SITE ASSESSMENT REPORT
76 PRODUCTS FACILITY NO 351385
6 NORTH 5TH STREET
Wenatchee, Washington

February 28, 2014

Prepared for:
Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, California 94583

Prepared by:
Leidos Engineering, LLC
405 South 8th Street, Suite 301
Boise, Idaho 83702

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SITE ASSESSMENT REPORT
76 PRODUCTS FACILITY NO. 351385

1.0 INTRODUCTION

This report documents the activities and findings of a site assessment performed by SAIC Energy, Environment & Infrastructure, LLC (SAIC; now Leidos Engineering, LLC [Leidos]) on behalf of Chevron Environmental Management Company, for itself and as Attorney-in-Fact for Union Oil Company of California (hereafter EMC) at 76 Products Facility No. 351385 (the site), located in Wenatchee, Washington. This investigation was performed as an independent action to further define the nature and extent of petroleum-affected media at property.

2.0 SITE ASSESSMENT ACTIVITIES

2.1 OBJECTIVES AND PRE-FIELD ACTIVITIES

The primary objective of this supplemental site assessment was to collect additional data to further define the nature and extent of petroleum hydrocarbon-affected soil and groundwater at the northern portion of the site.

Assessment locations were selected based on the following:

- Hand auger soil borings SB-1 through SB-3 were completed in the vicinity of a stained surface area, north of the above ground storage tanks (ASTs), identified during the site assessment conducted by Pacific Environmental Group, Inc. (PEG), in 1997 (PEG 1997). Boring SB-3 location was originally planned for monitoring well location.
- The groundwater wells (MW-18 and MW-19) were completed in the vicinity of MW-15 to provide additional groundwater data north of the ASTs.

2.2 SUBSURFACE UTILITY LOCATION

Prior to beginning site assessment activities, all underground utilities were marked by the public Utilities Underground Location Center. In addition, a private utility locator performed a geophysical survey to verify the presence of all subsurface structures on the subject property within the vicinity of the proposed soil boring and monitoring well locations. Subsurface utility lines were identified at the northern property boundary which limited the area where soil borings could be completed. The proposed groundwater well between the northern property line and MW-15 could not be installed due to the location of the utility lines.

2.3 BORING AND MONITORING WELL INSTALLATION AND SOIL SAMPLING

On August 13 and 14, 2013, three soil borings (SB-1 through SB-3) and two pre-packed groundwater monitoring wells (MW-18 and MW-19) were installed using a hand auger, or air knife and direct push probe, respectively. The soil boring locations were installed using a hand auger and completed to depths of 5.5 feet below ground surface (ft bgs). The groundwater monitoring well locations were cleared to 8 feet bgs using an air knife and completed to depths of approximately 22 and 26 ft bgs using a direct push probe turning solid stem augers.

Each soil boring and monitoring well location was logged by SAIC field personnel in accordance with the Unified Soil Classification System (USCS) Visual-Manual Procedure (ASTM Method

D2488). Soil samples from each boring were screened for the presence of hydrocarbons using a photo-ionization detector (PID). Soil samples were selected for laboratory analysis based on field observations including headspace screening concentrations, sheen, and historical contamination depth locations.

Locations of the soil borings and monitoring wells are shown on Figure 1. Boring and monitoring well log construction details are provided in Appendix A.

Soil samples selected for laboratory analysis were analyzed for:

- Gasoline-range hydrocarbons by Northwest Method NWTPH-Gx;
- Diesel-range hydrocarbons and heavy oil-range hydrocarbons by Northwest Method NWTPH-Dx extended;
- Benzene, toluene, ethylbenzene, total xylenes, ethanol, and methyl tert-butyl ether by United States Environmental Protection Agency (USEPA) Method 8260B; and
- Lead by USEPA Method 6010B.

Selected samples were also analyzed for ethylene dibromide (EDB), ethylene dichloride (EDC), and n-hexane by USEPA Method 8260B, carcinogenic polynuclear aromatic hydrocarbons (cPAHs) and naphthalene by USEPA Method 8270C SIM, fractional organic carbon (FOC) by Method SM 5310 B modified, extractable petroleum hydrocarbons (EPH) by NWEPH Method, and volatile petroleum hydrocarbons (VPH) by NWVPH Method.

Samples collected for laboratory analysis were submitted under chain-of-custody protocol to Eurofins Lancaster Laboratories in Lancaster, Pennsylvania.

