mg/kg);
- Benzene in eight soil borings (SB-9, SB-10, SB-14 through SB-18, and SB-20) at concentrations up to 1.7 mg/kg;
- Toluene in one soil boring (SB-14) at a concentration of 8.2 mg/kg;

2. Cleanup levels for the Site as proposed in the October 31, 2012 Draft Feasibility Study Report prepared by SAIC. Proposed Site cleanup levels are also shown in Tables 1 and 2 of this report.

- Ethylbenzene in three soil borings (SB-10, SB-15, and SB-17) at concentrations up to 10 mg/kg; and
- Total xylenes in three soil borings (SB-10, SB-14, and SB-17) at concentrations up to 65 mg/kg.

GRO, DRO, and benzene soil sampling results for borings in this area are also presented graphically in updated geologic cross-sections included on Figures 3 and 5. For comparison, geologic cross-sections based on pre-2005 soil sampling results are also included on Figures 4 and 6.

Soil sampling results from this area indicate that GRO and benzene are the primary COCs in this area of the Site and that contamination largely occurs within the zone of seasonal groundwater fluctuation. However, these substances were also detected above cleanup levels in near-surface (approximately 2 feet bgs) soil samples collected at three of the boring locations (SB-15, SB-16, and SB-17) in this area (Figure 5). These near-surface detections of petroleum-range contamination are inconsistent with a UST release, and are instead believed to be indicators of a shallow petroleum release mechanism at the Site.

2010 IRA EXCAVATION-1

Two soil borings (SB-12 and SB-13) were completed within the boundaries of 2010 IRA Excavation-1 (Figure 2). As requested by Ecology, the locations for these borings were selected to be at the approximate locations of IRA excavation samples EX1-30-9 and EX1-55-9.5, respectively.

Field screening and laboratory results from borings SB-12 and SB-13 indicate that petroleum-range contamination remains in this area of the Site at concentrations exceeding proposed Site cleanup levels. Contamination appears to be present within a relatively thin smear zone at the groundwater interface. The following table provides a summary and comparison of the 2010 and 2013 soil sampling results from these two locations.

Sample ID	Sample Date	GRO (mg/kg)	DRO (mg/kg)	Benzene (mg/kg)
EX1-30-9	10/7/2010	3,100	4,500	< 0.02
SB-12-9.5	11/6/2013	1.5	< 3.3	< 0.0055
SB-12-10.5	11/6/2013	1,600	2,500	< 0.19
SB-12-12	11/6/2013	2.6	< 3.3	< 0.0046
SB-12-13.5	11/6/2013	< 1.0	< 3.3	< 0.0051
EX1-55-9.5	10/11/2010	6,600	1,100	< 0.02
SB-13-10.5	11/7/2013	150	82	0.085
SB-13-12.5	11/7/2013	< 1.0	< 3.4	< 0.0052

Note: Bold values indicate laboratory results confirmed or potentially exceeding proposed Site cleanup levels.

2010 IRA EXCAVATION-2

One soil boring (SB-11) was completed in the area of 2010 IRA Excavation-2 (Figure 1). This boring was completed in the approximate location of IRA excavation sample EX2-14-9.5. Two soil samples were collected from boring SB-11. The first sample (SB-11-10) was collected at 10 feet bgs, immediately below the quarry spall excavation backfill (i.e., at the base of the excavation at this location), and the second sample was collected at 12.5 feet bgs. The boring was completed to a final depth of 20 feet bgs.

Field screening and laboratory results of these samples detected no evidence of petroleum-range contamination above proposed Site cleanup levels.

SUMMARY AND CONCLUSIONS

Results of the 2013 soil sampling assessment at the Site indicate that petroleum-range contamination (primarily GRO and benzene) continues to be present on the active service station property, but that cleanup objectives appear to have been achieved on the inactive station portion of the Site.

In the area immediately downgradient (south) of the UST basin and pump islands, GRO and benzene contamination in soil continue to be widespread. However, comparison of soil sampling data from this assessment to pre-2005 data (Figures 3 and 5) suggests that the lateral and vertical extent of impacted soil may be decreasing in response to ongoing natural attenuation at the Site. The current data set indicates no detections of COCs exceeding proposed Site cleanup levels at a depth greater than approximately 10.5 feet bgs. In comparison, results of soil sampling performed in December 2004 indicate that GRO and benzene contamination exceeding cleanup levels was previously detected at depths of up to 15 feet bgs.

Although the current data set indicates that maximum vertical depth of contamination has decreased, it also suggests that shallow soil contamination (approximately 2 feet bgs) is more extensive than previously identified, or has increased since the December 2004 sampling event. In this area, GRO was detected in samples from 2 feet bgs in three soil borings (SB-15, SB-16, and SB-17), at concentrations up to 2,800 mg/kg. The confirmed presence of shallow soil contamination at these locations is not consistent with the historic UST release that was previously determined to have occurred at the Site. Instead, based on the shallow depth of these samples, and their lateral distance from the pump islands, it is likely that this contamination is the result of surface releases that have occurred, and may continue to occur, in association with the operation of an active service station at the Site. Additional support for on-going surface releases at the Site is provided by observations, by Leidos personnel, of petroleum sheens in rain water sheet flow draining from the station during the November 2013 soil sampling activities.

In the area of IRA Excavation-1, on the active service station property, sampling results for soil borings SB-12 and SB-13 indicate that petroleum-range contamination (including DRO) continues to be present within a relatively thin smear zone at the groundwater interface. Results for sample SB-12-10.5 indicate that GRO and DRO concentrations in this area remain relatively high; however, groundwater data for monitoring well MW-110, MW-112, MW-119, and MW-103 indicate that groundwater downgradient of

this area does not contain petroleum-range contamination exceeding proposed Site cleanup levels (see Third Quarter 2013 Groundwater Monitoring Report, prepared by Leidos, dated January 31, 2014). Therefore, soil contamination remaining in this area is believed to be localized and stable.

In the area of IRA Excavation-2, on the inactive service station property, sampling results for boring SB-11 were non-detect or below Site cleanup levels for all COCs. Based on these data, and the results of groundwater monitoring performed at monitoring well MW-120 since November 2011, Leidos believes that the limited GRO contamination remaining in place at the conclusion of the 2010 IRA excavation was addressed by the addition of Oxygen Release Compound® to the base of the excavation, and/or naturally occurring attenuation processes. Therefore, we believe that cleanup objectives for this portion of the Site have been completed.

CLOSING

Chevron currently anticipates performing groundwater monitoring for the evaluation of natural attenuation at the Site through May 2014 (four quarterly events). Upon evaluation of those data, our project team would like to meet with you again to discuss the results of these evaluations, and develop an agreed upon path forward for satisfaction of the Agreed Order for the Site.

If you have any questions or comments regarding this report, please contact me at (425) 482-3323 or by email at shropshirer@leidos.com.

Sincerely,

Leidos Engineering, LLC



Russell S. Shropshire, PE
Senior Project Manager

Enclosures:

- Figure 1 – Site Map and Soil Boring Locations
- Figure 2 – Soil Boring Locations – Active Station Property
- Figure 3 – 2013 Soil Sampling Results – Cross-Section A-A'
- Figure 4 – Pre-2005 Soil Sampling Results – Cross-Section A-A'
- Figure 5 – 2013 Soil Sampling Results – Cross-Section B-B'
- Figure 6 – Pre-2005 Soil Sampling Results – Cross-Section B-B'
- Table 1 – Summary of Soil Analytical Data – TPH, BTEX, Total Lead
- Table 2 – Summary of Soil Analytical Data – cPAHs
- Attachment A – Boring Logs
- Attachment B – Laboratory Analysis Report

cc: Mr. Mark Horne – CEMC
 Mr. Charles Vineyard
 Mr. John Houlihan – Houlihan Law
 Project File

REPORT LIMITATIONS

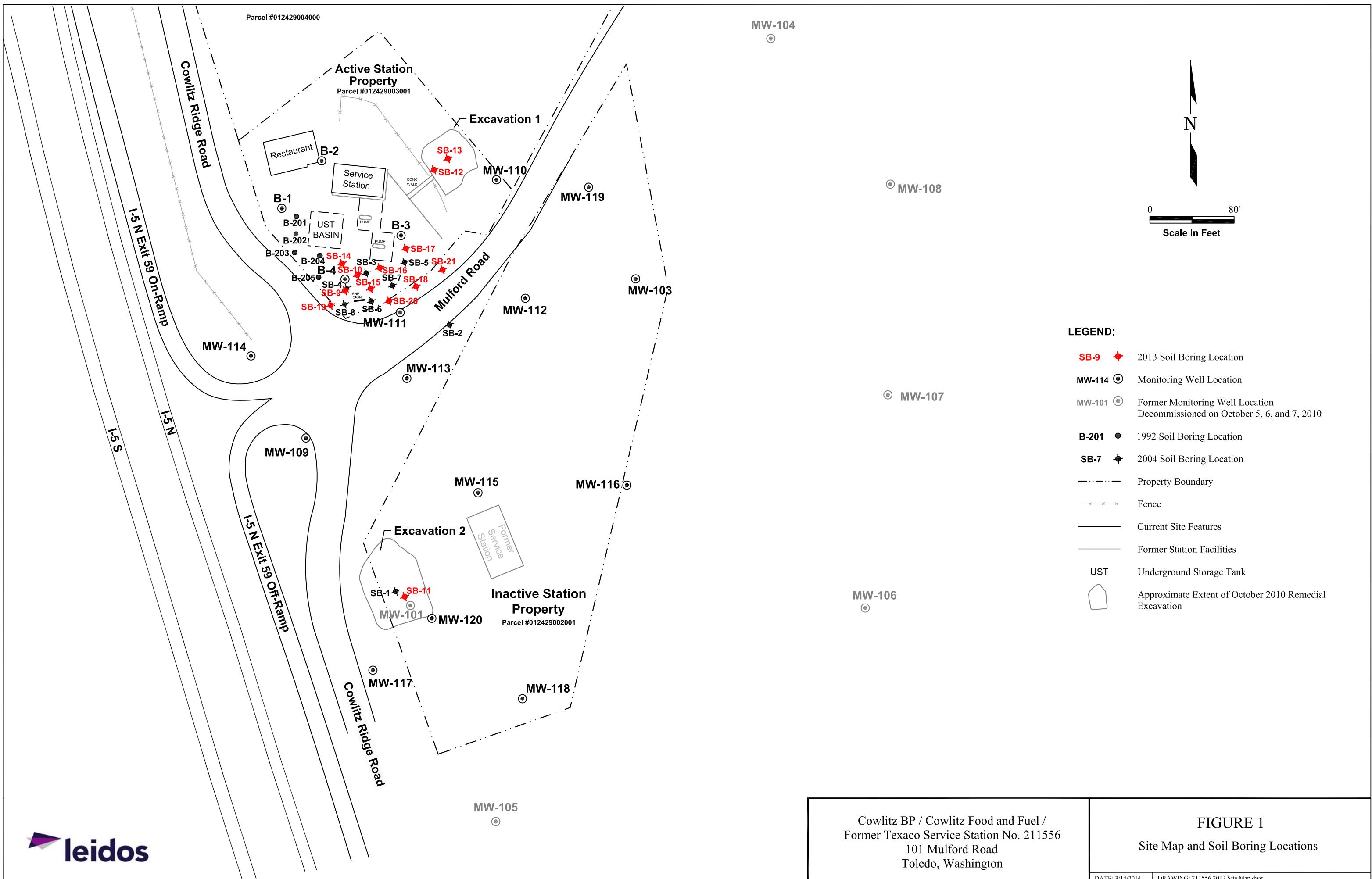
This technical document was prepared on behalf of CEMC and is intended for its sole use and for use by the local, state or federal regulatory agency that the technical document was sent to by Leidos. Any other person or entity obtaining, using, or relying on this technical document hereby acknowledges that they do so at their own risk, and Leidos shall have no responsibility or liability for the consequences thereof.

Site history and background information provided in this technical document are based on sources that may include interviews with environmental regulatory agencies and property management personnel and a review of acquired environmental regulatory agency documents and property information obtained from CEMC and others. Leidos has not made, nor has it been asked to make, any independent investigation concerning the accuracy, reliability, or completeness of such information beyond that described in this technical document.

Recognizing reasonable limits of time and cost, this technical document cannot wholly eliminate uncertainty regarding the vertical and lateral extent of impacted environmental media.

Opinions and recommendations presented in this technical document apply only to site conditions and features as they existed at the time of Leidos site visits or site work and cannot be applied to conditions and features of which Leidos is unaware and has not had the opportunity to evaluate.

All sources of information on which Leidos has relied in making its conclusions (including direct field observations) are identified by reference in this technical document or in appendices attached to this technical document. Any information not listed by reference or in appendices has not been evaluated or relied upon by Leidos in the context of this technical document. The conclusions, therefore, represent our professional opinion based on the identified sources of information.

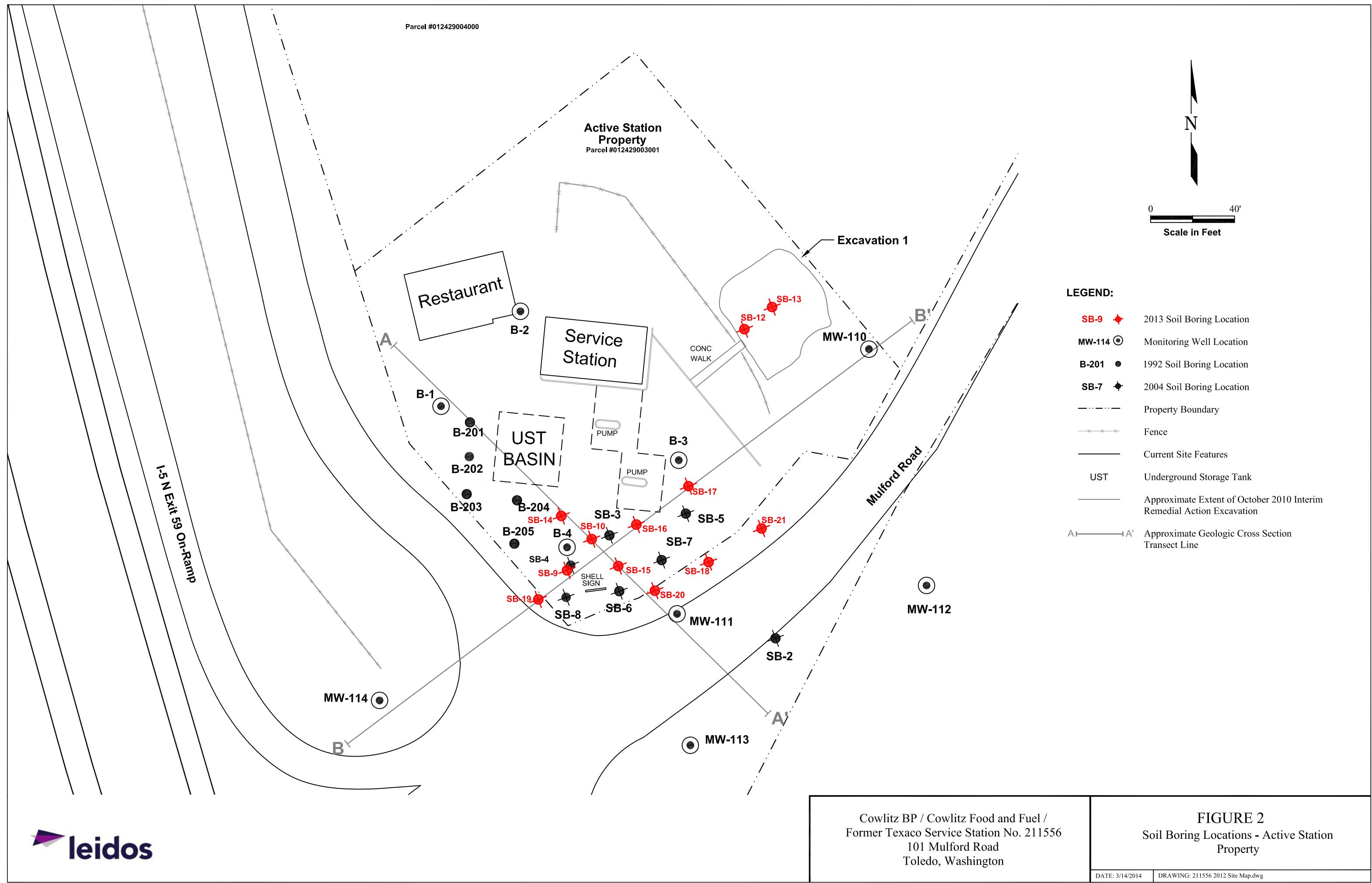


 leidos

Cowlitz BP / Cowlitz Food and Fuel /
Former Texaco Service Station No. 211556
101 Mulford Road
Toledo, Washington

FIGURE 1

Map and Soil Boring Locations



LEGEND:

- Boring
- Screened interval
- Estimated extent of soil contamination exceeding Site cleanup levels, based on November 2013 soil sampling results (dashed where inferred)
- Estimated extent of soil contamination exceeding Site cleanup levels, based on pre-2005 soil sampling results (see Figure 4 for additional details)
- Highest recorded groundwater elevation
- Lowest recorded groundwater elevation
- Soil analytical sample location
- 3,300 Gasoline-range hydrocarbon concentration in milligrams per kilogram (mg/kg)
- 160 Diesel-range hydrocarbon concentration in mg/kg
- 0.38 Benzene concentration in mg/kg
- ND No analytes were detected at or above laboratory detection limits
- 0.27* Analyte not detected at or above indicated laboratory detection limit; however, the detection limit exceeded the Site cleanup level
- 0.38** Bold indicates analyte concentration exceeding Site cleanup level
- Contact line between soil types

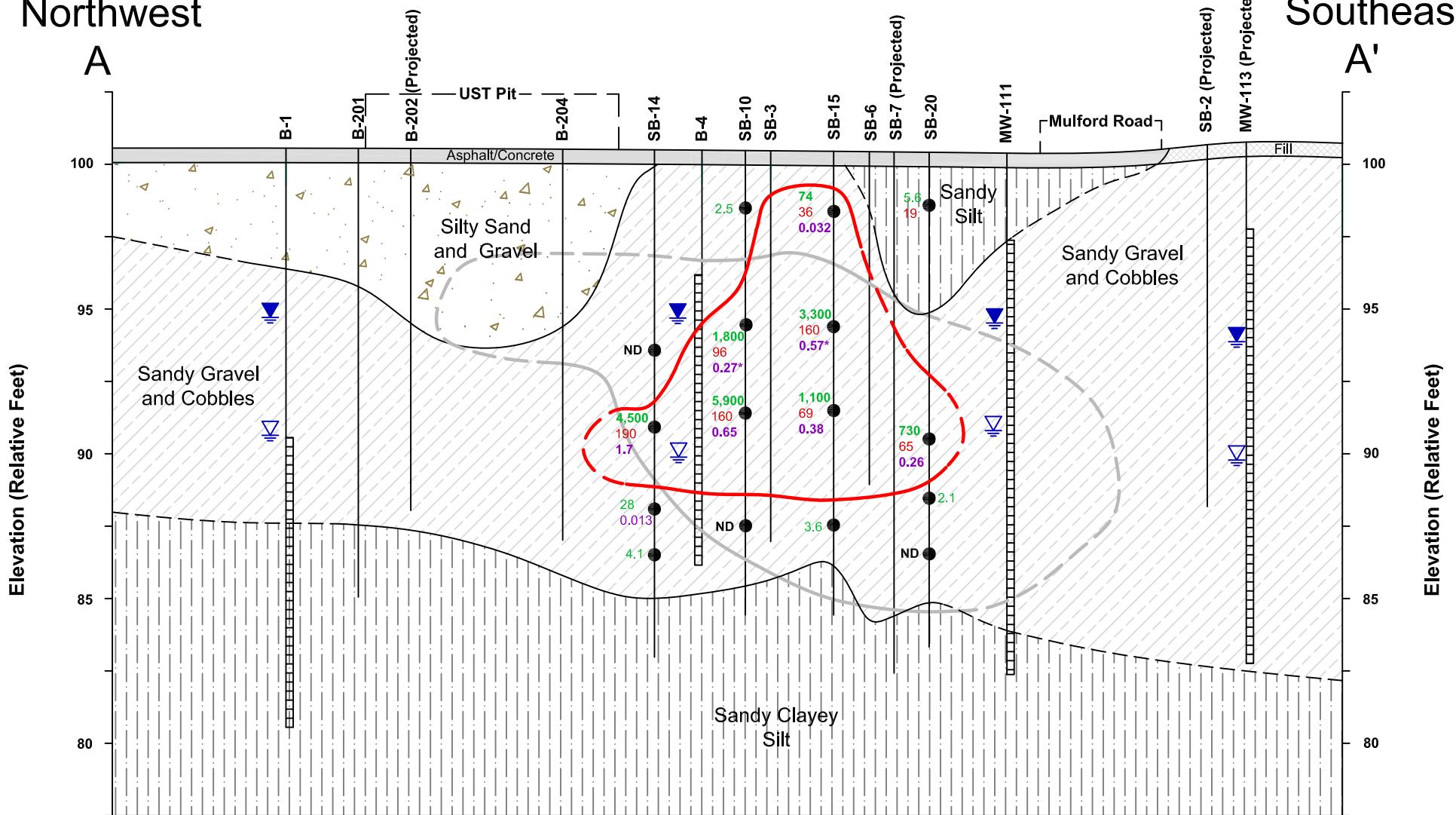
Note: Analyte concentration not included if less than laboratory detection limits.