2.4 EQUIPMENT DECONTAMINATION

All reusable soil sampling equipment was decontaminated by washing in a Liquinox™ solution followed by an initial rinse in tap water and a final rinse in distilled water. Sample collection bowls and sheen pans were decontaminated immediately after collecting, logging, and screening each sample. All other single-use disposable soil sampling materials/equipment (e.g., gloves, single-use sample syringes, and plastic bags) were discarded immediately after use and disposed of as municipal waste.

3.0 FINDINGS

During drilling activities, fine to medium sand with some silt was observed to extend from near surface to depths of approximately 22 to 25 ft bgs. Underlying the sand layer is a fine to coarse gravel with sand. Below the gravel layer, bedrock was encountered, which limited the total depth of the borings. A review of historical boring logs indicates bedrock was also encountered at similar depths.

The deeper soil borings were continuously cored to confirm the presence of moisture, and during this investigation no groundwater was encountered to depths of 22 and 26 ft bgs. Water levels were measure in nearby wells MW-6 and MW-15 at 24.30 and 24.56 ft below top of casing, respectively. Historically observed water beneath the site ranges from approximately 18 and 26 ft bgs which approximately coincide with the depth of bedrock.

Concentrations of petroleum hydrocarbons in all soil samples were below the Model Toxic Control Act (MTCA) Method A cleanup levels or the laboratory reporting limits. Soil sample analytical results from this assessment are summarized in Table 1 and laboratory report is presented in Appendix B.

4.0 CONCLUSIONS

This site assessment was conducted to further assess residual hydrocarbons in the vicinity of monitoring well MW-15. No groundwater was observed and all soil concentrations were below MTCA Method A cleanup levels.

A review of historic boring logs indicates that bedrock was encountered at depths ranging from 20 to 25 ft bgs. Quarterly well monitoring data show that water has been observed at depths ranging from 18 to 26 ft bgs. Based on the fact that the relatively thin layer of observed water is above bedrock, it can be concluded that this water is perched and is not likely source of potable groundwater or likely to reach the river, which is approximately 800 ft to the east.

Monitoring wells MW-18 and MW-19 have been added to the groundwater monitoring and sampling program and will be sampled during the next event if groundwater is observed.

As noted in the 2012 Conceptual Site Model (SAIC 2012), all current exposure pathways to residual hydrocarbon-affected soil and groundwater are not complete and are highly unlikely to affect any potential receptors. In addition, further remedial actions are not warranted because there are no completed pathways to current receptors, and there are no technically feasible remedial alternatives that can be implemented to also accommodate current site conditions.

Based on the results of this site assessment and data evaluation presented in the 2012 Conceptual Site Model, Leidos recommends a No Further Action designation for the Site.

5.0 REFERENCES

Pacific Environmental Group (PEG), 1998. *Tosco Bulk Plant No. 0853, 6 Fifth Street, Wenatchee, Washington*, Summary of Assessment Activities. January 28, 1998.

SAIC, 2012. 76 Products Facility No. 351385, 6 North 5th Street, Wenatchee, Washington, Conceptual Site Model, September 27, 2012.

6.0 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 that 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.

Figures

SB-3	5
TPH-G	<1.3
TPH-D	<3.3
TPH-O	<11
B	0.0008
T	<0.001
E	<0.001
X	<0.001
LEAD	3.68

MW-19	21	26
TPH-G	<1.2	1.9
TPH-D	<3.4	<3.3
TPH-O	<11	<11
B	0.001	0.004
T	<0.001	<0.001
E	<0.001	<0.001
X	<0.001	<0.001
LEAD	4.62	4.58

SB-2	5
TPH-G	<1.2
TPH-D	<3.4
TPH-O	<11
B	<0.0005
T	<0.001
E	<0.001
X	<0.001
LEAD	5.85

MW-18	21	22
TPH-G	<1.1	<1.2
TPH-D	<3.4	<3.1
TPH-O	97	<10
B	0.0009	<0.0006
T	<0.001	<0.001
E	<0.001	<0.001
X	<0.001	<0.001
LEAD	4.96	3.11

SB-1	5
TPH-G	<1.4
TPH-D	<3.5
TPH-O	<12
B	0.0009
T	<0.001
E	<0.001
X	<0.001
LEAD	6.90

N

0 40'
Feet

LEGEND

- Site Boundary
- MW-3 — Monitoring Well Location
- MW-1 ϕ — Decommissioned Monitoring Well Location
- SB-1 ● — Soil Boring Location
- SB-3* ● — Attempted Monitoring Well Location
- AST — Aboveground Storage Tank
- Approximate Limits of 1990 Excavation
- Approximate Location of Electrical Underground Utility Line

ANALYTES

SAMPLE ID	DEPTH (In feet below ground surface)
TPH-G	GASOLINE-RANGE HYDROCARBONS
TPH-D	DIESEL-RANGE HYDROCARBONS
TPH-O	HEAVY OIL-RANGE HYDROCARBONS
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENES
LEAD	TOTAL LEAD

Units in milligrams per kilogram (mg/kg)

<1.0 Less than Indicated Laboratory Reporting Limits

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NOTE: Features were adapted from a Stantec Corporation figure, *Site Map with Groundwater Elevations (June 16, 2010),* dated July 8, 2010.

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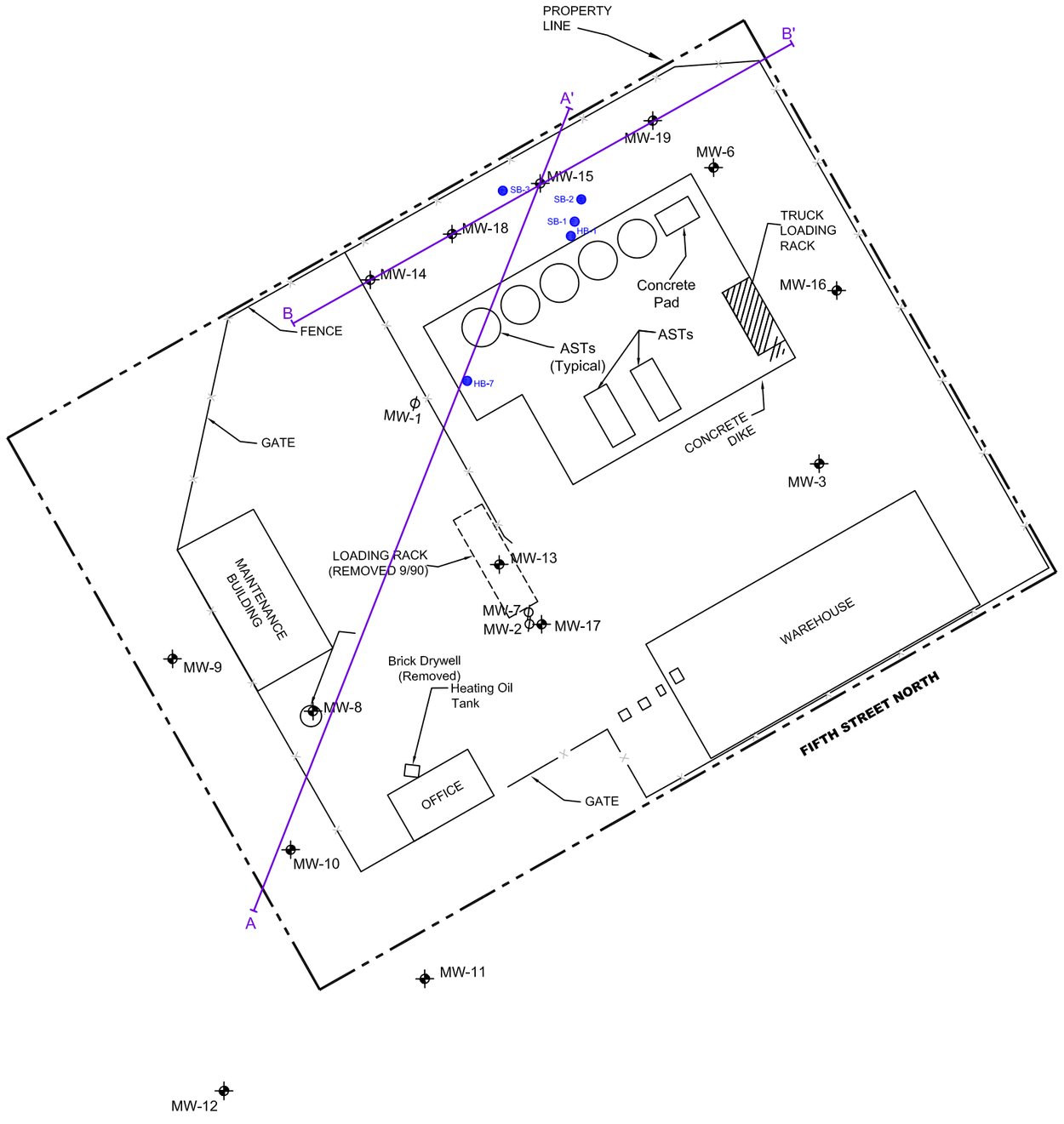
FIGURE 1
Site Map with Soil Analytical Results