SOIL/ROCK CLASSIFICATION LEGEND:

- | | |
|--|--|
| | Concrete or Asphalt |
| | Brown, fine to coarse Sand and Gravel with some cobbles and silt |
| | Brown to gray, medium to coarse sandy Gravel and Cobbles |
| | Brown to greenish gray, fine sandy, clayey Silt |

Northwest

A



Southeast

A'

Elevation (Relative Feet)

0 15 30 60
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

Cowlitz BP / Cowlitz Food and Fuel /
Former Texaco Service Station No. 211556
101 Mulford Road
Toledo, Washington

FIGURE 3
2013 Soil Sampling Results -
Cross-Section A-A'

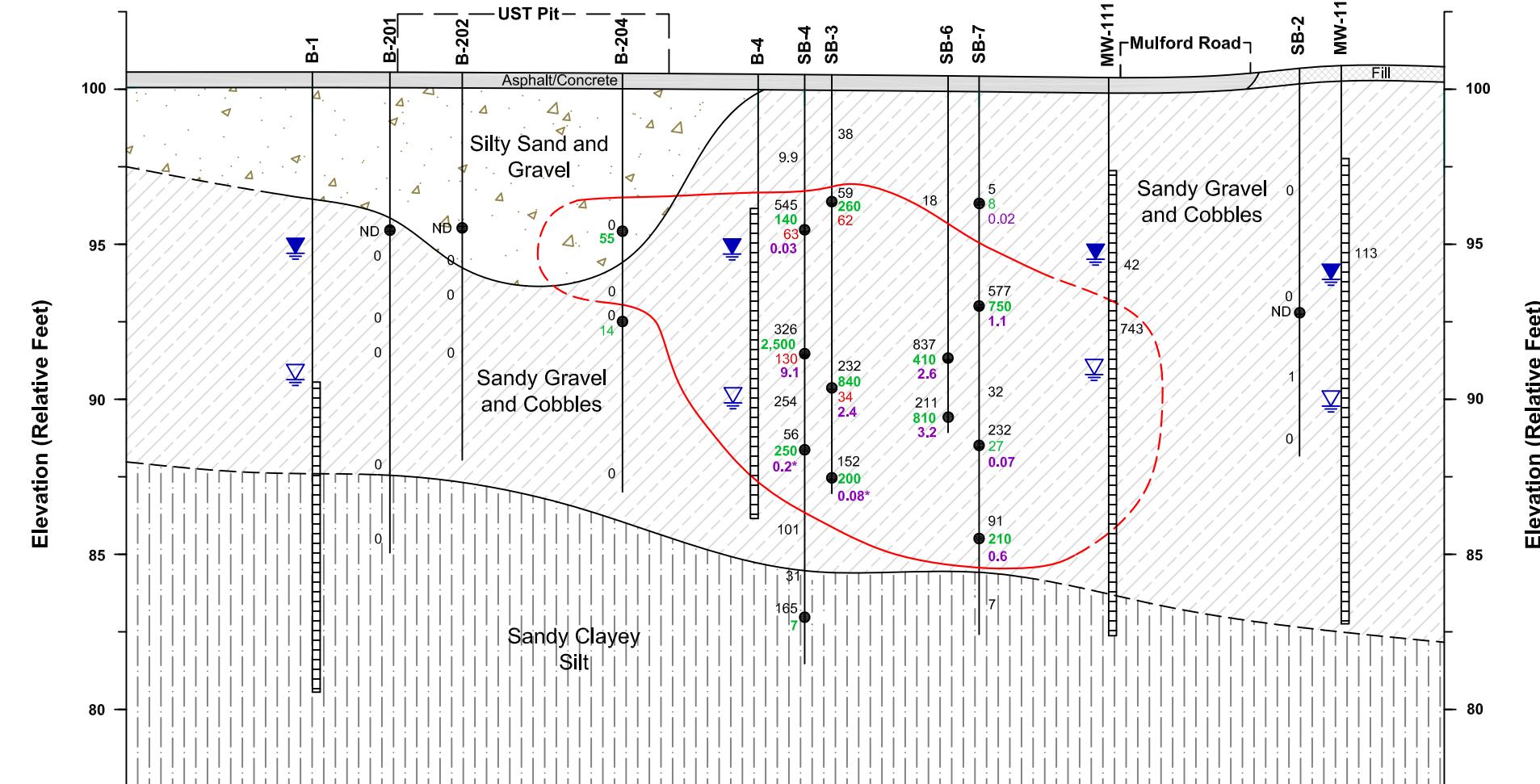
DATE: 3/20/2014 DRAWING: 211556 X-Section.dwg

LEGEND:

- Boring
- Screened interval
- Estimated extent of soil contamination exceeding Site cleanup levels, based on pre-2005 soil sampling results (dashed where inferred)
- Highest recorded groundwater elevation
- Lowest recorded groundwater elevation
- Soil analytical sample location
- Gasoline-range hydrocarbon concentration in milligrams per kilogram (mg/kg)
- Diesel-range hydrocarbon concentration in mg/kg
- Benzene concentration in mg/kg
- ND No analytes were detected at or above laboratory detection limits
- 0.05* Analyte not detected at or above indicated laboratory detection limit; detection limit exceeded the Site cleanup level
- 0.13 Bold indicates analyte concentration exceeding Site cleanup level
- 140 Photoionization detector (PID) reading in parts per million (ppm)
- Contact line between soil types

Northwest

A



Southeast

A'

Elevation (Relative Feet)

SOIL/ROCK CLASSIFICATION LEGEND:

- Concrete or Asphalt
- Brown, fine to coarse Sand and Gravel with some Cobbles and Silt
- Brown to gray, medium to coarse sandy Gravel and Cobbles
- Brown to greenish gray, fine sandy, clayey SILT

0 15 30 60
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

Cowlitz BP / Cowlitz Food and Fuel /
Former Texaco Service Station No. 211556
101 Mulford Road
Toledo, Washington

FIGURE 4
Pre-2005 Soil Sampling Results -
Cross-Section A-A'

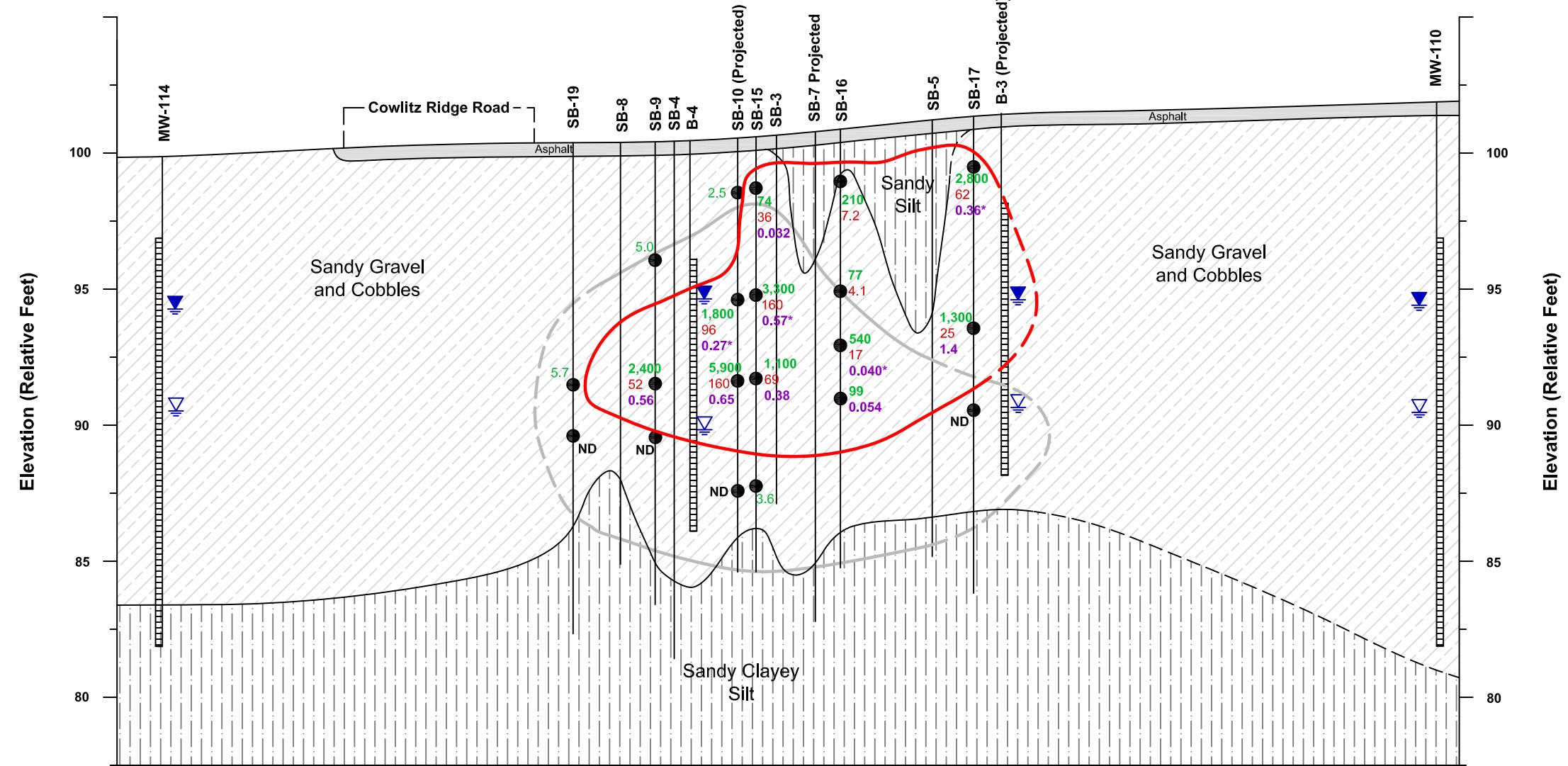
DATE: 3/19/2014 DRAWING: 21-1556 X-Section.dwg

LEGEND:

- Boring
- Screened interval
- Estimated extent of soil contamination exceeding Site cleanup levels, based on November 2013 soil sampling results (dashed where inferred)
- Estimated extent of soil contamination exceeding Site cleanup levels, based on pre-2005 soil sampling results (see Figure 6 for additional details)
- Highest recorded groundwater elevation
- Lowest recorded groundwater elevation
- Soil analytical sample location
- Gasoline-range hydrocarbon concentration in milligrams per kilogram (mg/kg)
- Diesel-range hydrocarbon concentration in mg/kg
- Benzene concentration in mg/kg
- ND No analytes were detected at or above laboratory detection limits
- 0.27* Analyte not detected at or above indicated laboratory detection limit; however, the detection limit exceeded the Site cleanup level
- 0.38 Bold indicates analyte concentration exceeding Site cleanup level
- Contact line between soil types

West

B



SOIL/ROCK CLASSIFICATION LEGEND:

- Concrete or Asphalt
- Brown to gray, medium to coarse sandy Gravel and Cobbles
- Brown to greenish gray, fine sandy, clayey Silt

0 15 30 60
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

Cowlitz BP / Cowlitz Food and Fuel /
Former Texaco Service Station No. 211556
101 Mulford Road
Toledo, Washington

FIGURE 5
2013 Soil Sampling Results -
Cross-Section B-B'

LEGEND:

- Boring
- Screened interval
- Estimated extent of soil contamination exceeding Site cleanup levels, based on pre-2005 soil sampling results (dashed where inferred)
- Highest recorded groundwater elevation
- Lowest recorded groundwater elevation
- Soil analytical sample location
- 28 Gasoline-range hydrocarbon concentration in milligrams per kilogram (mg/kg)
- 10 Diesel-range hydrocarbon concentration in mg/kg
- 0.001 Benzene concentration in mg/kg
- ND No analytes were detected at or above laboratory detection limits
- 0.05* Analyte not detected at or above indicated laboratory detection limit; detection limit exceeded the Site cleanup level
- 0.13 Bold indicates analyte concentration exceeding Site cleanup level
- 140 Photolionization detector (PID) reading in parts per million (ppm)
- Contact line between soil types

West
B

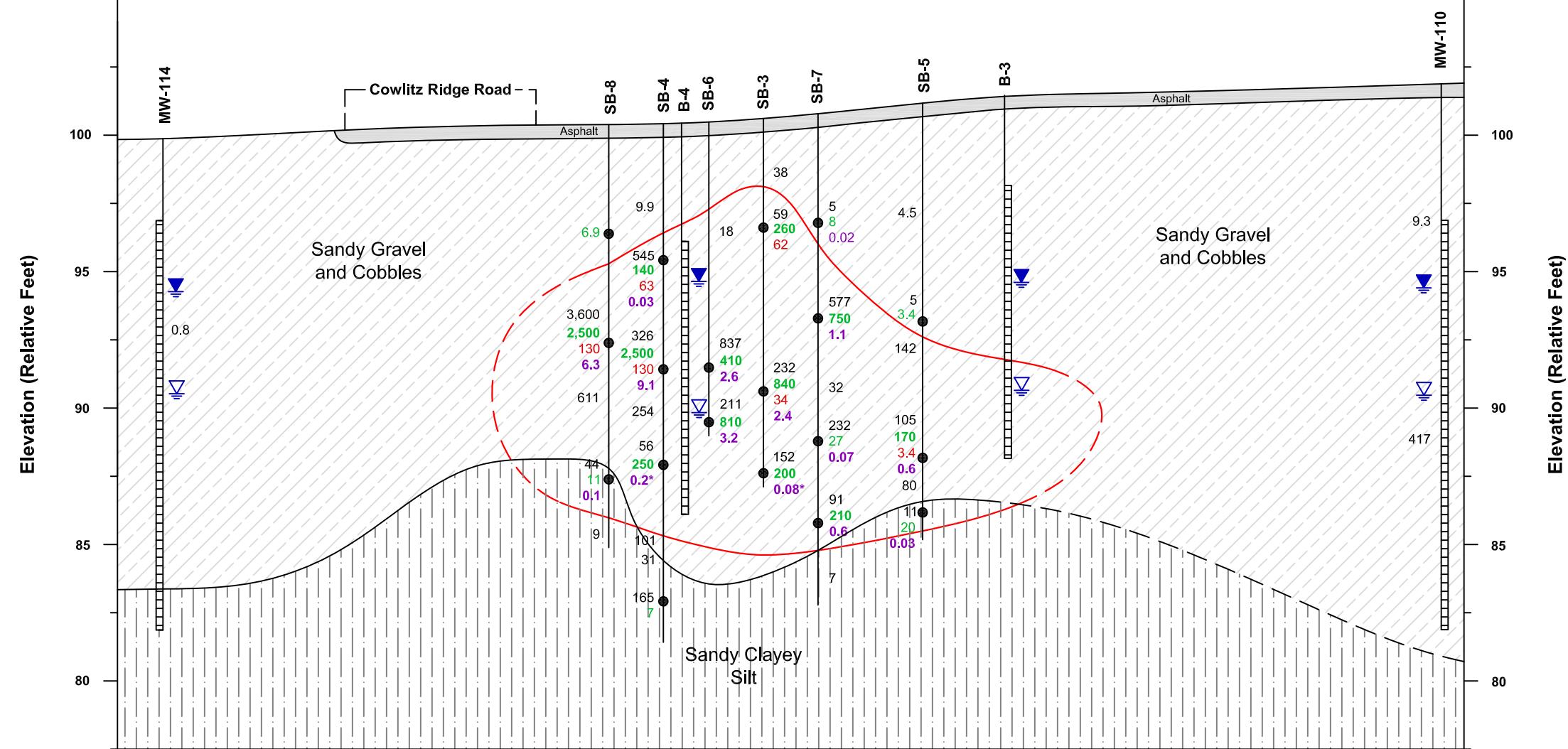


TABLE 1
SUMMARY OF HISTORICAL ANALYTICAL DATA - TPH, BTEX¹
COWLITZ BP (COWLITZ FOOD AND FUEL)/FORMER TEXACA SERVICE STATION 211556
101 Mulford Road Toledo, Washington
Concentration reported in mg/kg

Sample ID	Depth (ft)	Date Sampled	Gasoline Range Organics ² (mg/kg)	Diesel Range Organics (mg/kg)		Heavy Oils (mg/kg)		Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total Lead (mg/kg)
				w/o silica gel	w silica gel	w/o silica gel	w silica gel					
SB-9-4	4	11/4/2013	5.0	<3.7	<3.7	<12	<12	<0.0065	<0.0065	0.0072	<0.019	8.80
SB-9-9	9	11/8/2013	2,400	52	34	<11	<11	0.56	4.5	<2.7	5.0	4.63
SB-9-11	11	11/8/2013	<0.9	<3.3	<3.3	<11	<11	<0.0046	<0.0046	<0.0046	<0.014	3.40
DUP-3-110813	11	11/8/2013	<0.9	<3.2	<3.2	<11	<11	<0.0043	0.0051	<0.0043	<0.013	2.64
SB-10-2	2	11/4/2013	2.5	<3.9	<3.9	<13	<13	<0.0075	0.013	0.023	0.11	7.57
SB-10-6	6	11/6/2013	1,800	96	74	<12	<12	<0.27	0.35	1.0	1.9	10.7
SB-10-9	9	11/7/2013	5,900	160	140	<11	<11	0.65	4.2	7.5	15	7.13
SB-10-13	13	11/7/2013	<1	<3.3	<3.3	<11	<11	<0.0048	<0.0048	<0.0048	<0.15	2.53
SB-11-10	10	11/6/2013	19	<3.3	<3.3	<11	<11	<0.0048	0.0049	0.024	0.046	5.79
SB-11-12.5	12.5	11/6/2013	<1	<3.3	<3.3	<11	<11	<0.0048	<0.0048	<0.0048	<0.014	6.79
SB-12-9.5	9.5	11/6/2013	1.5	<3.3	<3.3	15	<11	<0.0055	<0.0055	<0.0055	<0.016	6.34
SB-12-10.5	10.5	11/6/2013	1,600	2,500	2,300	<110	<110	<0.19	2.2	<1.5	3.4	11.0
SB-12-12	12	11/6/2013	2.6	<3.3	<3.3	<11	<11	<0.0046	<0.0046	<0.0046	<0.014	5.70
SB-12-13.5	13.5	11/6/2013	<1.0	<3.3	<3.3	<11	<11	<0.0051	0.017	<0.0051	<0.015	7.21
SB-13-10.5	10.5	11/7/2013	150	82	76	14	<11	0.085	0.32	0.17	0.88	7.34
SB-13-12.5	12.5	11/7/2013	<1.0	<3.4	<3.4	<11	<11	<0.0052	<0.0052	<0.0052	<0.015	6.78
SB-14-7	7	11/5/2013	<1.1	<3.5	<3.5	<12	<12	<0.0056	<0.0056	<0.0056	<0.017	8.67
SB-14-9.5	9.5	11/7/2013	4,500	190	170	<11	<11	1.7	8.2	<5.3	9.7	7.24
DUP-1-110713	9.5	11/7/2013	2,200	150	140	<11	<11	<0.45	<2.6	1.6	4.2	6.21
SB-14-12.5	12.5	11/7/2013	28	<3.3	<3.3	<11	<11	0.013	0.032	0.054	0.059	3.60
SB-14-14	14	11/7/2013	4.1	<3.2	<3.2	<11	<11	<0.0053	0.0065	0.0059	<0.016	1.85
SB-15-2	2	11/5/2013	74	36	19	83	16	0.032	0.086	0.22	0.65	11.5
SB-15-6	6	11/6/2013	3,300	160	130	<11	<11	<0.57	1.4	3.8	5.7	12.5
SB-15-9	9	11/7/2013	1,100	69	57	<11	<11	0.38	1.4	6.8	7.2	4.24
SB-15-13	13	11/7/2013	3.6	<3.4	<3.4	<11	<11	<0.0048	<0.0048	0.041	<0.014	1.78
SB-16-2	2	11/6/2013	210	7.2	4.2	<14	<14	<0.036	<0.15	0.15	0.24	11.4
SB-16-6	6	11/6/2013	77	4.1	<3.3	<11	<11	<0.0055	0.034	0.012	0.096	13.4
SB-16-8	8	11/7/2013	540	17	12	12	<11	<0.040	0.17	0.42	0.67	5.05
SB-16-10	10	11/7/2013	99	<3.4	<3.4	12	<11	0.054	0.097	0.22	0.20	6.84
SB-17-2	2	11/6/2013	2,800	62	47	33	<13	<0.36	1.1	7.9	65	19.3
SB-17-8	8	11/8/2013	1,300	25	15	<11	<11	1.4	1.7	10	20	3.64
SB-17-11	11	11/8/2013	<0.9	<3.3	<3.3	<11	<11	<0.0046	<0.0046	<0.0046	<0.014	2.67
SB-18-8	8	11/7/2013	580	<3.4	<3.4	<11	<11	0.43	1.2	1.4	0.84	4.55
DUP-2-110713	8	11/7/2013	620	7.8	6.6	<11	<11	0.46	1.3	1.5	0.92	4.09
SB-18-12	12	11/7/2013	<1	<3.5	<3.5	<12	<12	<0.0050	<0.0050	<0.0050	<0.015	3.00
SB-19-9	9	11/8/2013	5.7	<3.2	<3.2	<11	<11	<0.0048	0.014	0.014	0.042	3.55
SB-19-11	19	11/8/2013	<1	<3.2	<3.2	<11	<11	<0.0050	<0.0050	<0.0050	<0.015	2.97
SB-20-2	2	11/8/2013	5.6	19	13	16	<13	<0.0068	0.0068	<0.0091	<0.020	5.29

TABLE 1
SUMMARY OF HISTORICAL ANALYTICAL DATA - TPH, BTEX¹
COWLITZ BP (COWLITZ FOOD AND FUEL)/FORMER TEXACA SERVICE STATION 211556
101 Mulford Road Toledo, Washington
Concentration reported in mg/kg

Sample ID	Depth (ft)	Date Sampled	Gasoline Range Organics² (mg/kg)	Diesel Range Organics (mg/kg)		Heavy Oils (mg/kg)		Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total Lead (mg/kg)
SB-20-10	10	11/8/2013	730	65	46	<11	<11	0.26	0.96	2.1	1.1	5.80
SB-20-12	12	11/8/2013	2.1	<3.3	<3.3	<11	<11	<0.0048	<0.0048	0.0077	<0.014	6.07
SB-20-14	14	11/8/2013	<1.0	<3.4	<3.4	<11	<11	<0.0050	<0.0050	<0.0050	<0.015	3.94
SB-21-6	6	11/8/2013	<1.6	<3.7	<3.7	<12	<12	<0.0082	<0.0082	<0.0082	<0.025	3.83
SB-21-9	9	11/8/2013	61	3.3	<3.3	<11	<11	<0.020	<0.069	0.049	0.12	4.42
SB-21-12	12	11/8/2013	<1.2	<3.3	<3.3	<11	<11	<0.0059	<0.0059	<0.0059	<0.018	4.62
MTCA Method A CULS			30/100	2,000		2,000		0.03	7.0	6.0	9.0	250

ABBREVIATIONS:

CULs = Cleanup levels

DUP = Duplicate

Ecology = Washington State Department of Ecology

< = Concentration was less than the laboratory reporting limit

EPA = United States Environmental Protection Agency

mg/kg = Milligrams per kilogram

MTCA = Model Toxics Control Act

TPH = Total Petroleum Hydrocarbons

BTEX = Benzene, toluene, ethylbenzene and total xylenes

w = with

w/o = without

ANALYTICAL METHODS:

Gasoline Range Organics Analyzed by Ecology Method NWTPH-Gx.