DATE: 11/11/2013 | DRAWING: 351385 Site Map.dwg



LEGEND

- Site Boundary
- MW-3 — Monitoring Well Location
- MW-1 ϕ — Decomissioned Well
- AST — Aboveground Storage Tank
- A — A' — Geologic Cross Section Transect Location

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NOTE: Features were adapted from a Stantec Corporation figure, *Site Map with Groundwater Elevations (June 16, 2010),* dated July 8, 2010.

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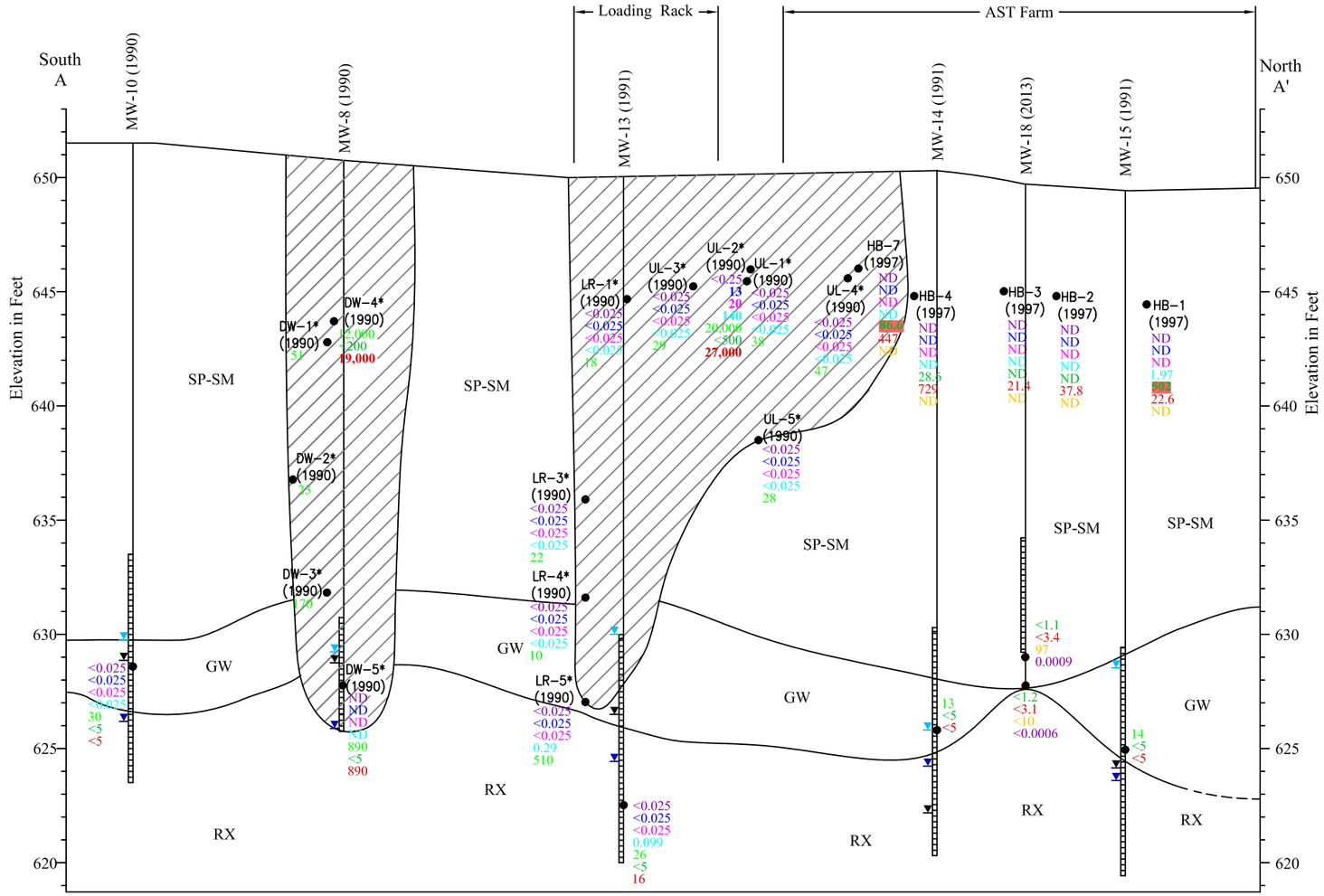
Wenatchee, Washington