Diesel Range Organics Analyzed by Ecology Method NWTPH-Dx with silica-gel cleanup.

Heavy Oils Analyzed by Ecology Method NWTPH-Dx with silica-gel cleanup.

Benzene, Toluene, Ethylbenzene, and Total Xylenes Analyzed by EPA Method 8021B (2004 and older) and EPA Method 8260B (2010)

cPAHs analyzed by EPA Method 8270C SIM
Total Lead analyzed EPA Method 6020

Notes:

1. Analytical results in bold font indicate concentrations exceed MTCA Method A cleanup levels.

2. TPH-GRO MTCA Method A cleanup level is 30 mg/kg if benzene is present and 100 mg/kg if benzene is not present.

TABLE 1
SUMMARY OF HISTORICAL ANALYTICAL DATA - cPAHs
COWLITZ BP (COWLITZ FOOD AND FUEL)/FORMER TEXACA SERVICE STATION 211556
101 Mulford Road Toledo, Washington
Concentration reported in mg/kg

Sample ID	Depth (ft)	Date Sampled	Benzo(a) anthracene ¹ (mg/kg)	Benzo(a) pyrene ¹ (mg/kg)	Benzo(b) fluoranthene ¹ (mg/kg)	Benzo(k) floranthene ¹ (mg/kg)	Chrysene ¹ (mg/kg)	Dibenz(a,h) anthracene ¹ (mg/kg)	Indeno (1,2,3-cd) pyrene ¹ (mg/kg)
SB-9-4	4	11/4/2013	<0.00082	<0.00082	<0.00082	<0.00082	<0.00041	<0.00082	<0.00082
SB-9-9	9	11/8/2013	0.0053	0.0020	0.0020	0.00082	0.0050	<0.00073	<0.00073
SB-9-11	11	11/8/2013	<0.00074	<0.00074	<0.00074	<0.00074	<0.00037	<0.00074	<0.00074
DUP-3-110813	11	11/8/2013	<0.00072	<0.00072	<0.00072	<0.00072	<0.00036	<0.00072	<0.00072
SB-10-2	2	11/4/2013	<0.00085	<0.00085	<0.00085	<0.00085	0.0013	<0.00085	<0.00085
SB-10-6	6	11/6/2013	0.0070	0.0037	0.0036	0.0019	0.0080	<0.00082	<0.00082
SB-10-9	9	11/7/2013	0.012	0.0046	0.0041	0.0014	0.011	<0.00075	0.0012
SB-10-13	13	11/7/2013	<0.00073	<0.00073	<0.00073	<0.00073	0.00080	<0.00073	<0.00073
SB-11-10	10	11/6/2013	0.00075	<0.00073	0.0017	0.00097	0.0024	<0.00073	<0.00073
SB-11-12.5	12.5	11/6/2013	<0.00073	<0.00073	<0.00073	<0.00073	<0.00037	<0.00073	<0.00073
SB-12-9.5	9.5	11/6/2013	0.0015	0.0021	0.0032	0.0011	0.0026	<0.00074	0.0011
SB-12-10.5	10.5	11/6/2013	<0.0072	<0.0072	<0.0072	<0.0072	0.017	<0.0072	<0.0072
SB-12-12	12	11/6/2013	<0.00073	<0.00073	<0.00073	<0.00073	<0.00037	<0.00073	<0.00073
SB-12-13.5	13.5	11/6/2013	<0.00073	<0.00073	<0.00073	<0.00073	<0.00036	<0.00073	<0.00073
SB-13-10.5	10.5	11/7/2013	<0.00074	<0.00074	0.0011	<0.00074	0.0014	<0.00074	<0.00074
SB-13-12.5	12.5	11/7/2013	<0.00075	<0.00075	<0.00075	<0.00075	<0.00037	<0.00075	<0.00075
SB-14-7	7	11/5/2013	0.0039	0.0055	0.0098	0.0042	0.018	0.0027	0.0017
SB-14-9.5	9.5	11/7/2013	0.027	0.012	0.011	0.0037	0.026	0.0011	0.0022
DUP-1-110713	9.5	11/7/2013	0.014	0.0060	0.0053	0.0021	0.013	<0.00073	0.0012
SB-14-12.5	12.5	11/7/2013	<0.00074	<0.00074	<0.00074	<0.00074	<0.00037	<0.00074	<0.00074
SB-14-14	14	11/7/2013	<0.00072	<0.00072	<0.00072	<0.00072	<0.00036	<0.00072	<0.00072
SB-15-2	2	11/5/2013	<0.00092	0.00093	0.0019	<0.00092	0.0034	<0.00092	<0.00092
SB-15-6	6	11/6/2013	0.015	0.0079	0.0074	0.0037	0.016	0.00079	0.0013
SB-15-9	9	11/7/2013	0.0051	0.0021	0.0021	0.00081	0.0048	<0.00071	<0.00071
SB-15-13	13	11/7/2013	<0.00076	<0.00076	<0.00076	<0.00076	<0.00038	<0.00076	<0.00076
SB-16-2	2	11/6/2013	<0.00091	<0.00091	<0.00091	<0.00091	<0.00045	<0.00091	<0.00091
SB-16-6	6	11/6/2013	0.0029	0.0018	0.0016	0.00081	0.0025	<0.00073	<0.00073
SB-16-8	8	11/7/2013	0.0070	0.0029	0.0024	0.00093	0.0055	<0.00074	<0.00074
SB-16-10	10	11/7/2013	<0.00075	<0.00075	0.0018	<0.00075	0.0011	<0.00075	<0.00075
SB-17-2	2	11/6/2013	0.0018	<0.00086	0.0020	<0.00086	0.0026	<0.00086	<0.00086
SB-17-8	8	11/8/2013	0.0027	0.0011	0.0013	<0.00074	0.0032	<0.00074	<0.0074
SB-17-11	11	11/8/2013	<0.00075	<0.00075	<0.00075	<0.00075	<0.00037	<0.00075	<0.000075
SB-18-8	8	11/7/2013	<0.00074	<0.00074	<0.00074	<0.00074	0.00055	<0.00074	<0.00074
DUP-2-110713	8	11/7/2013	<0.00074	<0.00074	<0.00074	<0.00074	0.00044	<0.00074	<0.00074
SB-18-12	12	11/7/2013	<0.00077	<0.00077	<0.00077	<0.00077	<0.00038	<0.00077	<0.00077

TABLE 1
SUMMARY OF HISTORICAL ANALYTICAL DATA - cPAHs
COWLITZ BP (COWLITZ FOOD AND FUEL)/FORMER TEXACA SERVICE STATION 211556
101 Mulford Road Toledo, Washington
Concentration reported in mg/kg

Sample ID	Depth (ft)	Date Sampled	Benzo(a) anthracene ¹ (mg/kg)	Benzo(a) pyrene ¹ (mg/kg)	Benzo(b) fluoranthene ¹ (mg/kg)	Benzo(k) floranthene ¹ (mg/kg)	Chrysene ¹ (mg/kg)	Dibenz(a,h) anthracene ¹ (mg/kg)	Indeno(1,2,3-cd) pyrene ¹ (mg/kg)
SB-19-9	9	11/8/2013	<0.00072	<0.0072	<0.00072	<0.00072	0.00062	<0.00072	<0.00072
SB-19-11	19	11/8/2013	<0.00072	<0.00072	<0.00072	<0.00072	<0.00036	<0.00072	<0.00072
SB-20-2	2	11/8/2013	<0.00087	<0.00087	<0.00087	<0.00087	0.00098	<0.00087	<0.00087
SB-20-10	10	11/8/2013	0.0054	0.0023	0.0021	0.00072	0.0050	<0.00071	<0.00071
SB-20-12	12	11/8/2013	<0.00073	<0.00073	<0.00073	<0.00073	<0.00036	<0.00073	<0.00073
SB-20-14	14	11/8/2013	<0.00075	<0.00075	<0.00075	<0.00075	<0.00037	<0.00075	<0.00075
SB-21-6	6	11/8/2013	<0.00082	<0.00082	<0.00082	<0.00082	<0.00041	<0.00082	<0.00082
SB-21-9	9	11/8/2013	<0.00072	<0.00072	<0.00072	<0.00072	0.00061	<0.00072	<0.00072
SB-21-12	12	11/8/2013	<0.00073	<0.00073	<0.00073	<0.00073	<0.00037	<0.00073	<0.00073
MTCA Method A CULs			--	--	--	--	--	--	--

Abbreviations:

cPAHs = Carcinogenic polycyclic aromatic hydrocarbons

DUP = Duplicate

(ft.) = Feet

(mg/kg) = Milligrams per kilogram

MTCA = Model Toxics Control Act

SIM = Selective Ion Monitoring

USEPA = United States Environmental Protection Agency

Attachment A:
Boring Logs



18912 North Creek Parkway, Ste. 101
Bothell, WA 98011

Soil Boring: SB-9

Project: Former Texaco Station No. 211556		Logged By: G. Cisneros		Driller: Cascade Drilling LP		
Client: Chevron EMC		Date Started: 11/4/2013		Drill Method: HA/AK/Sonic		
Location: 101 Mulford Road, Toledo, WA		Date Completed: 11/8/2013		Total Boring Depth: 17 ft		
MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	
					GRAPHIC LOG	
					DEPTH (ft)	
					LITHOLOGY/DESCRIPTION	
Moist	1.9	PID/FID		G = 5.0 D <3.7 HO <12 B <0.0065	GW	Two layers asphalt to six inches. Boring was cleared by airknife to 8 feet bgs. Soil samples collected by hand auger between ground surface and 8 feet bgs.
Moist	19.8		SB-9-5			(GW) Brown, medium dense, sandy, fine to coarse GRAVEL with 30% medium to coarse sand, 5% silt, and cobbles up to 8 inches in diameter. (no odor, no sheen)
Moist	0.0/0.0				GP	Same as above. Cobbles up to 12 inches in diameter. (no odor, no sheen)
Moist	2.4/0.1				GP	(GP) Brown, medium dense, fine to medium GRAVEL with 5% sand. (no odor, no sheen)
Wet	1827/3101		SB-9-9	G 2,400 D 52 HO <11 B 0.56	GP	(GP) Same as above. (no odor, no sheen)
Wet	2.0/1.9				GP	(GP) Gray, medium dense, sandy, medium to coarse GRAVEL with 20% cobbles and 15% sand. (slight odor, slight sheen)
Wet	1.7/0.4		SB-9-11	G <0.9 D <3.3 HO <11 B <0.0046	GP	Gray, medium dense, sandy, medium to coarse GRAVEL with 20% cobbles and 15% sand. (no odor, no sheen)
Wet	1.3/0.5				GP	(GP) Same as above. Brown GRAVEL (no odor, no sheen)
Wet	1.6/0.1				GP	
Wet	1.7/0.3				GP	
Moist	0.0/0.0				ML/CL	(ML/CL) Olive gray, very hard, clayey SILT/silty CLAY with high plasticity. (no odor, no sheen)
						Bottom of borehole at 17.0 feet.
						18
						19
						20



18912 North Creek Parkway, Ste. 101
Bothell, WA 98011

Soil Boring: SB-10

Project: Former Texaco Station No. 211556		Logged By: G. Cisneros		Driller: Cascade Drilling LP		
Client: Chevron EMC		Date Started: 11/4/2013		Drill Method: HA/AK/Sonic		
Location: 101 Mulford Road, Toledo, WA		Date Completed: 11/7/2013		Total Boring Depth: 16 ft		
MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	
					LITHOLOGY/DESCRIPTION	
Moist	PID/FID	57/61	SB-10-2	G = 2.5 D <3.9 HO <13 B <0.0075	GW	Asphalt to 3 inches. Boring was cleared by airknife to 8 feet bgs. (GW) Brown, medium dense, sandy, fine to coarse GRAVEL with 30% sand, 10% cobbles up to 13 inches in diameter, and 5% silt. (no odor, no sheen)
Moist	8.1/0.0	998/720	SB-10-6	G 1,800 D 96 HO <12 B <0.27	GW	Soil samples collected by hand auger between ground surface and 8 feet bgs. Same as above. (slight odor, no sheen)
Moist	1472/939	1700/3332	SB-10-9	G 5,900 D 160 HO <11 B 0.65	GP	(GW) Brown sandy, silty GRAVEL with organics and woody debris at 3.5 feet. (no odor, no sheen) (GP) Olive gray to brown, medium dense, coarse GRAVEL with 20% coarse sand and 15% cobbles up to 8 inches in diameter. (moderate odor, slight sheen)
Wet	488/103	52/20.7	SB-10-13	G <1 D <3.3 HO <11 B <0.0048	GM	Same as above. (slight odor, slight sheen)
Moist	20.9/5.1	3.7/2.2	SB-10-13	G <1 D <3.3 HO <11 B <0.0048	GM	(GM) Same as above. (slight odor, no sheen) (GM) Same as above. (no odor, no sheen)
Moist	1.0/0.0				ML/CL	Same as above. (no odor, no sheen) (ML/CL) Olive gray, very hard, clayey SILT/silty CLAY with high plasticity. (no odor, no sheen)
						Bottom of borehole at 16.0 feet.
						16 17 18 19 20



18912 North Creek Parkway, Ste. 101
Bothell, WA 98011

Soil Boring: SB-11

Project: Former Texaco Station No. 211556		Logged By: G. Cisneros		Driller: Cascade Drilling LP				
Client: Chevron EMC		Date Started: 11/5/2013		Drill Method: HA/AK/Sonic				
Location: 101 Mulford Road, Toledo, WA		Date Completed: 11/6/2013		Total Boring Depth: 20 ft				
Elevation: ft								
MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
Wet								Road base FILL. Geotextile fabric at 1.25 feet. Boring was cleared by airknife to 8 feet bgs.
Wet	0.0/0.0	SB-11-10	X	G = 19 D <3.3 HO <11 B <0.0048	GP		1	Excavation Backfill to 7.25 feet.
Wet	0.0/0.0	SB-11-12.5	X	G <1 D <3.3 HO <11 B <0.0048	GP		2	
Sat.	0.0/0.0						3	
Sat.	0.0/0.0						4	
Wet	0.0/0.0						5	
Wet	0.0/0.0						6	
Moist	0.0/0.0						7	
Moist	0.0/0.0						8	Quarry Spalls to 9.75 feet.
							9	
							10	(GP) Brown, medium dense, sandy, cobbly, medium to coarse GRAVEL with 20% medium to coarse sand and 15% cobbles up to 10 inches in diameter. (no odor, no sheen)
							11	Same as above. (no, odor, no sheen)
							12	
							13	(GP) Gray, medium dense, fine to coarse GRAVEL with 10% cobbles and <5% sand. (no odor, no sheen)
							14	
							15	Same as above. (no odor, no sheen)
							16	(GP) Same as above. (no odor, no sheen)
							17	(ML/CL) Olive gray, very hard, silty CLAY/clayey SILT with high plasticity. (no odor, no sheen)
							18	
							19	Same as above. (no odor, no sheen)
							20	Bottom of borehole at 20.0 feet.



18912 North Creek Parkway, Ste. 101
Bothell, WA 98011

Soil Boring: SB-12

Project: Former Texaco Station No. 211556
Client: Chevron EMC
Location: 101 Mulford Road, Toledo, WA

Logged By: G. Cisneros
Date Started: 11/5/2013
Date Completed: 11/6/2013

Driller: Cascade Drilling LP
Drill Method: HA/AK/Sonic
Total Boring Depth: 16 ft
Elevation: ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	
								DEPTH (ft)	LITHOLOGY/DESCRIPTION
									Roadbase FILL. Gravel. Boring was cleared by airknife to 8 feet bgs.
							1		Excavation Backfill down to 7.5 feet.
							2		
							3		
							4		
							5		
							6		
							7		
							8		Quarry Spalls to 9.5 feet.
							9		
							10		(GP) Brown, medium dense, sandy, fine to coarse GRAVEL with 30% medium to coarse sand and 10% cobbles. (no odor, no sheen)
							11		Same as above, gray, medium dense GRAVEL. (strong odor, moderate sheen)
							12		(GP) Brown, medium dense, sandy, fine to coarse GRAVEL with 30% sand and 10% cobbles. (no odor, no sheen)
							13		Same as above. (no odor, no sheen)
							14		
							15		(ML/CL) Olive gray, very hard, silty CLAY/clayey SILT with high plasticity. (no odor, no sheen)
							16		Bottom of borehole at 16.0 feet.
							17		
							18		
							19		
							20		



18912 North Creek Parkway, Ste. 101
Bothell, WA 98011

Soil Boring: SB-13



18912 North Creek Parkway, Ste. 101
Bothell, WA 98011

Soil Boring: SB-14

Project: Former Texaco Station No. 211556
Client: Chevron EMC
Location: 101 Mulford Road, Toledo, WA

Logged By: G. Cisneros
Date Started: 11/5/2013
Date Completed: 11/7/2013

Driller: Cascade Drilling LP
Drill Method: HA/AK/Sonic
Total Boring Depth: 17.5 ft
Elevation: ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	
								LITHOLOGY	DESCRIPTION
Moist	3.3/0.0	PID/FID 			GW		1	Asphalt. Boring was cleared by airknife to 8 feet bgs. (GW) FILL. Soil samples collected by hand auger between ground surface and 8 feet bgs.	
Moist	4.5/4.8	PID/FID 			GW		2	Asphalt. (GW) Brown, medium dense, sandy, fine to coarse GRAVEL with 30% sand, 15% gravel up to 15 inches in diameter, and 5% silt. (no odor, no sheen)	
Moist	0.9/0.0	PID/FID 			GP		3	Same as above. (no odor, no sheen)	
Moist	9.0/5.6	PID/FID 	SB-14-7	G <1.1 D <3.5 HO <12 B <0.0056	GP		4	(GW) Same as above. (no odor, no sheen)	
Wet	1842/3332		SB-14-9.5	G 4,500 D 190 HO <11 B 1.7	GP		5		
Sat.	10.3/4.7				GP		6		
Sat.	3.5/1.3				GP		7	Same as above with 70% coarse GRAVEL, 20% cobbles, and 10% sand. (no odor, no sheen)	
Moist	8.9/4.4			G 28 D <3.3 HO <11 B = 0.013	GP		8	(GP) Same as above. (no odor, no sheen)	
Moist	11.3/4.5		SB-14-14	G = 4.1 D <3.2 HO <11 B <0.0053	GP		9	Gray, sandy, cobbly GRAVEL. (slight odor, slight sheen)	
Moist	1.3/6.7		SB-14-14		GP		10	(GP) Same as above.	
Moist	0.0/0.0				ML/CL		11		
							12	Brown, medium dense, fine to coarse GRAVEL and COBBLES with 10% coarse sand. (no odor, no sheen)	
							13		
							14	(GP) Same as above with 30% coarse sand. (no odor, no sheen)	
							15		
							16	Same as above. (no odor, no sheen)	
							17		
							18	(ML/CL) Olive gray, very hard, clayey SILT/silty CLAY with high plasticity. (no odor, no sheen)	
							19		
							20		
								Bottom of borehole at 17.5 feet.	