FIGURE 2
Geologic Cross Section Transect Locations

DATE: 10/24/2013 | DRAWING: 351385 Site Map.dwg



LEGEND:

—	Boring (year of installation)
—	Screened interval
—	Groundwater elevation during installation
—	Highest recorded groundwater elevation
—	Lowest recorded groundwater elevation
—	Soil analytical sample location (year collected)
28	Gasoline-range hydrocarbon concentration in milligrams per kilogram (mg/kg)
10	Diesel-range hydrocarbon concentration in mg/kg
10	Heavy oil-range hydrocarbon concentration in mg/kg
10	Total petroleum hydrocarbon by 418.1 concentration in mg/kg
0.001	Benzene concentration in mg/kg
0.001	Toluene concentration in mg/kg
0.001	Elthylbenzene concentration in mg/kg
0.001	Total xylenes concentration in mg/kg
0.13	Bold indicates concentration exceeds the MTCA Method A cleanup level
502	Bold and shaded indicates concentrations exceed MTCA Method A cleanup levels and left in place
ND	Not detected above the reporting limits
	Contact line between soil types
SP-SM	Fine to medium sand with silt
GW	Fine to coarse gravel
RX	Bedrock
	Extent of 1990 soil excavation
DW-1*	Asterisk indicates boring location was removed during excavation

0 15 30 60

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 6'

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6 North 5th Street
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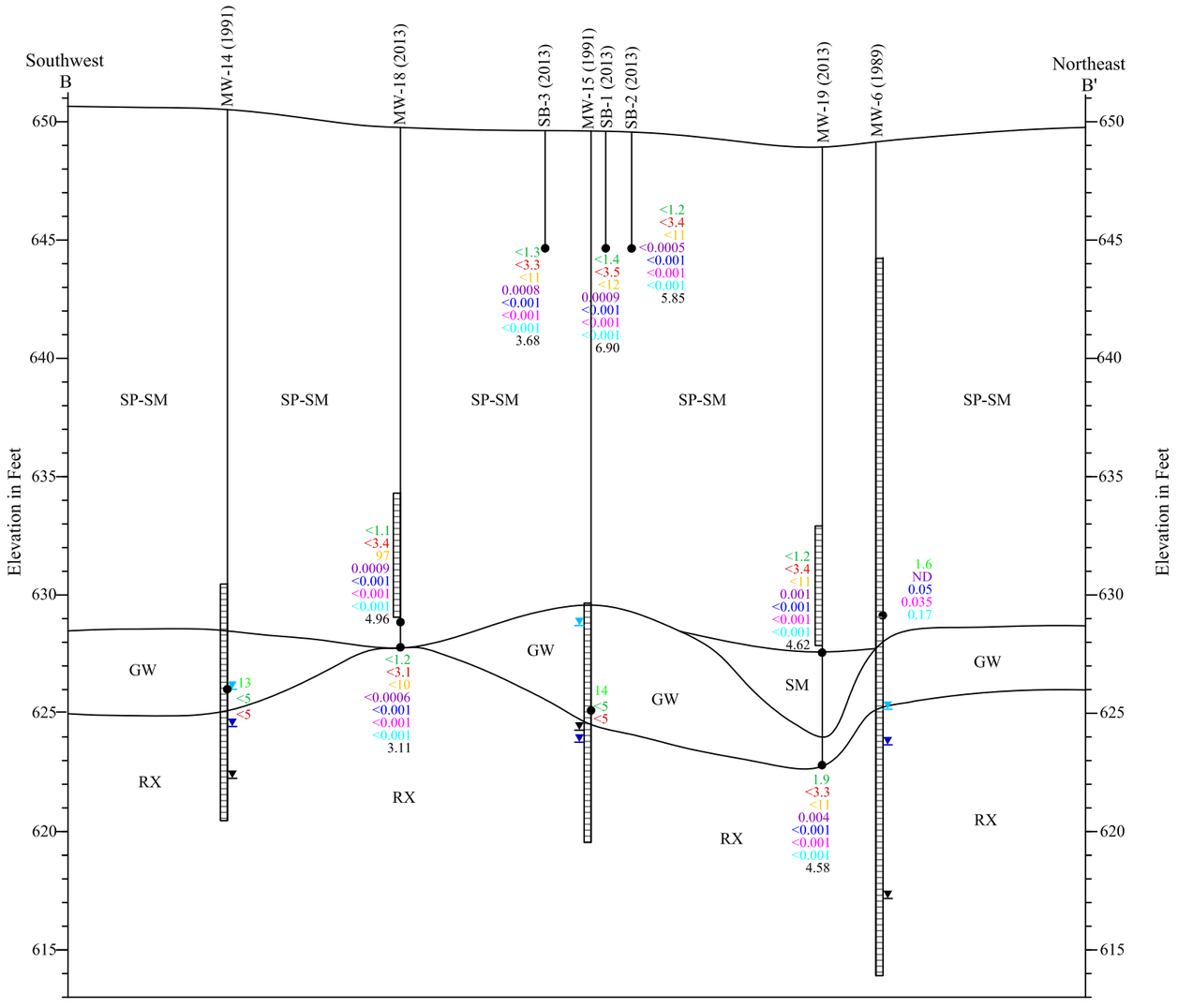
FIGURE 3
Geologic Cross Section A-A'