18912 North Creek Parkway, Ste. 101
Bothell, WA 98011

Soil Boring: SB-15

Project: Former Texaco Station No. 211556			Logged By: G. Cisneros			Driller: Cascade Drilling LP						
Client: Chevron EMC			Date Started: 11/5/2013			Drill Method: HA/AK/Sonic						
Location: 101 Mulford Road, Toledo, WA			Date Completed: 11/7/2013			Total Boring Depth: 16 ft						
MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION				
Moist	PID/FID 77.1/45.8			G 74 D 36 HO = 83 B 0.032	GW		1	Asphalt. Top 3 inches. Boring was cleared by airknife to 8 feet bgs.				
Moist	28.1/20.3				GW		1	Road base FILL. Gravel. Soil samples collected by hand auger between ground surface and 8 feet bgs.				
Moist	1655/3242		SB-15-6	G 3,300 D 160 HO <11 B <0.57	GP		2	(GW) Brown, medium dense, sandy, fine to coarse GRAVEL with 30% coarse sand and 15% cobbles up to 12 inches diameter, and 5% silt.				
Moist	1645/1882						3	Same as above. (slight odor, no sheen)				
Wet	2145/3332			G 1,100 D 69 HO <11 B 0.38	GP		4	(GW) Same as above. (slight odor, no sheen)				
Sat.	707/376		SB-15-9		GP		5	(GP) Gray, medium dense, sandy, cobble, fine to coarse GRAVEL with 30% sand and 10% cobbles. (moderate odor, slight sheen)				
Wet	302/201						6					
Moist	266/226						7	Same as above. (slight odor, slight sheen)				
Moist	38/24.6			G 3.6 D <3.4 HO <11 B <0.0048	GP		8					
Moist	3.2/5.4		SB-15-13				9					
Moist	0.0/0.0				ML/CL		10	(GP) Same as above with 20% cobbles and 5% sand. (no odor, no sheen)				
							11	Brown, medium dense, sandy, medium to coarse GRAVEL with 30% sand and 15% cobbles. (slight odor, no sheen)				
							12					
							13					
							14					
							15	(ML/CL) Olive gray, very hard, silty CLAY/clayey SILT with high plasticity. (no sheen, no odor)				
							16	Bottom of borehole at 16.0 feet.				
							17					
							18					
							19					
							20					



18912 North Creek Parkway, Ste. 101
Bothell, WA 98011

Soil Boring: SB-16



18912 North Creek Parkway, Ste. 101
Bothell, WA 98011

Soil Boring: SB-17

Project: Former Texaco Station No. 211556
Client: Chevron EMC
Location: 101 Mulford Road, Toledo, WA

Logged By: G. Cisneros
Date Started: 11/6/2013
Date Completed: 11/8/2013

Driller: Cascade Drilling LP
Drill Method: HA/AK/Sonic
Total Boring Depth: 17.5 ft
Elevation: ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	
								Lithology	Description
Moist	PID/FID 1151/1933			G 2,800 D 62 HO = 33 B <0.36	SM		1	Asphalt. Up to 3 inches. Boring was cleared by airknife to 8 feet bgs. Road base FILL. Soil samples collected by hand auger between ground surface and 8 feet bgs. (SM) Brown, loose, silty SAND with 10% gravel. (moderate odor, slight sheen)	
Moist	18.2/10.0		SB-17-2		GW		2	Roots, woody debris at 25 inches.	
Moist	4.5/0.2				GW		3	(GW) Brown, medium dense, sandy GRAVEL. (no sheen)	
Moist	2290/3101			G 1,300 D 25 HO <11 B 1.4	GW		4	Same as above with gravel up to 6 inches in diameter and 5% silt (no sheen)	
Wet	1885/3075		SB-17-8		GW		8	Brown, medium dense, sandy, fine to coarse GRAVEL with 30% sand, 15% cobbles, and 10% silt. (moderate odor, slight sheen)	
Wet	3.7/2.4				GW		9	(GW) Same as above. (moderate odor, slight sheen)	
Wet	4.6/5.1				GW		10	Same as above. (no odor, no sheen)	
Wet	2.7/1.6		SB-17-11	G <0.9 D <3.3 HO <11 B <0.0046	GW		11		
Moist	0.0/0.0				GW		12	(GW) Same as above. (no odor, no sheen)	
Moist	0.0/0.0				GW		13		
Moist	0.0/0.0				ML/CL		14	(ML/CL) Olive gray, very hard, silty CLAY/clayey SILT with high plasticity. (no odor, no sheen)	
Moist	0.0/0.0						15		
							16		
							17		
							18	Bottom of borehole at 17.5 feet.	
							19		
							20		



18912 North Creek Parkway, Ste. 101
Bothell, WA 98011

Soil Boring: SB-18

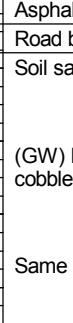
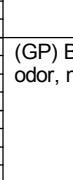
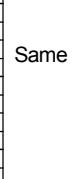
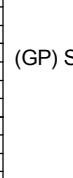
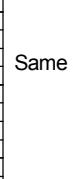
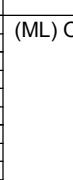
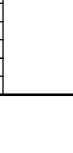
Project: Former Texaco Station No. 211556 Logged By: G. Cisneros
Client: Chevron EMC Date Started: 11/7/2013
Location: 101 Mulford Road, Toledo, WA Date Completed: 11/7/2013
Driller: Cascade Drilling LP
Drill Method: HA/AK/Sonic
Total Boring Depth: 16 ft
Elevation: ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	
								Lithology	Description
Moist	PID/FID 1.1/1.4				SP		1	Asphalt. Top 4 inches. Boring was cleared by airknife to 8 feet bgs. Soil samples collected by hand auger between ground surface and 8 feet bgs.	
Moist	2.5/0.4				GP		2	(SP) Brown, loose, gravelly SAND with 5% silt. (no odor, no sheen)	
Moist	1227/1148			G 580 D <3.4 HO <11 B 0.43	GP		3		
Moist	106/99		SB-18-8		GP		4	(GP) No recovery: Cobbles up to 4 inches in diameter. (no odor, no sheen)	
Moist	26/22.3				GW		5		
Sat.	6.5/5.1				GP		6	Same as above with increasing sand. (no odor, no sheen)	
Wet	9.3/2.2		SB-18-12	G <1 D <3.5 HO <12 B <0.0050	GW		7		
Moist	5.7/1.1				GP		8	(GP) Brownish-gray, medium dense, sandy, fine to coarse GRAVEL with 30% sand and 10% cobbles. (slight odor, slight sheen)	
Moist	4.1/1.4				GW		9	Same as above. (slight odor, no sheen)	
					GP		10	(GW) Brown, medium dense, sandy, fine to coarse GRAVEL with 30% sand, 10% cobbles, and 10% silt. (no odor, no sheen)	
					GP		11		
					GP		12	(GP) Brown, medium dense, sandy, cobbly, fine to coarse GRAVEL with 30% sand and 10% cobbles. (no odor, no sheen)	
					GW		13	Same as above. (no odor, no sheen)	
					GP		14		
					CL-ML		15	(CL-ML) Olive gray, very hard, silty CLAY/clayey SILT with high plasticity. (no odor, no sheen)	
							16	Bottom of borehole at 16.0 feet.	
							17		
							18		
							19		
							20		



18912 North Creek Parkway, Ste. 101
Bothell, WA 98011

Soil Boring: SB-19

Project: Former Texaco Station No. 211556 Client: Chevron EMC Location: 101 Mulford Road, Toledo, WA			Logged By: G. Cisneros Date Started: 11/7/2013 Date Completed: 11/8/2013			Driller: Cascade Drilling LP Drill Method: HA/AK/Sonic Total Boring Depth: 18 ft Elevation: ft		
MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
Moist	PID/FID				GW			Asphalt. Top 3 inches. Boring was cleared by airknife to 8 feet bgs. Road base FILL.
Moist	1.1/0.0				GW		1	Soil samples collected by hand auger between ground surface and 8 feet bgs.
Moist	0.3/0.0				GP		2	(GW) Brown, medium dense, sandy, fine to coarse GRAVEL with 30% sand, 20% cobbles, and 10% silt. (no odor, no sheen)
Moist					GP		3	Same as above. (no odor, no sheen)
Moist	4.0/0.6				GP		4	Same as above. (no odor, no sheen)
Wet	18.3/8.9				GP		5	(GP) Brown, medium dense, cobbly GRAVEL with 30% cobbles and 20% sand. (no odor, no sheen)
Wet	8.3/5.3		SB-19-9	G = 5.7 D <3.2 HO <11 B <0.0048	GP		6	(GP) Same as above. (no odor, no sheen)
Sat.	6.2/2.2				GP		7	
Sat.	4.8/1.2		SB-19-11	G <1 D <3.2 HO <11 B <0.0050	GP		8	Same as above. (no odor, no sheen)
Sat.	6.0/2.0				GP		9	
Sat.	3.8/0.6				GP		10	(GP) Same as above. (no odor, no sheen)
Wet	2.1/0.5				ML		11	
Moist					ML		12	
					ML		13	
					ML		14	
					ML		15	
					ML		16	
					ML		17	
					ML		18	Bottom of borehole at 18.0 feet.
					ML		19	
					ML		20	



18912 North Creek Parkway, Ste. 101
Bothell, WA 98011

Soil Boring: SB-20

Project: Former Texaco Station No. 211556
Client: Chevron EMC
Location: 101 Mulford Road, Toledo, WA

Logged By: G. Cisneros
Date Started: 11/8/2013
Date Completed: 11/8/2013

Driller: Cascade Drilling LP
Drill Method: HA/AK/Sonic
Total Boring Depth: 17 ft
Elevation: ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	
								Lithology	Description
Moist	20.2/33.1	PID/FID	SB-20-2	G = 5.6 D = 19 HO = 16 B <0.0068	ML		17	Asphalt. Top 3 inches. Boring was cleared by airknife to 8 feet bgs. Soil samples collected by hand auger between ground surface and 8 feet bgs.	
Moist	4.4/4.0				SM		17	(ML) Dark brown, soft SILT with medium plasticity and 10% fine to medium sand. (moderate odor, no sheen)	
Moist	1.1/0.0				GW		20	(SM) Brown, medium dense, silty, gravelly, fine to coarse SAND with 20% gravel, 15% silt, and 10% cobbles. (no odor, no sheen)	
Moist	55.1/17.5				GW		24	(GW) Brown, medium dense, sandy, cobbly, fine to coarse GRAVEL with 30% sand, 15% cobbles, and 5% silt. (no odor, no sheen)	
Wet	1644/3080				GW		28	Same as above. Brown to gray GRAVEL. (slight odor, slight sheen)	
Wet	1855/3101				GW		30	(GW) Gray, medium dense, sandy, fine to coarse GRAVEL with 30% sand, 10% cobbles, and 5% silt. (slight odor, slight sheen)	
Sat.	844/687		SB-20-10	G 730 D 65 HO <11 B 0.26	GW		32	Same as above. (moderate odor, slight sheen)	
	10.5/13.1				GW		34	(GW) Same as above. (slight odor, slight sheen)	
Sat.	46/5.4		SB-20-12	G 2.1 D <3.3 HO <11 B <0.0048	GW		36	Same as above. (no odor, no sheen)	
Wet	12/1.6				GW		38	(GW) Same as above. (no odor, no sheen)	
Wet	8.8/0.0		SB-20-14	G <1.0 D <3.4 HO <11 B <0.0050	ML/CL		40	(ML/CL) Olive gray, very hard, silty CLAY/clayey SILT with high plasticity. (no odor, no sheen)	
							17	Bottom of borehole at 17.0 feet.	
							18		
							19		
							20		



18912 North Creek Parkway, Ste. 101
Bothell, WA 98011

Soil Boring: SB-21

Project: Former Texaco Station No. 211556		Logged By: G. Cisneros		Driller: Cascade Drilling LP		
Client: Chevron EMC		Date Started: 11/8/2013		Drill Method: HA/AK/Sonic		
Location: 101 Mulford Road, Toledo, WA		Date Completed: 11/8/2013		Total Boring Depth: 16 ft		
MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	
					LITHOLOGY/DESCRIPTION	
Moist	1.6/0.0	PID/FID			GP	Asphalt. Top 3 inches. Boring was cleared by airknife to 8 feet bgs. Soil samples collected by hand auger between ground surface and 8 feet bgs.
Moist	10.8/0.0				GP	(GP) Brown, medium dense, sandy, rounded, fine to coarse GRAVEL with 10% sand. (no odor, no sheen)
Moist	1.8/0.0		SB-21-6	G <1.6 D <3.7 HO <12 B <0.0082	SP	(SP) Brown, medium dense, fine to medium SAND with 10% fine gravel and 5% cobbles. (no odor, no sheen)
Moist	10.0/0.8				GP	Same as above. (no odor, no sheen)
Wet	829/1564		SB-21-9	G 61 D <3.3 HO <11 B <0.020	GP	(GP) Gray, medium dense, sandy, fine to coarse GRAVEL with 15% sand and 10% cobbles. (slight odor, slight sheen)
Wet	228/163				GP	Brownish gray GRAVEL with 15% sand. (slight odor, no sheen)
Wet	38.1/29.8				GP	(GP) Same as above. Brown GRAVEL. (no odor, no sheen)
Wet	16.1/25.3		SB-21-12	G <1.2 D <3.3 HO <11 B <0.0059	GP	Brown, medium dense, sandy, fine to coarse GRAVEL with 30% sand and 10% cobbles. (no odor, no sheen)
Sat.	6.2/2.4				GP	(GP) Same as above. (no odor, no sheen)
Sat.	5.4/1.6				GP	Same as above. (no odor, no sheen)
Moist	4.1/0.8				ML/CL	(ML/CL) Olive gray, very hard, clayey SILT/silty CLAY with high plasticity. (no odor, no sheen)
						Bottom of borehole at 16.0 feet.
						17
						18
						19
						20

Attachment B:
Laboratory Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

November 27, 2013

Project: 211556

Submittal Date: 11/12/2013
Group Number: 1433626
PO Number: 0015119898

Release Number: SHRILL HOPKINS

State of Sample Origin: WA

<u>Client Sample Description</u>	<u>Lancaster Labs (LL) #</u>
SB-9-4 Grab Soil	7275384
SB-10-2 Grab Soil	7275385
SB-15-2 Grab Soil	7275386
SB-14-7 Grab Soil	7275387
SB-15-6 Grab Soil	7275388
SB-10-6 Grab Soil	7275389
SB-16-2 Grab Soil	7275390
SB-16-6 Grab Soil	7275391
SB-11-10 Grab Soil	7275392
SB-11-12.5 Grab Soil	7275393
SB-17-2 Grab Soil	7275394
SB-12-9.5 Grab Soil	7275395
SB-12-10.5 Grab Soil	7275396
SB-12-12 Grab Soil	7275397
SB-12-13.5 Grab Soil	7275398
SB-13-10.5 Grab Soil	7275399
SB-13-12.5 Grab Soil	7275400
SB-14-9.5 Grab Soil	7275401
DUP-1-110713 Grab Soil	7275402
SB-14-12.5 Grab Soil	7275403
SB-14-14 Grab Soil	7275404
SB-16-8 Grab Soil	7275405
SB-16-10 Grab Soil	7275406
SB-10-9 Grab Soil	7275407
SB-10-13 Grab Soil	7275408
SB-15-9 Grab Soil	7275409
SB-15-13 Grab Soil	7275410
SB-18-8 Grab Soil	7275411
SB-18-12 Grab Soil	7275412
DUP-2-110713 Grab Soil	7275413
SB-17-8 Grab Soil	7275414

SB-17-11 Grab Soil	7275415
SB-9-9 Grab Soil	7275416
SB-20-2 Grab Soil	7275417
SB-9-11 Grab Soil	7275418
DUP-3-110813 Grab Soil	7275419
SB-19-9 Grab Soil	7275420
SB-19-11 Grab Soil	7275421
SB-20-10 Grab Soil	7275422
SB-20-12 Grab Soil	7275423
SB-20-14 Grab Soil	7275424
SB-21-6 Grab Soil	7275425
SB-21-9 Grab Soil	7275426
SB-21-12 Grab Soil	7275427

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC Leidos
COPY TO

Attn: Russ Shropshire

Respectfully Submitted,



Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-9-4 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275384
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/04/2013 15:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT904

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00082	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00082	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00082	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00082	1
10725	Chrysene	218-01-9	N.D.	0.00041	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00082	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00082	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	5.0	1.3	26.26
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0065	26.26
08179	Ethylbenzene	100-41-4	0.0072	0.0065	26.26
08179	Toluene	108-88-3	N.D.	0.0065	26.26
08179	Total Xylenes	1330-20-7	N.D.	0.019	26.26
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.7	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	12	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.7	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	12	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	8.80	0.594	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	19.1	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-9-4 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275384
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/04/2013 15:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT904

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13318SLE026	11/17/2013 07:18	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13318SLE026	11/15/2013 09:20	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13319A31A	11/15/2013 21:58	Laura M Krieger	26.26
08179	BTEX by 8021	SW-846 8021B	1	13319A31A	11/15/2013 21:58	Laura M Krieger	26.26
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/04/2013 15:30	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133180026A	11/20/2013 00:44	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133180027A	11/19/2013 20:06	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133180027A	11/15/2013 07:35	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133180026A	11/15/2013 07:35	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 17:24	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002A	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-10-2 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275385
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/04/2013 15:45 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT102

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00085	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00085	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00085	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00085	1
10725	Chrysene	218-01-9	0.0013	0.00042	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00085	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00085	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	2.5	1.5	29.26
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	N.D.	0.0075	29.26
08179	Ethylbenzene	100-41-4	0.023	0.0075	29.26
08179	Toluene	108-88-3	0.013	0.0075	29.26
08179	Total Xylenes	1330-20-7	0.11	0.023	29.26
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.9	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	13	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.9	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	13	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	7.57	0.631	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	22.3	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-10-2 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275385
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/04/2013 15:45 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT102

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13318SLE026	11/17/2013 07:50	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13318SLE026	11/15/2013 09:20	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13319A31A	11/15/2013 20:43	Laura M Krieger	29.26
08179	BTEX by 8021	SW-846 8021B	1	13319A31A	11/15/2013 20:43	Laura M Krieger	29.26
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/04/2013 15:45	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133180026A	11/20/2013 03:03	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133180027A	11/19/2013 20:26	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133180027A	11/15/2013 07:35	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133180026A	11/15/2013 07:35	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 17:28	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002A	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-15-2 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275386
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/05/2013 15:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT152

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00092	1
10725	Benzo(a)pyrene	50-32-8	0.00093	0.00092	1
10725	Benzo(b)fluoranthene	205-99-2	0.0019	0.00092	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00092	1
10725	Chrysene	218-01-9	0.0034	0.00046	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00092	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00092	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	74	6.5	116.18
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	0.032	0.0081	29.04
08179	Ethylbenzene	100-41-4	0.22	0.0081	29.04
08179	Toluene	108-88-3	0.086	0.0081	29.04
08179	Total Xylenes	1330-20-7	0.65	0.024	29.04
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
modified					
08272	Diesel Range Organics C12-C24	n.a.	36	4.2	1
08272	Heavy Range Organics C24-C40	n.a.	83	14	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
modified					
12006	DRO C12-C24 w/Si Gel	n.a.	19	4.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	16	14	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	11.5	0.674	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	28.0	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-15-2 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275386
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/05/2013 15:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT152

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13318SLE026	11/17/2013 08:21	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13318SLE026	11/15/2013 09:20	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13319A31A	11/16/2013 02:05	Laura M Krieger	116.18
08179	BTEX by 8021	SW-846 8021B	1	13319A31B	11/19/2013 02:47	Marie D Beamenderfer	29.04
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/05/2013 15:15	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133180026A	11/20/2013 03:42	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133180027A	11/19/2013 23:05	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133180027A	11/15/2013 07:35	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133180026A	11/15/2013 07:35	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 17:40	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002A	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-14-7 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275387
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/05/2013 16:10 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT147

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	0.0039	0.00076	1
10725	Benzo(a)pyrene	50-32-8	0.0055	0.00076	1
10725	Benzo(b)fluoranthene	205-99-2	0.0098	0.00076	1
10725	Benzo(k)fluoranthene	207-08-9	0.0042	0.00076	1
10725	Chrysene	218-01-9	0.018	0.00038	1
10725	Dibenz(a,h)anthracene	53-70-3	0.0027	0.00076	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	0.0017	0.00076	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.1	24.21
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	N.D.	0.0056	24.21
08179	Ethylbenzene	100-41-4	N.D.	0.0056	24.21
08179	Toluene	108-88-3	N.D.	0.0056	24.21
08179	Total Xylenes	1330-20-7	N.D.	0.017	24.21
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.5	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	12	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.5	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	12	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	8.67	0.569	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	13.9	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-14-7 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275387
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/05/2013 16:10 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT147

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13318SLE026	11/19/2013 08:20	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13318SLE026	11/15/2013 09:20	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13319A31A	11/15/2013 22:33	Laura M Krieger	24.21
08179	BTEX by 8021	SW-846 8021B	1	13319A31A	11/15/2013 22:33	Laura M Krieger	24.21
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/05/2013 16:10	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133180026A	11/20/2013 01:23	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133180027A	11/19/2013 20:46	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133180027A	11/15/2013 07:35	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133180026A	11/15/2013 07:35	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 17:44	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002A	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-15-6 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275388
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 08:50 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT156

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	0.015	0.00076	1
10725	Benzo(a)pyrene	50-32-8	0.0079	0.00076	1
10725	Benzo(b)fluoranthene	205-99-2	0.0074	0.00076	1
10725	Benzo(k)fluoranthene	207-08-9	0.0037	0.00076	1
10725	Chrysene	218-01-9	0.016	0.00038	1
10725	Dibenz(a,h)anthracene	53-70-3	0.00079	0.00076	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	0.0013	0.00076	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	3,300	230	4931.31
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	N.D.	0.57	2465.65
08179	Ethylbenzene	100-41-4	3.8	0.57	2465.65
08179	Toluene	108-88-3	1.4	0.57	2465.65
08179	Total Xylenes	1330-20-7	5.7	1.7	2465.65
Reporting limits were raised due to interference from the sample matrix.					
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx modified		mg/kg	mg/kg	
08272	Diesel Range Organics C12-C24	n.a.	160	3.4	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified		mg/kg	mg/kg	
12006	DRO C12-C24 w/Si Gel	n.a.	130	3.4	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	12.5	0.558	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	13.0	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-15-6 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275388
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 08:50 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT156

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13318SLE026	11/19/2013 10:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13318SLE026	11/15/2013 09:20	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13319A31B	11/18/2013 19:07	Marie D Beamenderfer	4931.31
08179	BTEX by 8021	SW-846 8021B	1	13319A31A	11/16/2013 03:51	Laura M Krieger	2465.65
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/06/2013 08:50	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133180026A	11/20/2013 03:23	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133180027A	11/19/2013 21:05	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133180027A	11/15/2013 07:35	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133180026A	11/15/2013 07:35	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 17:49	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002A	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-10-6 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275389
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 12:00 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT106

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	0.0070	0.00082	1
10725	Benzo(a)pyrene	50-32-8	0.0037	0.00082	1
10725	Benzo(b)fluoranthene	205-99-2	0.0036	0.00082	1
10725	Benzo(k)fluoranthene	207-08-9	0.0019	0.00082	1
10725	Chrysene	218-01-9	0.0080	0.00041	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00082	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00082	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	1,800	140	2789.51
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.27	1115.8
08179	Ethylbenzene	100-41-4	1.0	0.27	1115.8
08179	Toluene	108-88-3	0.35	0.27	1115.8
08179	Total Xylenes	1330-20-7	1.9	0.82	1115.8
Reporting limits were raised due to interference from the sample matrix.					
GC Petroleum Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	96	3.7	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	12	1
GC Petroleum Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	74	3.7	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	12	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	10.7	0.601	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	18.5	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-10-6 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275389
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 12:00 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT106

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13318SLE026	11/19/2013 08:52	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13318SLE026	11/15/2013 09:20	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13319A31B	11/18/2013 19:43	Marie D Beamanerfer	2789.51
08179	BTEX by 8021	SW-846 8021B	1	13319A31A	11/16/2013 04:27	Laura M Krieger	1115.8
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/06/2013 12:00	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133180026A	11/20/2013 02:43	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133180027A	11/19/2013 21:25	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133180027A	11/15/2013 07:35	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133180026A	11/15/2013 07:35	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 17:53	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002A	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-16-2 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275390
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 12:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT162

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00091	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00091	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00091	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00091	1
10725	Chrysene	218-01-9	N.D.	0.00045	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00091	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00091	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	210	18	332.07
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	N.D.	0.036	132.83
08179	Ethylbenzene	100-41-4	0.15	0.036	132.83
08179	Toluene	108-88-3	N.D.	0.15	132.83
08179	Total Xylenes	1330-20-7	0.24	0.11	132.83
Reporting limits were raised due to interference from the sample matrix.					
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx modified		mg/kg	mg/kg	
08272	Diesel Range Organics C12-C24	n.a.	7.2	4.1	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	14	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified		mg/kg	mg/kg	
12006	DRO C12-C24 w/Si Gel	n.a.	4.2	4.1	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	14	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	11.4	0.679	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	27.1	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-16-2 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275390
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 12:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT162

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13318SLE026	11/19/2013 09:24	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13318SLE026	11/15/2013 09:20	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13319A31A	11/16/2013 05:02	Laura M Krieger	332.07
08179	BTEX by 8021	SW-846 8021B	1	13319A31B	11/19/2013 00:26	Marie D Beamenderfer	132.83
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/06/2013 12:15	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133180026A	11/20/2013 01:43	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133180027A	11/19/2013 21:45	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133180027A	11/15/2013 07:35	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133180026A	11/15/2013 07:35	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 16:59	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002A	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-16-6 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275391
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 13:50 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT166

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	0.0029	0.00073	1
10725	Benzo(a)pyrene	50-32-8	0.0018	0.00073	1
10725	Benzo(b)fluoranthene	205-99-2	0.0016	0.00073	1
10725	Benzo(k)fluoranthene	207-08-9	0.00081	0.00073	1
10725	Chrysene	218-01-9	0.0025	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00073	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00073	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	77	4.4	99.65
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0055	24.91
08179	Ethylbenzene	100-41-4	0.034	0.0055	24.91
08179	Toluene	108-88-3	0.012	0.0055	24.91
08179	Total Xylenes	1330-20-7	0.096	0.016	24.91
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	4.1	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	13.4	0.540	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	9.2	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-16-6 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275391
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 13:50 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT166

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13318SLE026	11/19/2013 09:55	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13318SLE026	11/15/2013 09:20	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13319A31A	11/16/2013 05:37	Laura M Krieger	99.65
08179	BTEX by 8021	SW-846 8021B	1	13319A31B	11/19/2013 03:23	Marie D Beamenderfer	24.91
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/06/2013 13:50	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133180026A	11/20/2013 02:03	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133180027A	11/19/2013 22:05	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133180027A	11/15/2013 07:35	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133180026A	11/15/2013 07:35	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 17:57	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002A	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-11-10 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275392
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 14:40 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1110

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	0.00075	0.00073	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00073	1
10725	Benzo(b)fluoranthene	205-99-2	0.0017	0.00073	1
10725	Benzo(k)fluoranthene	207-08-9	0.00097	0.00073	1
10725	Chrysene	218-01-9	0.0024	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00073	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00073	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	19	1	21.98
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0048	21.98
08179	Ethylbenzene	100-41-4	0.024	0.0048	21.98
08179	Toluene	108-88-3	0.0049	0.0048	21.98
08179	Total Xylenes	1330-20-7	0.046	0.015	21.98
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	5.79	0.551	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	9.2	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-11-10 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275392
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 14:40 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1110

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13318SLE026	11/19/2013 10:27	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13318SLE026	11/15/2013 09:20	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13319A31A	11/15/2013 23:09	Laura M Krieger	21.98
08179	BTEX by 8021	SW-846 8021B	1	13319A31A	11/15/2013 23:09	Laura M Krieger	21.98
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/06/2013 14:40	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133180026A	11/20/2013 02:23	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133180027A	11/19/2013 22:25	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133180027A	11/15/2013 07:35	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133180026A	11/15/2013 07:35	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 18:01	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002A	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-11-12.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275393
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 15:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1112

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00073	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00073	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00073	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00073	1
10725	Chrysene	218-01-9	N.D.	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00073	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00073	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	N.D.	1	21.69
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0048	21.69
08179	Ethylbenzene	100-41-4	N.D.	0.0048	21.69
08179	Toluene	108-88-3	N.D.	0.0048	21.69
08179	Total Xylenes	1330-20-7	N.D.	0.014	21.69
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	6.79	0.527	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	8.8	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-11-12.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275393
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 15:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1112

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/21/2013 07:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13319A31A	11/15/2013 23:44	Laura M Krieger	21.69
08179	BTEX by 8021	SW-846 8021B	1	13319A31A	11/15/2013 23:44	Laura M Krieger	21.69
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/06/2013 15:15	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133180026A	11/20/2013 00:24	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133180027A	11/19/2013 22:45	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133180027A	11/15/2013 07:35	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133180026A	11/15/2013 07:35	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 18:05	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002A	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-17-2 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275394
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 15:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT172

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	0.0018	0.00086	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00086	1
10725	Benzo(b)fluoranthene	205-99-2	0.0020	0.00086	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00086	1
10725	Chrysene	218-01-9	0.0026	0.00043	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00086	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00086	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	2,800	360	6970.09
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	N.D.	0.36	1394.02
08179	Ethylbenzene	100-41-4	7.9	0.36	1394.02
08179	Toluene	108-88-3	1.1	0.36	1394.02
08179	Total Xylenes	1330-20-7	65	1.1	1394.02
Reporting limits were raised due to interference from the sample matrix.					
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx modified		mg/kg	mg/kg	
08272	Diesel Range Organics C12-C24	n.a.	62	3.9	1
08272	Heavy Range Organics C24-C40	n.a.	33	13	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified		mg/kg	mg/kg	
12006	DRO C12-C24 w/Si Gel	n.a.	47	3.9	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	13	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	19.3	0.625	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	23.1	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-17-2 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275394
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 15:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT172

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/21/2013 08:07	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13319A31A	11/16/2013 06:13	Laura M Krieger	6970.09
08179	BTEX by 8021	SW-846 8021B	1	13319A31B	11/19/2013 01:01	Marie D Beamenderfer	1394.02
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/06/2013 15:30	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133200029A	11/21/2013 04:31	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133200030A	11/20/2013 17:17	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133200030A	11/18/2013 07:10	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133200029A	11/18/2013 07:10	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 18:09	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002B	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-12-9.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275395
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 16:00 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT129

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	0.0015	0.00074	1
10725	Benzo(a)pyrene	50-32-8	0.0021	0.00074	1
10725	Benzo(b)fluoranthene	205-99-2	0.0032	0.00074	1
10725	Benzo(k)fluoranthene	207-08-9	0.0011	0.00074	1
10725	Chrysene	218-01-9	0.0026	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00074	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	0.0011	0.00074	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	1.5	1.1	24.73
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0055	24.73
08179	Ethylbenzene	100-41-4	N.D.	0.0055	24.73
08179	Toluene	108-88-3	N.D.	0.0055	24.73
08179	Total Xylenes	1330-20-7	N.D.	0.016	24.73
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	15	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	6.34	0.549	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	9.9	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-12-9.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275395
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 16:00 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT129

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/21/2013 08:38	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13319A31A	11/15/2013 21:22	Laura M Krieger	24.73
08179	BTEX by 8021	SW-846 8021B	1	13319A31A	11/15/2013 21:22	Laura M Krieger	24.73
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/06/2013 16:00	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133200029A	11/21/2013 05:13	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133200030A	11/20/2013 17:37	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133200030A	11/18/2013 07:10	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133200029A	11/18/2013 07:10	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 18:14	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002B	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-12-10.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275396
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 16:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1210

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.0072	10
10725	Benzo(a)pyrene	50-32-8	N.D.	0.0072	10
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.0072	10
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.0072	10
10725	Chrysene	218-01-9	0.017	0.0036	10
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0072	10
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0072	10
Reporting limits were raised due to interference from the sample matrix.					
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	1,600	75	1733.89
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.19	866.95
08179	Ethylbenzene	100-41-4	N.D.	1.5	866.95
08179	Toluene	108-88-3	2.2	0.19	866.95
08179	Total Xylenes	1330-20-7	3.4	0.57	866.95
Reporting limits were raised due to interference from the sample matrix.					
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	2,500	33	10
08272	Heavy Range Organics C24-C40	n.a.	N.D.	110	10
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	2,300	33	10
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	110	10
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	11.0	0.533	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	8.0	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-12-10.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275396
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 16:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1210

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/22/2013 04:38	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12 Gx	ECY 97-602 NWTPH-	1	13319A31B	11/18/2013 20:18	Marie D Beamenderfer	1733.89
08179	BTEX by 8021	SW-846 8021B	1	13319A31A	11/16/2013 06:48	Laura M Krieger	866.95
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/06/2013 16:15	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133200029A	11/22/2013 16:50	Glorines Suarez-Rivera	10
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133200030A	11/22/2013 16:31	Glorines Suarez-Rivera	10
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133200030A	11/18/2013 07:10	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133200029A	11/18/2013 07:10	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 18:18	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002B	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-12-12 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275397
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 16:20 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1212

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00073	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00073	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00073	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00073	1
10725	Chrysene	218-01-9	N.D.	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00073	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00073	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	2.6	0.9	20.55
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0046	20.55
08179	Ethylbenzene	100-41-4	N.D.	0.0046	20.55
08179	Toluene	108-88-3	N.D.	0.0046	20.55
08179	Total Xylenes	1330-20-7	N.D.	0.014	20.55
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	5.70	0.538	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	9.7	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-12-12 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275397
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 16:20 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1212

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/21/2013 09:40	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13319A31A	11/16/2013 00:19	Laura M Krieger	20.55
08179	BTEX by 8021	SW-846 8021B	1	13319A31A	11/16/2013 00:19	Laura M Krieger	20.55
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/06/2013 16:20	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133200029A	11/21/2013 02:02	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133200030A	11/20/2013 18:57	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133200030A	11/18/2013 07:10	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133200029A	11/18/2013 07:10	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 18:30	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002B	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-12-13.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275398
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 16:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1213

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00073	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00073	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00073	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00073	1
10725	Chrysene	218-01-9	N.D.	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00073	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00073	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.0	23.17
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0051	23.17
08179	Ethylbenzene	100-41-4	N.D.	0.0051	23.17
08179	Toluene	108-88-3	0.017	0.0051	23.17
08179	Total Xylenes	1330-20-7	N.D.	0.015	23.17
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	7.21	0.530	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	8.4	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-12-13.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275398
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/06/2013 16:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1213

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/21/2013 10:11	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13319A31A	11/16/2013 00:55	Laura M Krieger	23.17
08179	BTEX by 8021	SW-846 8021B	1	13319A31A	11/16/2013 00:55	Laura M Krieger	23.17
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/06/2013 16:30	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133200029A	11/21/2013 02:23	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133200030A	11/20/2013 19:18	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133200030A	11/18/2013 07:10	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133200029A	11/18/2013 07:10	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 18:55	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002B	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-13-10.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275399
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 08:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1310

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00074	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00074	1
10725	Benzo(b)fluoranthene	205-99-2	0.0011	0.00074	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00074	1
10725	Chrysene	218-01-9	0.0014	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00074	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00074	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	150	8.5	192.2
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	0.085	0.017	76.88
08179	Ethylbenzene	100-41-4	0.17	0.017	76.88
08179	Toluene	108-88-3	0.32	0.017	76.88
08179	Total Xylenes	1330-20-7	0.88	0.051	76.88
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
08272	Diesel Range Organics C12-C24	n.a.	82	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	14	11	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
12006	DRO C12-C24 w/Si Gel	n.a.	76	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	7.34	0.531	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	9.5	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-13-10.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275399
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 08:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1310

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/21/2013 14:20	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13319A31B	11/18/2013 20:53	Marie D Beamenderfer	192.2
08179	BTEX by 8021	SW-846 8021B	1	13319A31B	11/19/2013 02:12	Marie D Beamenderfer	76.88
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 08:30	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133200029A	11/21/2013 05:35	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133200030A	11/20/2013 21:05	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133200030A	11/18/2013 07:10	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133200029A	11/18/2013 07:10	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 18:38	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002B	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-13-12.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275400
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 08:40 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1312

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00075	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00075	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00075	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00075	1
10725	Chrysene	218-01-9	N.D.	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00075	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00075	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.0	23.03
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0052	23.03
08179	Ethylbenzene	100-41-4	N.D.	0.0052	23.03
08179	Toluene	108-88-3	N.D.	0.0052	23.03
08179	Total Xylenes	1330-20-7	N.D.	0.015	23.03
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.4	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.4	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	6.78	0.550	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	10.8	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-13-12.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275400
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 08:40 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1312

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/21/2013 14:50	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13319A31A	11/16/2013 01:30	Laura M Krieger	23.03
08179	BTEX by 8021	SW-846 8021B	1	13319A31A	11/16/2013 01:30	Laura M Krieger	23.03
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 08:40	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133200029A	11/21/2013 02:44	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133200030A	11/20/2013 19:40	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133200030A	11/18/2013 07:10	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133200029A	11/18/2013 07:10	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 18:42	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002B	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-14-9.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275401
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 09:45 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT149

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	0.027	0.00071	1
10725	Benzo(a)pyrene	50-32-8	0.012	0.00071	1
10725	Benzo(b)fluoranthene	205-99-2	0.011	0.00071	1
10725	Benzo(k)fluoranthene	207-08-9	0.0037	0.00071	1
10725	Chrysene	218-01-9	0.026	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	0.0011	0.00071	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	0.0022	0.00071	1
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.					
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	4,500	190	4464.93
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	1.7	0.38	1785.97
08179	Ethylbenzene	100-41-4	N.D.	5.3	1785.97
08179	Toluene	108-88-3	8.2	0.38	1785.97
08179	Total Xylenes	1330-20-7	9.7	1.1	1785.97
Reporting limits were raised due to interference from the sample matrix.					
GC Petroleum Hydrocarbons ECY 97-602 NWTPH-Dx modified					
08272	Diesel Range Organics C12-C24	n.a.	190	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si ECY 97-602 NWTPH-Dx modified					
12006	DRO C12-C24 w/Si Gel	n.a.	170	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	7.24	0.514	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	6.5	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-14-9.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275401
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 09:45 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT149

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/21/2013 15:22	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12 Gx	ECY 97-602 NWTPH-	1	13319A31B	11/18/2013 21:29	Marie D Beamenderfer	4464.93
08179	BTEX by 8021	SW-846 8021B	1	13322A31A	11/20/2013 00:53	Laura M Krieger	1785.97
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 09:45	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133200029A	11/21/2013 03:06	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133200030A	11/20/2013 20:01	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133200030A	11/18/2013 07:10	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133200029A	11/18/2013 07:10	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 18:47	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002B	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: DUP-1-110713 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275402
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MTFD1

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	0.014	0.00073	1
10725	Benzo(a)pyrene	50-32-8	0.0060	0.00073	1
10725	Benzo(b)fluoranthene	205-99-2	0.0053	0.00073	1
10725	Benzo(k)fluoranthene	207-08-9	0.0021	0.00073	1
10725	Chrysene	218-01-9	0.013	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00073	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	0.0012	0.00073	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	2,200	220	5094.47
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	N.D.	0.45	2037.79
08179	Ethylbenzene	100-41-4	1.6	0.45	2037.79
08179	Toluene	108-88-3	N.D.	2.6	2037.79
08179	Total Xylenes	1330-20-7	4.2	1.3	2037.79
Reporting limits were raised due to interference from the sample matrix.					
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx modified		mg/kg	mg/kg	
08272	Diesel Range Organics C12-C24	n.a.	150	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified		mg/kg	mg/kg	
12006	DRO C12-C24 w/Si Gel	n.a.	140	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	6.21	0.539	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	9.0	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: DUP-1-110713 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275402
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MTFD1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/21/2013 15:53	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13319A31B	11/18/2013 22:04	Marie D Beamenderfer	5094.47
08179	BTEX by 8021	SW-846 8021B	1	13319A31B	11/19/2013 01:37	Marie D Beamenderfer	2037.79
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 00:00	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133200029A	11/21/2013 03:27	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133200030A	11/20/2013 20:22	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133200030A	11/18/2013 07:10	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133200029A	11/18/2013 07:10	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708003	11/19/2013 18:51	Katlin N Cataldi	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708003	11/18/2013 23:15	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820002B	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-14-12.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275403
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 10:00 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1412

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C SIM	mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00074	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00074	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00074	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00074	1
10725	Chrysene	218-01-9	N.D.	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00074	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00074	1
	GC Volatiles	ECY 97-602 NWTPH-Gx	mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	28	2.0	45.54
	GC Volatiles	SW-846 8021B	mg/kg	mg/kg	
08179	Benzene	71-43-2	0.013	0.0050	22.77
08179	Ethylbenzene	100-41-4	0.032	0.0050	22.77
08179	Toluene	108-88-3	0.054	0.0050	22.77
08179	Total Xylenes	1330-20-7	0.059	0.015	22.77
	GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx	mg/kg	mg/kg	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
	GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx	mg/kg	mg/kg	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
	Metals	SW-846 6010B	mg/kg	mg/kg	
06955	Lead	7439-92-1	3.60	0.532	1
	Wet Chemistry	SM 2540 G-1997	%	%	
00111	Moisture	n.a.	9.6	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-14-12.5 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275403
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 10:00 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1412

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/21/2013 16:24	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13319A31B	11/18/2013 22:39	Marie D Beamanerfer	45.54
08179	BTEX by 8021	SW-846 8021B	1	13322A31A	11/20/2013 01:29	Laura M Krieger	22.77
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 10:00	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133200029A	11/21/2013 03:48	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133200030A	11/20/2013 20:43	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133200030A	11/18/2013 07:10	Olivia Arosemena	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133200029A	11/18/2013 07:10	Olivia Arosemena	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 12:40	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820002B	11/18/2013 21:52	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-14-14 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275404
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 10:10 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1414

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00072	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00072	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00072	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00072	1
10725	Chrysene	218-01-9	N.D.	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00072	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00072	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	4.1	1.1	24.9
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	N.D.	0.0053	24.9
08179	Ethylbenzene	100-41-4	0.0059	0.0053	24.9
08179	Toluene	108-88-3	0.0065	0.0053	24.9
08179	Total Xylenes	1330-20-7	N.D.	0.016	24.9
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	1.85	0.536	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	6.8	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-14-14 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275404
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 10:10 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1414

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/21/2013 16:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13322A31A	11/20/2013 00:18	Laura M Krieger	24.9
08179	BTEX by 8021	SW-846 8021B	1	13322A31A	11/20/2013 00:18	Laura M Krieger	24.9
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 10:10	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133220009A	11/20/2013 11:38	Tyler O Griffin	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133220010A	11/20/2013 05:22	Tyler O Griffin	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133220010A	11/18/2013 16:35	JoElla L Rice	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133220009A	11/18/2013 16:35	JoElla L Rice	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 12:44	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003A	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-16-8 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275405
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 12:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT168

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	0.0070	0.00074	1
10725	Benzo(a)pyrene	50-32-8	0.0029	0.00074	1
10725	Benzo(b)fluoranthene	205-99-2	0.0024	0.00074	1
10725	Benzo(k)fluoranthene	207-08-9	0.00093	0.00074	1
10725	Chrysene	218-01-9	0.0055	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00074	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00074	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	540	20	450.64
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.040	180.25
08179	Ethylbenzene	100-41-4	0.42	0.040	180.25
08179	Toluene	108-88-3	0.17	0.040	180.25
08179	Total Xylenes	1330-20-7	0.67	0.12	180.25
Reporting limits were raised due to interference from the sample matrix.					
GC Petroleum Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	17	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	12	11	1
GC Petroleum Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	12	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	5.05	0.552	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	10.3	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-16-8 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275405
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 12:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT168

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/21/2013 17:25	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13322A31B	11/20/2013 21:42	Marie D Beamenderfer	450.64
08179	BTEX by 8021	SW-846 8021B	1	13322A31B	11/21/2013 04:23	Marie D Beamenderfer	180.25
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 12:30	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133220009A	11/20/2013 11:58	Tyler O Griffin	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133220010A	11/20/2013 06:01	Tyler O Griffin	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133220010A	11/18/2013 16:35	JoElla L Rice	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133220009A	11/18/2013 16:35	JoElla L Rice	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 12:56	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003A	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-16-10 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275406
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 12:45 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00075	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00075	1
10725	Benzo(b)fluoranthene	205-99-2	0.0018	0.00075	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00075	1
10725	Chrysene	218-01-9	0.0011	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00075	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00075	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	99	7.5	164.92
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	0.054	0.019	82.46
08179	Ethylbenzene	100-41-4	0.22	0.019	82.46
08179	Toluene	108-88-3	0.097	0.019	82.46
08179	Total Xylenes	1330-20-7	0.20	0.056	82.46
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.4	1
08272	Heavy Range Organics C24-C40	n.a.	12	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.4	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	6.84	0.559	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	11.5	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-16-10 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275406
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 12:45 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/22/2013 03:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13324A31A	11/21/2013 20:00	Laura M Krieger	164.92
08179	BTEX by 8021	SW-846 8021B	1	13322A31B	11/20/2013 22:19	Marie D Beamenderfer	82.46
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 12:45	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133220009A	11/20/2013 12:18	Tyler O Griffin	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133220010A	11/20/2013 06:21	Tyler O Griffin	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133220010A	11/18/2013 16:35	JoElla L Rice	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133220009A	11/18/2013 16:35	JoElla L Rice	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 13:00	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Connors	1
00111	Moisture	SM 2540 G-1997	1	13322820003A	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-10-9 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275407
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 13:20 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT109

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	0.012	0.00075	1
10725	Benzo(a)pyrene	50-32-8	0.0046	0.00075	1
10725	Benzo(b)fluoranthene	205-99-2	0.0041	0.00075	1
10725	Benzo(k)fluoranthene	207-08-9	0.0014	0.00075	1
10725	Chrysene	218-01-9	0.011	0.00038	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00075	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	0.0012	0.00075	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	5,900	270	5986.01
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	0.65	0.54	2394.4
08179	Ethylbenzene	100-41-4	7.5	0.54	2394.4
08179	Toluene	108-88-3	4.2	0.54	2394.4
08179	Total Xylenes	1330-20-7	15	1.6	2394.4
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx modified		mg/kg	mg/kg	
08272	Diesel Range Organics C12-C24	n.a.	160	3.4	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified		mg/kg	mg/kg	
12006	DRO C12-C24 w/Si Gel	n.a.	140	3.4	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	7.13	0.543	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	11.5	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-10-9 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275407
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 13:20 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT109

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13319SLD026	11/22/2013 04:07	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13319SLD026	11/16/2013 10:30	William H Saadeh	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13322A31B	11/20/2013 22:55	Marie D Beamenderfer	5986.01
08179	BTEX by 8021	SW-846 8021B	1	13322A31B	11/21/2013 04:59	Marie D Beamenderfer	2394.4
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 13:20	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133220009A	11/20/2013 12:38	Tyler O Griffin	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133220010A	11/20/2013 06:41	Tyler O Griffin	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133220010A	11/18/2013 16:35	JoElla L Rice	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133220009A	11/18/2013 16:35	JoElla L Rice	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 13:04	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003A	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-10-13 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275408
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 13:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1013

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00073	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00073	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00073	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00073	1
10725	Chrysene	218-01-9	0.00080	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00073	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00073	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	N.D.	1	21.85
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0048	21.85
08179	Ethylbenzene	100-41-4	N.D.	0.0048	21.85
08179	Toluene	108-88-3	N.D.	0.0048	21.85
08179	Total Xylenes	1330-20-7	N.D.	0.015	21.85
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	2.53	0.533	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	9.8	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-10-13 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275408
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 13:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1013

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLD026	11/21/2013 18:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLD026	11/18/2013 03:00	Sherry L Morrow	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13322A31A	11/19/2013 20:10	Laura M Krieger	21.85
08179	BTEX by 8021	SW-846 8021B	1	13322A31A	11/19/2013 20:10	Laura M Krieger	21.85
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 13:30	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133220009A	11/20/2013 09:39	Tyler O Griffin	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133220010A	11/20/2013 07:01	Tyler O Griffin	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133220010A	11/18/2013 16:35	JoElla L Rice	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133220009A	11/18/2013 16:35	JoElla L Rice	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 13:08	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003A	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-15-9 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275409
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 14:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT159

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	0.0051	0.00071	1
10725	Benzo(a)pyrene	50-32-8	0.0021	0.00071	1
10725	Benzo(b)fluoranthene	205-99-2	0.0021	0.00071	1
10725	Benzo(k)fluoranthene	207-08-9	0.00081	0.00071	1
10725	Chrysene	218-01-9	0.0048	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00071	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00071	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	1,100	88	2059.18
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	0.38	0.22	1029.59
08179	Ethylbenzene	100-41-4	6.8	0.22	1029.59
08179	Toluene	108-88-3	1.4	0.22	1029.59
08179	Total Xylenes	1330-20-7	7.2	0.66	1029.59
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
08272	Diesel Range Organics C12-C24	n.a.	69	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
12006	DRO C12-C24 w/Si Gel	n.a.	57	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	4.24	0.530	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	6.6	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-15-9 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275409
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 14:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT159

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLD026	11/21/2013 20:35	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLD026	11/18/2013 03:00	Sherry L Morrow	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13322A31B	11/20/2013 23:32	Marie D Beamanerfer	2059.18
08179	BTEX by 8021	SW-846 8021B	1	13322A31A	11/20/2013 05:01	Laura M Krieger	1029.59
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 14:15	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133220009A	11/20/2013 09:59	Tyler O Griffin	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133220010A	11/20/2013 07:21	Tyler O Griffin	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133220010A	11/18/2013 16:35	JoElla L Rice	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133220009A	11/18/2013 16:35	JoElla L Rice	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 13:12	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003A	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-15-13 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275410
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 14:40 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1513

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00076	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00076	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00076	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00076	1
10725	Chrysene	218-01-9	N.D.	0.00038	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00076	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00076	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	3.6	1	20.89
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	N.D.	0.0048	20.89
08179	Ethylbenzene	100-41-4	0.041	0.0048	20.89
08179	Toluene	108-88-3	N.D.	0.0048	20.89
08179	Total Xylenes	1330-20-7	0.069	0.014	20.89
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.4	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.4	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	1.78	0.552	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	12.9	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

This sample was submitted to the laboratory on 11/13/13 at 10:00.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-15-13 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275410
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 14:40 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1513

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLD026	11/21/2013 21:07	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLD026	11/18/2013 03:00	Sherry L Morrow	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13322A31B	11/21/2013 00:08	Marie D Beamenderfer	20.89
08179	BTEX by 8021	SW-846 8021B	1	13322A31B	11/21/2013 00:08	Marie D Beamenderfer	20.89
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 14:40	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133220009A	11/20/2013 10:19	Tyler O Griffin	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133220010A	11/20/2013 07:40	Tyler O Griffin	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133220010A	11/18/2013 16:35	JoElla L Rice	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133220009A	11/18/2013 16:35	JoElla L Rice	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 13:16	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Connors	1
00111	Moisture	SM 2540 G-1997	1	13322820003A	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-18-8 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275411
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 15:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT188

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00074	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00074	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00074	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00074	1
10725	Chrysene	218-01-9	0.00055	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00074	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00074	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	580	38	836.96
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	0.43	0.094	418.48
08179	Ethylbenzene	100-41-4	1.4	0.094	418.48
08179	Toluene	108-88-3	1.2	0.094	418.48
08179	Total Xylenes	1330-20-7	0.84	0.28	418.48
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.4	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.4	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	4.55	0.551	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	11.0	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-18-8 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275411
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 15:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT188

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLD026	11/21/2013 21:40	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLD026	11/18/2013 03:00	Sherry L Morrow	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13324A31A	11/21/2013 20:37	Laura M Krieger	836.96
08179	BTEX by 8021	SW-846 8021B	1	13322A31B	11/21/2013 00:44	Marie D Beamenderfer	418.48
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 15:30	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133220009A	11/20/2013 10:39	Tyler O Griffin	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133220010A	11/20/2013 08:00	Tyler O Griffin	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133220010A	11/18/2013 16:35	JoElla L Rice	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133220009A	11/18/2013 16:35	JoElla L Rice	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 13:20	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Connors	1
00111	Moisture	SM 2540 G-1997	1	13322820003A	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-18-12 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275412
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 15:40 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1812

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00077	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00077	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00077	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00077	1
10725	Chrysene	218-01-9	N.D.	0.00038	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00077	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00077	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	N.D.	1	21.54
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0050	21.54
08179	Ethylbenzene	100-41-4	N.D.	0.0050	21.54
08179	Toluene	108-88-3	N.D.	0.0050	21.54
08179	Total Xylenes	1330-20-7	N.D.	0.015	21.54
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.5	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	12	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.5	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	12	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	3.00	0.578	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	13.5	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-18-12 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275412
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 15:40 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1812

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLD026	11/21/2013 22:12	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLD026	11/18/2013 03:00	Sherry L Morrow	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13322A31A	11/19/2013 20:46	Laura M Krieger	21.54
08179	BTEX by 8021	SW-846 8021B	1	13322A31A	11/19/2013 20:46	Laura M Krieger	21.54
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 15:40	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133220009A	11/20/2013 10:59	Tyler O Griffin	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133220010A	11/20/2013 08:20	Tyler O Griffin	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133220010A	11/18/2013 16:35	JoElla L Rice	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133220009A	11/18/2013 16:35	JoElla L Rice	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 13:24	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003A	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: DUP-2-110713 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275413
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MTFD2

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00074	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00074	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00074	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00074	1
10725	Chrysene	218-01-9	0.00044	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00074	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00074	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	620	35	789.81
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	0.46	0.087	394.91
08179	Ethylbenzene	100-41-4	1.5	0.087	394.91
08179	Toluene	108-88-3	1.3	0.087	394.91
08179	Total Xylenes	1330-20-7	0.92	0.26	394.91
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	7.8	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	6.6	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	4.09	0.537	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	9.6	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: DUP-2-110713 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275413
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/07/2013 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MTFD2

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLD026	11/21/2013 22:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLD026	11/18/2013 03:00	Sherry L Morrow	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13322A31B	11/21/2013 01:21	Marie D Beamenderfer	789.81
08179	BTEX by 8021	SW-846 8021B	1	13322A31A	11/20/2013 06:47	Laura M Krieger	394.91
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/07/2013 00:00	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133220020A	11/21/2013 09:07	Glorines Suarez-Rivera	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133220021A	11/21/2013 13:16	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133220021A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133220020A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 13:29	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003A	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-17-8 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275414
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 08:20 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT178

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	0.0027	0.00074	1
10725	Benzo(a)pyrene	50-32-8	0.0011	0.00074	1
10725	Benzo(b)fluoranthene	205-99-2	0.0013	0.00074	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00074	1
10725	Chrysene	218-01-9	0.0032	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00074	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00074	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	1,300	190	4348.11
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	1.4	0.48	2174.05
08179	Ethylbenzene	100-41-4	10	0.48	2174.05
08179	Toluene	108-88-3	1.7	0.48	2174.05
08179	Total Xylenes	1330-20-7	20	1.5	2174.05
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	25	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	15	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	3.64	0.551	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	10.2	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-17-8 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275414
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 08:20 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT178

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLD026	11/21/2013 23:17	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLD026	11/18/2013 03:00	Sherry L Morrow	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13322A31B	11/21/2013 02:34	Marie D Beamenderfer	4348.11
08179	BTEX by 8021	SW-846 8021B	1	13322A31B	11/21/2013 05:36	Marie D Beamenderfer	2174.05
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/08/2013 08:20	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133220020A	11/21/2013 12:55	Glorines Suarez- Rivera	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133220021A	11/21/2013 13:37	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133220021A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133220020A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 12:15	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003B	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-17-11 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275415
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 08:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1711

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00075	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00075	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00075	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00075	1
10725	Chrysene	218-01-9	N.D.	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00075	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00075	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	N.D.	0.9	20.6
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	N.D.	0.0046	20.6
08179	Ethylbenzene	100-41-4	N.D.	0.0046	20.6
08179	Toluene	108-88-3	N.D.	0.0046	20.6
08179	Total Xylenes	1330-20-7	N.D.	0.014	20.6
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	2.67	0.559	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	10.6	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-17-11 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275415
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 08:30 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1711

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLD026	11/21/2013 23:49	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLD026	11/18/2013 03:00	Sherry L Morrow	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13322A31B	11/20/2013 21:06	Marie D Beamenderfer	20.6
08179	BTEX by 8021	SW-846 8021B	1	13322A31B	11/20/2013 21:06	Marie D Beamenderfer	20.6
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/08/2013 08:30	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133220020A	11/21/2013 13:37	Glorines Suarez- Rivera	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133220021A	11/21/2013 14:20	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133220021A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133220020A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 13:33	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003B	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-9-9 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275416
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 09:00 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT099

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	0.0053	0.00073	1
10725	Benzo(a)pyrene	50-32-8	0.0020	0.00073	1
10725	Benzo(b)fluoranthene	205-99-2	0.0020	0.00073	1
10725	Benzo(k)fluoranthene	207-08-9	0.00082	0.00073	1
10725	Chrysene	218-01-9	0.0050	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00073	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00073	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	2,400	94	2148.04
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	0.56	0.19	859.22
08179	Ethylbenzene	100-41-4	N.D.	2.7	859.22
08179	Toluene	108-88-3	4.5	0.19	859.22
08179	Total Xylenes	1330-20-7	5.0	0.56	859.22
Reporting limits were raised due to interference from the sample matrix.					
GC Petroleum Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	52	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	34	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	4.63	0.542	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	8.6	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-9-9 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275416
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 09:00 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT099

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLD026	11/22/2013 00:22	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLD026	11/18/2013 03:00	Sherry L Morrow	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13322A31B	11/21/2013 03:10	Marie D Beamenderfer	2148.04
08179	BTEX by 8021	SW-846 8021B	1	13322A31B	11/21/2013 06:12	Marie D Beamenderfer	859.22
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/08/2013 09:00	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133220020A	11/21/2013 16:06	Glorines Suarez- Rivera	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133220021A	11/26/2013 09:13	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133220021A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133220020A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 13:44	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003B	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-20-2 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275417
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 09:10 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT202

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00087	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00087	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00087	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00087	1
10725	Chrysene	218-01-9	0.00098	0.00043	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00087	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00087	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	5.6	1.4	26.05
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0068	26.05
08179	Ethylbenzene	100-41-4	N.D.	0.0091	26.05
08179	Toluene	108-88-3	0.0068	0.0068	26.05
08179	Total Xylenes	1330-20-7	N.D.	0.020	26.05
Reporting limits were raised due to interference from the sample matrix.					
GC Petroleum Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	19	3.9	1
08272	Heavy Range Organics C24-C40	n.a.	16	13	1
GC Petroleum Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	13	3.9	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	13	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	5.29	0.643	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	23.0	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-20-2 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275417
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 09:10 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT202

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLD026	11/22/2013 00:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLD026	11/18/2013 03:00	Sherry L Morrow	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13322A31B	11/20/2013 19:30	Marie D Beamenderfer	26.05
08179	BTEX by 8021	SW-846 8021B	1	13322A31B	11/20/2013 19:30	Marie D Beamenderfer	26.05
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/08/2013 09:10	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133220020A	11/21/2013 13:58	Glorines Suarez- Rivera	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133220021A	11/21/2013 14:41	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133220021A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133220020A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 13:48	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003B	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-9-11 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275418
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 09:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT911

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00074	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00074	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00074	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00074	1
10725	Chrysene	218-01-9	N.D.	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00074	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00074	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	N.D.	0.9	20.53
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0046	20.53
08179	Ethylbenzene	100-41-4	N.D.	0.0046	20.53
08179	Toluene	108-88-3	N.D.	0.0046	20.53
08179	Total Xylenes	1330-20-7	N.D.	0.014	20.53
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	3.40	0.537	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	10.5	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-9-11 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275418
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 09:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT911

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLD026	11/22/2013 01:26	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLD026	11/18/2013 03:00	Sherry L Morrow	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13322A31B	11/20/2013 20:07	Marie D Beamenderfer	20.53
08179	BTEX by 8021	SW-846 8021B	1	13322A31B	11/20/2013 20:07	Marie D Beamenderfer	20.53
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/08/2013 09:15	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133220020A	11/21/2013 14:20	Glorines Suarez- Rivera	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133220021A	11/21/2013 15:02	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133220021A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133220020A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 13:53	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003B	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: DUP-3-110813 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275419
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MTFD3

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00072	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00072	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00072	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00072	1
10725	Chrysene	218-01-9	N.D.	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00072	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00072	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	N.D.	0.9	19.75
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0043	19.75
08179	Ethylbenzene	100-41-4	N.D.	0.0043	19.75
08179	Toluene	108-88-3	0.0051	0.0043	19.75
08179	Total Xylenes	1330-20-7	N.D.	0.013	19.75
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	2.64	0.529	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	8.3	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: DUP-3-110813 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275419
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MTFD3

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLD026	11/22/2013 01:58	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLD026	11/18/2013 03:00	Sherry L Morrow	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13322A31A	11/19/2013 22:32	Laura M Krieger	19.75
08179	BTEX by 8021	SW-846 8021B	1	13322A31A	11/19/2013 22:32	Laura M Krieger	19.75
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/08/2013 00:00	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133220020A	11/21/2013 14:41	Glorines Suarez-Rivera	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133220021A	11/21/2013 15:23	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133220021A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133220020A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 13:57	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003B	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-19-9 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275420
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 10:00 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT199

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00072	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00072	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00072	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00072	1
10725	Chrysene	218-01-9	0.00062	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00072	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00072	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	5.7	1	22.1
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	N.D.	0.0048	22.1
08179	Ethylbenzene	100-41-4	0.014	0.0048	22.1
08179	Toluene	108-88-3	0.014	0.0048	22.1
08179	Total Xylenes	1330-20-7	0.042	0.015	22.1
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	3.55	0.532	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	8.8	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-19-9 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275420
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 10:00 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT199

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLD026	11/22/2013 02:31	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLD026	11/18/2013 03:00	Sherry L Morrow	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13322A31A	11/19/2013 23:07	Laura M Krieger	22.1
08179	BTEX by 8021	SW-846 8021B	1	13322A31A	11/19/2013 23:07	Laura M Krieger	22.1
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/08/2013 10:00	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133220020A	11/21/2013 15:44	Glorines Suarez-Rivera	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133220021A	11/21/2013 15:44	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133220021A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133220020A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 14:01	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003B	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-19-11 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275421
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 10:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1911

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00072	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00072	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00072	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00072	1
10725	Chrysene	218-01-9	N.D.	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00072	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00072	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	N.D.	1	23.03
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0050	23.03
08179	Ethylbenzene	100-41-4	N.D.	0.0050	23.03
08179	Toluene	108-88-3	N.D.	0.0050	23.03
08179	Total Xylenes	1330-20-7	N.D.	0.015	23.03
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	2.97	0.531	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	7.7	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-19-11 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275421
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 10:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M1911

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLD026	11/22/2013 03:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLD026	11/18/2013 03:00	Sherry L Morrow	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13322A31A	11/19/2013 23:43	Laura M Krieger	23.03
08179	BTEX by 8021	SW-846 8021B	1	13322A31A	11/19/2013 23:43	Laura M Krieger	23.03
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/08/2013 10:15	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133220020A	11/21/2013 15:02	Glorines Suarez-Rivera	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133220021A	11/21/2013 16:06	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133220021A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133220020A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 14:05	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003B	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-20-10 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275422
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 10:50 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M2010

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	0.0054	0.00071	1
10725	Benzo(a)pyrene	50-32-8	0.0023	0.00071	1
10725	Benzo(b)fluoranthene	205-99-2	0.0021	0.00071	1
10725	Benzo(k)fluoranthene	207-08-9	0.00072	0.00071	1
10725	Chrysene	218-01-9	0.0050	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00071	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00071	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	730	47	1087.11
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	0.26	0.24	1087.11
08179	Ethylbenzene	100-41-4	2.1	0.24	1087.11
08179	Toluene	108-88-3	0.96	0.24	1087.11
08179	Total Xylenes	1330-20-7	1.1	0.71	1087.11
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	65	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	46	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	5.80	0.542	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	7.7	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-20-10 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275422
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 10:50 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M2010

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLI026	11/22/2013 00:30	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLI026	11/18/2013 10:00	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13324A31A	11/21/2013 21:13	Laura M Krieger	1087.11
08179	BTEX by 8021	SW-846 8021B	1	13324A31A	11/21/2013 21:13	Laura M Krieger	1087.11
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/08/2013 10:50	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133220020A	11/21/2013 15:23	Glorines Suarez-Rivera	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133220021A	11/21/2013 16:29	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133220021A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133220020A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133225708005	11/21/2013 14:09	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133225708005	11/19/2013 09:25	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13322820003B	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-20-12 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275423
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 11:00 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M2012

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00073	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00073	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00073	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00073	1
10725	Chrysene	218-01-9	N.D.	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00073	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00073	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	2.1	1	21.99
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0048	21.99
08179	Ethylbenzene	100-41-4	0.0077	0.0048	21.99
08179	Toluene	108-88-3	N.D.	0.0048	21.99
08179	Total Xylenes	1330-20-7	N.D.	0.014	21.99
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	6.07	0.535	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	8.4	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-20-12 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275423
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 11:00 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M2012

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLI026	11/22/2013 01:01	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLI026	11/18/2013 10:00	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13324A31A	11/21/2013 22:26	Laura M Krieger	21.99
08179	BTEX by 8021	SW-846 8021B	1	13324A31A	11/21/2013 22:26	Laura M Krieger	21.99
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/08/2013 11:00	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133220022A	11/21/2013 07:21	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133220023A	11/20/2013 22:29	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133220023A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133220022A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133235708001	11/20/2013 13:16	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133235708001	11/19/2013 22:35	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820003B	11/18/2013 21:00	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-20-14 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275424
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 11:10 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M2014

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C SIM		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00075	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00075	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00075	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00075	1
10725	Chrysene	218-01-9	N.D.	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00075	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00075	1
GC Volatiles	ECY 97-602 NWTPH-Gx		mg/kg	mg/kg	
02006	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.0	22.29
GC Volatiles	SW-846 8021B		mg/kg	mg/kg	
08179	Benzene	71-43-2	N.D.	0.0050	22.29
08179	Ethylbenzene	100-41-4	N.D.	0.0050	22.29
08179	Toluene	108-88-3	N.D.	0.0050	22.29
08179	Total Xylenes	1330-20-7	N.D.	0.015	22.29
GC Petroleum Hydrocarbons	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.4	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx		mg/kg	mg/kg	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.4	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals	SW-846 6010B		mg/kg	mg/kg	
06955	Lead	7439-92-1	3.94	0.543	1
Wet Chemistry	SM 2540 G-1997		%	%	
00111	Moisture	n.a.	11.5	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-20-14 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275424
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 11:10 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M2014

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLI026	11/22/2013 01:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLI026	11/18/2013 10:00	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12 Gx	ECY 97-602 NWTPH-	1	13324A31A	11/22/2013 00:15	Laura M Krieger	22.29
08179	BTEX by 8021	SW-846 8021B	1	13324A31A	11/22/2013 00:15	Laura M Krieger	22.29
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/08/2013 11:10	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133220022A	11/21/2013 08:03	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133220023A	11/20/2013 23:12	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133220023A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133220022A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133235708001	11/20/2013 13:30	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133235708001	11/19/2013 22:35	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820004B	11/18/2013 22:35	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-21-6 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275425
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 11:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT216

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00082	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00082	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00082	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00082	1
10725	Chrysene	218-01-9	N.D.	0.00041	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00082	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00082	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.6	33.02
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0082	33.02
08179	Ethylbenzene	100-41-4	N.D.	0.0082	33.02
08179	Toluene	108-88-3	N.D.	0.0082	33.02
08179	Total Xylenes	1330-20-7	N.D.	0.025	33.02
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.7	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	12	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.7	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	12	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	3.83	0.613	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	19.2	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-21-6 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275425
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 11:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT216

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLI026	11/22/2013 02:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLI026	11/18/2013 10:00	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13324A31A	11/22/2013 00:51	Laura M Krieger	33.02
08179	BTEX by 8021	SW-846 8021B	1	13324A31A	11/22/2013 00:51	Laura M Krieger	33.02
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/08/2013 11:15	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133220022A	11/21/2013 08:24	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133220023A	11/20/2013 23:33	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133220023A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133220022A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133235708001	11/20/2013 13:34	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133235708001	11/19/2013 22:35	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820004B	11/18/2013 22:35	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-21-9 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275426
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 13:10 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT219

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00072	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00072	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00072	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00072	1
10725	Chrysene	218-01-9	0.00061	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00072	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00072	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	61	3.9	89.69
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.020	22.42
08179	Ethylbenzene	100-41-4	0.049	0.0049	22.42
08179	Toluene	108-88-3	N.D.	0.069	22.42
08179	Total Xylenes	1330-20-7	0.12	0.015	22.42
Reporting limits were raised due to interference from the sample matrix.					
GC Petroleum Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	3.3	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	4.42	0.528	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	8.1	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-21-9 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275426
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 13:10 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

MT219

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLI026	11/22/2013 02:34	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLI026	11/18/2013 10:00	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH- Gx	1	13324A31A	11/21/2013 21:50	Catherine J Schwarz	89.69
08179	BTEX by 8021	SW-846 8021B	1	13324A31B	11/22/2013 17:32	Marie D Beamenderfer	22.42
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/08/2013 13:10	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH- Dx modified	1	133220022A	11/21/2013 08:46	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	133220023A	11/20/2013 23:54	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	133220023A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH- Dx 06/97	1	133220022A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133235708001	11/20/2013 13:39	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133235708001	11/19/2013 22:35	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820004B	11/18/2013 22:35	Scott W Freisher	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-21-12 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275427
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 13:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M2112

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM					
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00073	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00073	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00073	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00073	1
10725	Chrysene	218-01-9	N.D.	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00073	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00073	1
GC Volatiles ECY 97-602 NWTPH-Gx					
02006	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.2	26.71
GC Volatiles SW-846 8021B					
08179	Benzene	71-43-2	N.D.	0.0059	26.71
08179	Ethylbenzene	100-41-4	N.D.	0.0059	26.71
08179	Toluene	108-88-3	N.D.	0.0059	26.71
08179	Total Xylenes	1330-20-7	N.D.	0.018	26.71
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons w/Si modified					
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B					
06955	Lead	7439-92-1	4.62	0.543	1
Wet Chemistry SM 2540 G-1997					
00111	Moisture	n.a.	9.8	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SB-21-12 Grab Soil
Facility# 211556
101 Mulford Road - Toledo, WA

LL Sample # SW 7275427
LL Group # 1433626
Account # 11255

Project Name: 211556

Collected: 11/08/2013 13:15 by AL

Chevron

L4310

Submitted: 11/12/2013 09:15

6001 Bollinger Canyon Road

Reported: 11/27/2013 09:52

San Ramon CA 94583

M2112

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13320SLI026	11/22/2013 03:05	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13320SLI026	11/18/2013 10:00	Anna E Stager	1
02006	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	13324A31A	11/22/2013 01:27	Laura M Krieger	26.71
08179	BTEX by 8021	SW-846 8021B	1	13324A31A	11/22/2013 01:27	Laura M Krieger	26.71
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201331833122	11/08/2013 13:15	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	133220022A	11/21/2013 09:07	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	133220023A	11/21/2013 00:16	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	133220023A	11/18/2013 23:25	Karen L Beyer	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	133220022A	11/18/2013 23:25	Karen L Beyer	1
06955	Lead	SW-846 6010B	1	133235708001	11/20/2013 13:43	Joanne M Gates	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	133235708001	11/19/2013 22:35	Annamaria Stipkovits	1
00111	Moisture	SM 2540 G-1997	1	13322820004B	11/18/2013 22:35	Scott W Freisher	1

Quality Control Summary

Client Name: Chevron
Reported: 11/27/13 at 09:52 AM

Group Number: 1433626

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 13318SLE026								
Benzo(a)anthracene	N.D.	0.00067	mg/kg	99		83-119		
Benzo(a)pyrene	N.D.	0.00067	mg/kg	102		80-122		
Benzo(b)fluoranthene	N.D.	0.00067	mg/kg	109		82-135		
Benzo(k)fluoranthene	N.D.	0.00067	mg/kg	101		79-123		
Chrysene	N.D.	0.00033	mg/kg	102		84-113		
Dibenz(a,h)anthracene	N.D.	0.00067	mg/kg	101		78-124		
Indeno(1,2,3-cd)pyrene	N.D.	0.00067	mg/kg	100		77-124		
Batch number: 13319SLD026								
Benzo(a)anthracene	N.D.	0.00067	mg/kg	108		83-119		
Benzo(a)pyrene	N.D.	0.00067	mg/kg	109		80-122		
Benzo(b)fluoranthene	N.D.	0.00067	mg/kg	120		82-135		
Benzo(k)fluoranthene	N.D.	0.00067	mg/kg	109		79-123		
Chrysene	N.D.	0.00033	mg/kg	110		84-113		
Dibenz(a,h)anthracene	N.D.	0.00067	mg/kg	112		78-124		
Indeno(1,2,3-cd)pyrene	N.D.	0.00067	mg/kg	111		77-124		
Batch number: 13320SLD026								
Benzo(a)anthracene	N.D.	0.00067	mg/kg	107		83-119		
Benzo(a)pyrene	N.D.	0.00067	mg/kg	102		80-122		
Benzo(b)fluoranthene	N.D.	0.00067	mg/kg	114		82-135		
Benzo(k)fluoranthene	N.D.	0.00067	mg/kg	103		79-123		
Chrysene	N.D.	0.00033	mg/kg	102		84-113		
Dibenz(a,h)anthracene	N.D.	0.00067	mg/kg	103		78-124		
Indeno(1,2,3-cd)pyrene	N.D.	0.00067	mg/kg	103		77-124		
Batch number: 13320SLI026								
Benzo(a)anthracene	N.D.	0.00067	mg/kg	100		83-119		
Benzo(a)pyrene	N.D.	0.00067	mg/kg	100		80-122		
Benzo(b)fluoranthene	N.D.	0.00067	mg/kg	113		82-135		
Benzo(k)fluoranthene	N.D.	0.00067	mg/kg	98		79-123		
Chrysene	N.D.	0.00033	mg/kg	102		84-113		
Dibenz(a,h)anthracene	N.D.	0.00067	mg/kg	110		78-124		
Indeno(1,2,3-cd)pyrene	N.D.	0.00067	mg/kg	108		77-124		
Batch number: 13319A31A								
Benzene	N.D.	0.0050	mg/kg	100	103	80-120	3	30
Ethylbenzene	N.D.	0.0050	mg/kg	98	101	80-120	4	30
NWTPH-GX Soil C7-C12	N.D.	1.0	mg/kg	94	94	65-120	1	30
Toluene	N.D.	0.0050	mg/kg	97	100	80-120	3	30
Total Xylenes	N.D.	0.015	mg/kg	97	100	80-120	4	30
Batch number: 13319A31B								
Sample number(s): 7275386, 7275388-7275391, 7275394, 7275396, 7275399, 7275401-								

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron

Group Number: 1433626

Reported: 11/27/13 at 09:52 AM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Benzene	N.D.	0.0050	mg/kg	100	103	80-120	3	30
Ethylbenzene	N.D.	0.0050	mg/kg	98	101	80-120	4	30
NWTPH-GX Soil C7-C12	N.D.	1.0	mg/kg	94	94	65-120	1	30
Toluene	N.D.	0.0050	mg/kg	97	100	80-120	3	30
Total Xylenes	N.D.	0.015	mg/kg	97	100	80-120	4	30
Batch number: 13322A31A	Sample number(s): 7275401, 7275403-7275404, 7275408-7275409, 7275412-7275413, 7275419-7275421							
Benzene	N.D.	0.0050	mg/kg	99	100	80-120	1	30
Ethylbenzene	N.D.	0.0050	mg/kg	99	100	80-120	1	30
NWTPH-GX Soil C7-C12	N.D.	1.0	mg/kg	88	89	65-120	1	30
Toluene	N.D.	0.0050	mg/kg	98	101	80-120	3	30
Total Xylenes	N.D.	0.015	mg/kg	99	100	80-120	2	30
Batch number: 13322A31B	Sample number(s): 7275405-7275407, 7275409-7275411, 7275413-7275418							
Benzene	N.D.	0.0050	mg/kg	99	100	80-120	1	30
Ethylbenzene	N.D.	0.0050	mg/kg	99	100	80-120	1	30
NWTPH-GX Soil C7-C12	N.D.	1.0	mg/kg	88	89	65-120	1	30
Toluene	N.D.	0.0050	mg/kg	98	101	80-120	3	30
Total Xylenes	N.D.	0.015	mg/kg	99	100	80-120	2	30
Batch number: 13324A31A	Sample number(s): 7275406, 7275411, 7275422-7275427							
Benzene	N.D.	0.0050	mg/kg	109	107	80-120	3	30
Ethylbenzene	N.D.	0.0050	mg/kg	107	107	80-120	0	30
NWTPH-GX Soil C7-C12	N.D.	1.0	mg/kg	99	98	65-120	1	30
Toluene	N.D.	0.0050	mg/kg	106	105	80-120	1	30
Total Xylenes	N.D.	0.015	mg/kg	107	107	80-120	0	30
Batch number: 13324A31B	Sample number(s): 7275426							
Benzene	N.D.	0.0050	mg/kg	109	107	80-120	3	30
Ethylbenzene	N.D.	0.0050	mg/kg	107	107	80-120	0	30
Toluene	N.D.	0.0050	mg/kg	106	105	80-120	1	30
Total Xylenes	N.D.	0.015	mg/kg	107	107	80-120	0	30
Batch number: 133180026A	Sample number(s): 7275384-7275393							
Diesel Range Organics C12-C24	N.D.	3.0	mg/kg	76		60-120		
Heavy Range Organics C24-C40	N.D.	10.	mg/kg					
Batch number: 133200029A	Sample number(s): 7275394-7275403							
Diesel Range Organics C12-C24	N.D.	3.0	mg/kg	76		60-120		
Heavy Range Organics C24-C40	N.D.	10.	mg/kg					
Batch number: 133220009A	Sample number(s): 7275404-7275412							
Diesel Range Organics C12-C24	N.D.	3.0	mg/kg	73		60-120		
Heavy Range Organics C24-C40	N.D.	10.	mg/kg					
Batch number: 133220020A	Sample number(s): 7275413-7275422							
Diesel Range Organics C12-C24	N.D.	3.0	mg/kg	80		60-120		
Heavy Range Organics C24-C40	N.D.	10.	mg/kg					
Batch number: 133220022A	Sample number(s): 7275423-7275427							
Diesel Range Organics C12-C24	N.D.	3.0	mg/kg	93		60-120		
Heavy Range Organics C24-C40	N.D.	10.	mg/kg					
Batch number: 133180027A	Sample number(s): 7275384-7275393							

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron

Group Number: 1433626

Reported: 11/27/13 at 09:52 AM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
DRO C12-C24 w/Si Gel	N.D.	3.0	mg/kg	61		50-133		
HRO C24-C40 w/Si Gel	N.D.	10.	mg/kg					
Batch number: 133200030A			Sample number(s): 7275394-7275403					
DRO C12-C24 w/Si Gel	N.D.	3.0	mg/kg	81		50-133		
HRO C24-C40 w/Si Gel	N.D.	10.	mg/kg					
Batch number: 133220010A			Sample number(s): 7275404-7275412					
DRO C12-C24 w/Si Gel	N.D.	3.0	mg/kg	66		50-133		
HRO C24-C40 w/Si Gel	N.D.	10.	mg/kg					
Batch number: 133220021A			Sample number(s): 7275413-7275422					
DRO C12-C24 w/Si Gel	N.D.	3.0	mg/kg	70		50-133		
HRO C24-C40 w/Si Gel	N.D.	10.	mg/kg					
Batch number: 133220023A			Sample number(s): 7275423-7275427					
DRO C12-C24 w/Si Gel	N.D.	3.0	mg/kg	84		50-133		
HRO C24-C40 w/Si Gel	N.D.	10.	mg/kg					
Batch number: 133225708003			Sample number(s): 7275384-7275402					
Lead	N.D.	0.500	mg/kg	113		80-120		
Batch number: 133225708005			Sample number(s): 7275403-7275422					
Lead	N.D.	0.500	mg/kg	105		80-120		
Batch number: 133235708001			Sample number(s): 7275423-7275427					
Lead	N.D.	0.500	mg/kg	112		80-120		
Batch number: 13322820002A			Sample number(s): 7275384-7275393					
Moisture				100		99-101		
Batch number: 13322820002B			Sample number(s): 7275394-7275403					
Moisture				100		99-101		
Batch number: 13322820003A			Sample number(s): 7275404-7275413					
Moisture				100		99-101		
Batch number: 13322820003B			Sample number(s): 7275414-7275423					
Moisture				100		99-101		
Batch number: 13322820004B			Sample number(s): 7275424-7275427					
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>BKG MAX</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 13318SLE026			Sample number(s): 7275384-7275392 UNSPK: P267556					
Benzo(a)anthracene	89	90	44-143	2	30			
Benzo(a)pyrene	93	97	44-140	5	30			

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 11/27/13 at 09:52 AM

Group Number: 1433626

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>BKG MAX</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Benzo(b)fluoranthene	98	98	26-142	0	30			
Benzo(k)fluoranthene	92	101	54-142	9	30			
Chrysene	93	94	29-148	1	30			
Dibenz(a,h)anthracene	98	102	20-137	4	30			
Indeno(1,2,3-cd)pyrene	95	99	17-136	4	30			
Batch number: 13319SLD026	Sample number(s): 7275393-7275407 UNSPK: P273843							
Benzo(a)anthracene	92	106	44-143	14	30			
Benzo(a)pyrene	76	111	44-140	30	30			
Benzo(b)fluoranthene	90	154*	26-142	39*	30			
Benzo(k)fluoranthene	97	106	54-142	9	30			
Chrysene	63	128	29-148	40*	30			
Dibenz(a,h)anthracene	76	78	20-137	3	30			
Indeno(1,2,3-cd)pyrene	63	70	17-136	11	30			
Batch number: 13320SLD026	Sample number(s): 7275408-7275421 UNSPK: 7275408							
Benzo(a)anthracene	106	107	44-143	0	30			
Benzo(a)pyrene	101	102	44-140	0	30			
Benzo(b)fluoranthene	113	113	26-142	1	30			
Benzo(k)fluoranthene	102	102	54-142	0	30			
Chrysene	99	101	29-148	2	30			
Dibenz(a,h)anthracene	102	103	20-137	1	30			
Indeno(1,2,3-cd)pyrene	102	103	17-136	1	30			
Batch number: 13320SLI026	Sample number(s): 7275422-7275427 UNSPK: P274722							
Benzo(a)anthracene	96	95	44-143	0	30			
Benzo(a)pyrene	91	92	44-140	1	30			
Benzo(b)fluoranthene	91	98	26-142	4	30			
Benzo(k)fluoranthene	123	123	54-142	0	30			
Chrysene	71	76	29-148	3	30			
Dibenz(a,h)anthracene	72	69	20-137	4	30			
Indeno(1,2,3-cd)pyrene	59	60	17-136	1	30			
Batch number: 133180026A	Sample number(s): 7275384-7275393 BKG: 7275384							
Diesel Range Organics C12-C24			N.D.		N.D.	0 (1)		20
Heavy Range Organics C24-C40			N.D.		N.D.	0 (1)		20
Batch number: 133200029A	Sample number(s): 7275394-7275403 BKG: 7275394							
Diesel Range Organics C12-C24			48		38	22*		20
Heavy Range Organics C24-C40			26		19	29* (1)		20
Batch number: 133220009A	Sample number(s): 7275404-7275412 BKG: 7275404							
Diesel Range Organics C12-C24			N.D.		N.D.	0 (1)		20
Heavy Range Organics C24-C40			N.D.		N.D.	0 (1)		20
Batch number: 133220020A	Sample number(s): 7275413-7275422 BKG: 7275414							
Diesel Range Organics C12-C24			22		14	44* (1)		20
Heavy Range Organics C24-C40			N.D.		N.D.	0 (1)		20
Batch number: 133220022A	Sample number(s): 7275423-7275427 BKG: 7275423							
Diesel Range Organics C12-C24			N.D.		N.D.	0 (1)		20
Heavy Range Organics C24-C40			N.D.		N.D.	0 (1)		20

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 11/27/13 at 09:52 AM

Group Number: 1433626

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD RPD</u>	<u>BKG MAX</u>	<u>DUP Conc</u>	<u>DUP Conc</u>	<u>Dup RPD Max</u>
Batch number: 133180027A DRO C12-C24 w/Si Gel HRO C24-C40 w/Si Gel			Sample number(s): 7275384-7275393		BKG: 7275384 N.D. N.D.	N.D.	0 (1) 0 (1)	20 20
Batch number: 133200030A DRO C12-C24 w/Si Gel HRO C24-C40 w/Si Gel			Sample number(s): 7275394-7275403		BKG: 7275394 36 N.D.	32 N.D.	14 (1) 0 (1)	20 20
Batch number: 133220010A DRO C12-C24 w/Si Gel HRO C24-C40 w/Si Gel			Sample number(s): 7275404-7275412		BKG: 7275404 N.D. N.D.	N.D.	0 (1) 0 (1)	20 20
Batch number: 133220021A DRO C12-C24 w/Si Gel HRO C24-C40 w/Si Gel			Sample number(s): 7275413-7275422		BKG: 7275414 13 N.D.	6.7 N.D.	66* (1) 0 (1)	20 20
Batch number: 133220023A DRO C12-C24 w/Si Gel HRO C24-C40 w/Si Gel			Sample number(s): 7275423-7275427		BKG: 7275423 N.D. N.D.	N.D.	0 (1) 0 (1)	20 20
Batch number: 133225708003 Lead	95	89	Sample number(s): 7275384-7275402	75-125	UNSPK: 7275390 BKG: 7275390 4 20 8.29 7.97 4			20
Batch number: 133225708005 Lead	100	100	Sample number(s): 7275403-7275422	75-125	UNSPK: 7275414 BKG: 7275414 0 20 3.27 3.98 20 (1)			20
Batch number: 133235708001 Lead	-227 (2)	-340 (2)	Sample number(s): 7275423-7275427	75-125	UNSPK: P279024 BKG: P279024 6 20 334 285 16			20
Batch number: 13322820002A Moisture			Sample number(s): 7275384-7275393		BKG: 7275390 27.1	24.9	8*	5
Batch number: 13322820002B Moisture			Sample number(s): 7275394-7275403		BKG: 7275395 9.9	10.4	4	5
Batch number: 13322820003A Moisture			Sample number(s): 7275404-7275413		BKG: 7275409 6.6	6.4	3	5
Batch number: 13322820003B Moisture			Sample number(s): 7275414-7275423		BKG: 7275417 23.0	24.7	7*	5
Batch number: 13322820004B Moisture			Sample number(s): 7275424-7275427		BKG: P276499 15.8	14.8	7*	5

Surrogate Quality Control

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 11/27/13 at 09:52 AM

Group Number: 1433626

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: SIM SVOA (microwave)

Batch number: 13318SLE026

Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
------------------	--------------------	-------------------------

7275384	98	93	96
7275385	94	89	97
7275386	96	89	95
7275387	108	95	99
7275388	108	95	110
7275389	97	92	77
7275390	92	91	89
7275391	102	97	103
7275392	101	94	100
Blank	93	89	94
LCS	96	92	98
MS	93	86	95
MSD	97	89	98

Limits: 54-129 59-125 61-125

Analysis Name: SIM SVOA (microwave)

Batch number: 13319SLD026

Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
------------------	--------------------	-------------------------

7275393	88	84	95
7275394	95	83	84
7275395	94	88	105
7275396	105	76	203*
7275397	95	89	106
7275398	93	86	103
7275399	103	92	118
7275400	94	87	104
7275401	103	91	184*
7275402	101	89	109
7275403	96	90	106
7275404	88	83	97
7275405	99	89	105
7275406	93	86	103
7275407	94	86	111
Blank	89	87	99
LCS	98	91	104
MS	88	76	96
MSD	98	90	111

Limits: 54-129 59-125 61-125

Analysis Name: SIM SVOA (microwave)

Batch number: 13320SLD026

Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
------------------	--------------------	-------------------------

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
 Reported: 11/27/13 at 09:52 AM

Group Number: 1433626

Surrogate Quality Control

7275408	84	84	95
7275409	93	90	113
7275410	90	87	98
7275411	89	87	100
7275412	87	86	96
7275413	89	86	97
7275414	90	87	105
7275415	84	83	93
7275416	91	88	109
7275417	78	76	90
7275418	88	88	96
7275419	88	85	97
7275420	90	87	99
7275421	87	87	97
Blank	84	85	91
LCS	90	91	102
MS	88	88	96
MSD	90	90	99

Limits: 54-129 59-125 61-125

Analysis Name: SIM SVOA (microwave)

Batch number: 13320SLI026

Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
------------------	--------------------	-------------------------

7275422	95	89	102
7275423	96	89	101
7275424	95	88	102
7275425	94	88	103
7275426	93	85	102
7275427	93	87	100
Blank	93	87	100
LCS	96	90	104
MS	109	93	342*
MSD	114	89	402*

Limits: 54-129 59-125 61-125

Analysis Name: Method 8021 Soil Master

Batch number: 13319A31A

Trifluorotoluene-F	Trifluorotoluene-P
--------------------	--------------------

7275384	89	89
7275385	85	88
7275386	95	
7275387	79	79
7275388		137
7275389		112
7275390	96	
7275391	97	
7275392	80	78
7275393	87	85
7275394	207*	
7275395	83	82
7275396		85

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 11/27/13 at 09:52 AM

Group Number: 1433626

Surrogate Quality Control

7275397	78	78
7275398	90	90
7275400	76	78
Blank	103	98
LCS	99	94
LCSD	101	97

Limits: 61-122 50-139

Analysis Name: Method 8021 Soil Master
Batch number: 13319A31B
Trifluorotoluene-F Trifluorotoluene-P

7275386	83
7275388	240*
7275389	130*
7275390	92
7275391	83
7275394	105
7275396	129*
7275399	93
7275401	385*
7275402	211*
7275403	84
Blank	99
LCS	99
LCSD	101

Limits: 61-122 50-139

Analysis Name: Method 8021 Soil Master
Batch number: 13322A31A
Trifluorotoluene-F Trifluorotoluene-P

7275401	336*
7275403	75
7275404	69
7275408	77
7275409	82
7275412	208*
7275413	68
7275419	72
7275419	213*
7275420	75
7275420	90
7275421	70
7275421	83
Blank	74
LCS	102
LCSD	99
LCSD	93
LCSD	93

Limits: 61-122 50-139

Analysis Name: Method 8021 Soil Master
Batch number: 13322A31B
Trifluorotoluene-F Trifluorotoluene-P

7275405	114	95
7275406		97

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 11/27/13 at 09:52 AM

Group Number: 1433626

Surrogate Quality Control

7275407	421*	218*
7275409	258*	
7275410	77	81
7275411		188*
7275413	278*	
7275414	695*	535*
7275415	103	92
7275416	141*	94
7275417	72	75
7275418	77	82
Blank	98	104
LCS	93	93
LCSD	84	93

Limits: 61-122 50-139

Analysis Name: Method 8021 Soil Master
Batch number: 13324A31A
Trifluorotoluene-F Trifluorotoluene-P

7275406	104	
7275411	277*	
7275422	135*	115
7275423	77	84
7275424	89	98
7275425	90	98
7275426	96	
7275427	90	100
Blank	99	108
LCS	97	91
LCSD	95	90

Limits: 61-122 50-139

Analysis Name: Method 8021 Soil Master
Batch number: 13324A31B
Trifluorotoluene-P

7275426	84	
Blank	109	
LCS	91	
LCSD	90	

Limits: 50-139

Analysis Name: NWTPH-Dx soil
Batch number: 133180026A
Orthoterphenyl

7275384	74	
7275385	88	
7275386	80	
7275387	91	
7275388	101	
7275389	91	
7275390	77	

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 11/27/13 at 09:52 AM

Group Number: 1433626

Surrogate Quality Control

7275391 95
7275392 90
7275393 92
Blank 92
DUP 83
LCS 92

Limits: 50-150

Analysis Name: NWTPH-Dx soil w/ 10g Si Gel
Batch number: 133180027A
Orthoterphenyl

7275384 61
7275385 68
7275386 60
7275387 77
7275388 84
7275389 75
7275390 68
7275391 79
7275392 74
7275393 78
Blank 79
DUP 70
LCS 78

Limits: 50-150

Analysis Name: NWTPH-Dx soil
Batch number: 133200029A
Orthoterphenyl

7275394 104
7275395 96
7275396 119
7275397 95
7275398 102
7275399 93
7275400 97
7275401 109
7275402 117
7275403 95
Blank 99
DUP 91
LCS 93

Limits: 50-150

Analysis Name: NWTPH-Dx soil w/ 10g Si Gel
Batch number: 133200030A
Orthoterphenyl

7275394 93
7275395 79
7275396 116

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 11/27/13 at 09:52 AM

Group Number: 1433626

Surrogate Quality Control

7275397	88
7275398	98
7275399	85
7275400	74
7275401	104
7275402	111
7275403	94
Blank	91
DUP	90
LCS	100

Limits: 50-150

Analysis Name: NWTPH-Dx soil
Batch number: 133220009A
Orthoterphenyl

7275404	89
7275405	96
7275406	93
7275407	99
7275408	92
7275409	97
7275410	91
7275411	92
7275412	94
Blank	93
DUP	46*
LCS	93

Limits: 50-150

Analysis Name: NWTPH-Dx soil w/ 10g Si Gel
Batch number: 133220010A
Orthoterphenyl

7275404	74
7275405	83
7275406	77
7275407	91
7275408	83
7275409	88
7275410	76
7275411	82
7275412	80
Blank	84
DUP	41*
LCS	87

Limits: 50-150

Analysis Name: NWTPH-Dx soil
Batch number: 133220020A
Orthoterphenyl

7275413 103

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 11/27/13 at 09:52 AM

Group Number: 1433626

Surrogate Quality Control

7275414	107
7275415	105
7275416	110
7275417	98
7275418	101
7275419	106
7275420	103
7275421	105
7275422	107
Blank	102
DUP	105
LCS	102

Limits: 50-150

Analysis Name: NWTPH-Dx soil w/ 10g Si Gel
Batch number: 133220021A
Orthoterphenyl

7275413	90
7275414	93
7275415	105
7275416	94
7275417	86
7275418	83
7275419	87
7275420	63
7275421	103
7275422	87
Blank	89
DUP	81
LCS	86

Limits: 50-150

Analysis Name: NWTPH-Dx soil
Batch number: 133220022A
Orthoterphenyl

7275423	110
7275424	99
7275425	107
7275426	101
7275427	107
Blank	100
DUP	107
LCS	112

Limits: 50-150

Analysis Name: NWTPH-Dx soil w/ 10g Si Gel
Batch number: 133220023A
Orthoterphenyl

7275423	96
7275424	95

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 11/27/13 at 09:52 AM

Group Number: 1433626

Surrogate Quality Control

7275425	96
7275426	94
7275427	98
Blank	93
DUP	91
LCS	105

Limits: 50-150

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Chevron Northwest Region Analysis Request/Chain of Custody



Lancaster
Laboratories

Acct # 11255

For Lancaster Laboratories use only
Group # 1433626 Sample # 7275384-421
Instructions on reverse side correspond with circled numbers.

1 Client Information		4 Matrix		5 Analyses Requested		SCR #: _____	
Facility #	WBS						
Site Address	211556 211556 NWENV-02115560-0804		Sediment	<input type="checkbox"/>			
Chevron PM	101 Mulford Rd, Toledo, WI Mark Horne Lead Consultant		Potable	<input type="checkbox"/>	Ground	<input type="checkbox"/>	
Consultant/Office	Leidos		NPDES	<input type="checkbox"/>	Surface	<input type="checkbox"/>	
Consultant Project Mgr.			Oil	<input type="checkbox"/>	Air	<input type="checkbox"/>	
Consultant Phone #	R.Shropshire		Total Number of Containers				
Sampler	425-482-3323		4	<input checked="" type="checkbox"/> BTEX + MTBE <input checked="" type="checkbox"/> 8021 <input checked="" type="checkbox"/> 8260 <input type="checkbox"/> Naphth			<input checked="" type="checkbox"/> Clic
A. Lembrick & G. Ciaveros			4	8260 full scan			
2 Sample Identification		Collected		NWTPH GX	NWTPH DX	Silica Gel Cleanup	<input checked="" type="checkbox"/>
		Date	Time	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Lead
SB-9-4		11/4/13	1530	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Total
SB-10-2		11/4/13	1545	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SB-15-2		11/5/13	1515	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Diss.
SB-14-7		11/5/13	1610	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Method
SB-15-6		11/6/13	0850	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SB-10-6		11/6/13	1200	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SB-16-2		11/6/13	1215	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SB-16-6		11/6/13	1350	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SB-11-10		11/6/13	1440	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SB-11-12-5		11/6/13	1515	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SB-17-2		11/6/13	1530	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SB-12-9-5		11/6/13	1600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SB-12-10-5		11/6/13	1615	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 Turnaround Time Requested (TAT) (please circle)		Relinquished by	Date	Time	Received by	Date	Time
Standard		5 day	11/11/13	1330			
72 hour		4 day					
		48 hour					
		24 hour					
8 Data Package Options (please circle if required)		Relinquished by Commercial Carrier:	Received by	Date	Time		
Type I - Full		UPS <input checked="" type="checkbox"/>	FedEx <input type="checkbox"/>	11/12/13	0915		
Type VI (Raw Data)		Other <input type="checkbox"/>					
		Temperature Upon Receipt 1.1-0.5 °C	Custody Seals Intact?	Yes	No		

Chevron Northwest Region Analysis Request/Chain of Custody



Lancaster
Laboratories

Acct. # 11255

For Lancaster Laboratories use only
Group # 1433626 Sample # 7275384-427
Instructions on reverse side correspond with circled numbers.

① Client Information		④ Matrix		⑤ Analyses Requested		⑥ Remarks			
Facility #	WBS	Sediment	Ground	② Total Number of Containers	Lead	Total	SCR #:		
Site Address	211556 NWENV-02115560-0802	Water	NPDES	8260	Diss.	<input checked="" type="checkbox"/>	Results in Dry Weight		
Chevron PM	Mark Horne	Oil	Air	8260 full scan	Method	Method	J value reporting needed		
Consultant/Office	Leidos			NWTPH GX			Must meet lowest detection		
Consultant Project Mgr.	Bothell			NWTPH DX	<input checked="" type="checkbox"/>		limits possible for 8260 compounds		
Consultant Phone #	R. Shropshire			Oxygenates			8021 MTBE Confirmation		
Sampler	425-482-3323						Confirm MTBE + Naphthalene		
	Alenbuck / G. Cisneros						Confirm highest hit by 8260		
		③ Grab	Composite				Confirm all hits by 8260		
							Run _____ oxy's on highest hit		
							Run _____ oxy's on all hits		
② Sample Identification	Collected	Date	Time						
SB-12-12	11/6/13	1620	/	4					
SB-12-13.5	11/6/13	1630	/	4					
SB-13-10.5	11/7/13	0830	/	4					
SB-13-12.5	11/7/13	0840	/	4					
SB-14-1.5	11/7/13	0945	/	4					
DUP-1-110713	11/7/13	--	/	4					
SB-14-12.5	11/7/13	1000	/	4					
SB-14-14	11/7/13	1010	/	4					
SB-16-8	11/7/13	1230	/	4					
SB-16-10	11/7/13	1245	/	4					
SB-9-9 SB-10-9 8	11/7/13	1320	/	4					
SB-9-15 SB-10-13 9c	11/7/13	1330	/	4					
SB-15-9	11/7/13	1415	/	4					
⑦ Turnaround Time Requested (TAT) (please circle)	Standard	5 day	4 day	Relinquished by	Date	Time	Received by	Date	Time
	72 hour	48 hour	24 hour		11/11/13	1330			
⑧ Data Package Options (please circle if required)	Type I - Full	Type VI (Raw Data)	Relinquished by Commercial Carrier:	UPS	FedEx	Other	Received by	Date	Time
								11/12/13	0915
			Temperature Upon Receipt	0.5-1.1	°C	Custody Seals Intact?	Yes	No	

Chevron Northwest Region Analysis Request/Chain of Custody



Lancaster
Laboratories

Acct. # 11255

For Lancaster Laboratories use only
Group # 1433626 Sample # 7075384-427
Instructions on reverse side correspond with circled numbers.

1 Client Information				4 Matrix		5 Analyses Requested				SCR #:		
Facility #	WBS			Sediment	Ground	Potable	NPDES	Surface		Oxygenates		
Site Address	211556 NWENW-02115560-0804			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		NWTPH GX		
Chevron PM	101 Mulford Road, Toledo, WA			Water	NPDES	Oil	Air			NWTPH DX	Lead	
Consultant/Office	Mark Horne Leidos			Soil	Composite					Silica Gel Cleanup	Total	
Consultant Project Mgr.	Bothe II			<input checked="" type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	
Consultant Phone #	R. Shropshire									WAEPH		
Sampler	425-482-3323											
A. Lembrick / G. Cisneros												
2 Sample Identification		Collected		Date	Time	Grab	Composite	Soil				
SB - 15-13		11/7/13 1440		/	/	/	/	/	4	/	/	/
SB - 18-8		11/7/13 1530		/	/	/	/	/	4	/	/	/
SB - 18-12		11/7/13 1540		/	/	/	/	/	4	/	/	/
DUP-2-110713		11/7/13 --		/	/	/	/	/	4	/	/	/
SB - 17-8		11/8/13 0820		/	/	/	/	/	4	/	/	/
SB - 17-11		11/8/13 0830		/	/	/	/	/	4	/	/	/
SB - 9-9		11/8 0900		/	/	/	/	/	4	/	/	/
SB - 20-2		11/8 0910		/	/	/	/	/	4	/	/	/
SB - 9-11		11/8 0915		/	/	/	/	/	4	/	/	/
DUP-3-110813		11/8 0915		/	/	/	/	/	4	/	/	/
SB - 19-9		11/8 1000		/	/	/	/	/	4	/	/	/
SB - 19-11		11/8 1015		/	/	/	/	/	4	/	/	/
SB - 20-10		11/8 1050		/	/	/	/	/	4	/	/	/
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by		Date	Time	Received by		Date	Time	(9)
<input checked="" type="radio"/> Standard		5 day	4 day			11/11/13	1330					
72 hour		48 hour	24 hour			Date	Time	Received by		Date	Time	
8 Data Package Options (please circle if required)				Relinquished by Commercial Carrier:				Received by		Date	Time	
Type I - Full		Type VI (Raw Data)		UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Other <input type="checkbox"/>						11/8/11	01/15	
				Temperature Upon Receipt <u>5-11</u> °C				Custody Seals Intact?		<input checked="" type="checkbox"/> Yes	No	

Chevron Northwest Region Analysis Request/Chain of Custody



Lancaster
Laboratories

Acct. # 1422 JH 11/13/13
11255

For Lancaster Laboratories use only
Group # 1453626 Sample # 7075384-427

Instructions on reverse side correspond with circled numbers.

① Client Information		④ Matrix		⑤ Analyses Requested		⑥ Remarks			
Facility #	WBS	Sediment	Water	Oil	Oxygenates	Lead	WAVPH		
Site Address	<u>Z11556 NWENW-0215560-0804</u>	<input type="checkbox"/>	<input type="checkbox"/> Ground	<input type="checkbox"/> Air	<input type="checkbox"/> Naphth	<input checked="" type="checkbox"/> Total	<input type="checkbox"/> WAEPH		
Chevron PM	Lead Consultant <u>Mark Horne</u>	<input type="checkbox"/>	<input type="checkbox"/> NPDES	<input type="checkbox"/>	<input checked="" type="checkbox"/> Silica Gel Cleanup	<input type="checkbox"/> Diss.	<input type="checkbox"/> Method		
Consultant/Office	<u>Leidos</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Surface	<input type="checkbox"/>	<input type="checkbox"/> Silica Gel	<input type="checkbox"/> 8260	<u>G10</u>		
Consultant Project Mgr.	<u>R. Shropshire</u>	<input type="checkbox"/>	<input type="checkbox"/> Air	<input type="checkbox"/>	<input type="checkbox"/> 8260 full scan	<input type="checkbox"/> 8021	<input type="checkbox"/> MTBE		
Consultant Phone #	<u>425-482-3323</u>	<input type="checkbox"/>	<input type="checkbox"/> Composite	<input type="checkbox"/>	<input type="checkbox"/> NWTPH GX	<input type="checkbox"/> WAEPA	<input type="checkbox"/> Confirm MTBE + Naphthalene		
Sampler	<u>A. Lembrick, G. Lishneros</u>	<input type="checkbox"/>	<input type="checkbox"/> Soil	<input type="checkbox"/>	<input type="checkbox"/> NWTPH DX	<input type="checkbox"/> Confirm highest hit by 8260	<input type="checkbox"/> Confirm all hits by 8260		
② Sample Identification	Collected	Grab	Composite	Oil	Oxygenates	Lead	WAVPH		
	Date		Soil	Oil	NWTPH GX	Total	WAEPH		
<u>SB-20-12</u>	<u>11/8</u>	<u>1100</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>		
<u>SB-20-14</u>									
<u>SB-21-6</u>									
<u>SB-21-9</u>									
<u>SB-21-12</u>									
⑦ Turnaround Time Requested (TAT) (please circle)	Standard	5 day	4 day	Relinquished by	Date	Time	Received by	Date	Time
	<input checked="" type="radio"/>			<u>Spencer</u>	<u>10/7/13</u>	<u>13:00</u>			
	72 hour	48 hour	24 hour	Relinquished by	Date	Time	Received by	Date	Time
⑧ Data Package Options (please circle if required)	Type I - Full	Type VI (Raw Data)	Relinquished by Commercial Carrier:	UPS <input checked="" type="checkbox"/>	FedEx <input type="checkbox"/>	Other <input type="checkbox"/>	Received by	Date	Time
							<u>M. ZL</u>	<u>11/12/13</u>	<u>0915</u>
			Temperature Upon Receipt	<u>0.5 - 1.1 °C</u>		Custody Seals Intact?	<input checked="" type="checkbox"/> Yes	No	

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m³	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is \geq the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

- A** TIC is a possible aldol-condensation product
- B** Analyte was also detected in the blank
- C** Pesticide result confirmed by GC/MS
- D** Compound quantitated on a diluted sample
- E** Concentration exceeds the calibration range of the instrument
- N** Presumptive evidence of a compound (TICs only)
- P** Concentration difference between primary and confirmation columns $>25\%$
- U** Compound was not detected
- X,Y,Z** Defined in case narrative

Inorganic Qualifiers

- B** Value is <CRDL, but \geq IDL
- E** Estimated due to interference
- M** Duplicate injection precision not met
- N** Spike sample not within control limits
- S** Method of standard additions (MSA) used for calculation
- U** Compound was not detected
- W** Post digestion spike out of control limits
- * Duplicate analysis not within control limits
- + Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.