DATE: 11/11/2013 | DRAWING: 351385 X-sections.dwg



LEGEND:

- Boring (year of installation)
- Screened interval
- Groundwater elevation during installation
- Highest recorded groundwater elevation
- Lowest recorded groundwater elevation
- Soil analytical sample location (year collected)

10	Gasoline-range hydrocarbon concentration in milligrams per kilogram (mg/kg)
10	Diesel-range hydrocarbon concentration in mg/kg
10	Heavy oil-range hydrocarbon concentration in mg/kg
10	Total petroleum hydrocarbon by 418.1 concentration in mg/kg
0.001	Benzene concentration in mg/kg
0.001	Toluene concentration in mg/kg
0.001	Elthylbenzene concentration in mg/kg
0.001	Total xylenes concentration in mg/kg
3.11	Lead concentration in mg/kg
0.13	Bold indicates concentration exceeding MTCA Method A cleanup level
ND	Not detected above the reporting limits
———	Contact line between soil types
SP-SM	Fine to medium sand with silt
SM	Silty, medium sand with occasional gravel
GW	Fine to coarse gravel
RX	Bedrock

0 15 30 60

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 6'

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FIGURE 4
Geologic Cross Section B-B'

DATE: 11/11/2013 | DRAWING: 351385 X-sections.dwg

Tables

TABLE 1
SOIL ANALYTICAL RESULTS - BTEX, PETROLEUM HYDROCARBONS, AND LEAD
76 PRODUCTS FACILITY NO. 351385
6 North 5th Street, Wenatchee, Washington
Concentrations reported in mg/kg

Sample ID /Depth (ft)	Date Sampled	Sample Depth (ft)	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH-G	TPH-D	TPH-O	Lead
SB-1-5	08/13/13	5	0.0009	<0.001	<0.001	<0.001	<1.4	<3.5	<12	6.90
SB-2-5	08/13/13	5	<0.0005	<0.001	<0.001	<0.001	<1.2	<3.4	<11	5.85
SB-3-5	08/14/13	5	0.0008	<0.001	<0.001	<0.001	<1.3	<3.3	<11	3.68
MW-18-21	08/14/13	21	0.0009	<0.001	<0.001	<0.001	<1.1	<3.4	97	4.96
MW-18-22	08/14/13	22	<0.0006	<0.001	<0.001	<0.001	<1.2	<3.1	<10	3.11
MW-19-21	08/14/13	21	0.001	<0.001	<0.001	<0.001	<1.2	<3.4	<11	4.62
MW-19-26	08/14/13	26	0.004	<0.001	<0.001	<0.001	1.9	<3.3	<11	4.58
MTCA Method A Cleanup Level			**0.03**	**7**	**6**	**9**	**100/30**	**2,000**	**2,000**	**250**

EXPLANATIONS
mg/kg = milligrams per kilogram
ft = feet
< = Analyte is not detected at or above the laboratory reporting limit. The laboratory reporting limit is listed.
MTCA = Model Toxic Control Act
USEPA = United States Environmental Protection Agency
BTEX = Benzene, toluene, ethylbenzene, and total xylenes
TPH = Total petroleum hydrocarbons
TPH-G = TPH as gasoline-range organics
TPH-D = TPH as diesel-range organics
TPH-O = TPH as heavy oil-range organics

BTEX analyzed by USEPA Method 8260B.
TPH-G analyzed by Northwest Method NWTPH-Gx.
TPH-D and TPH-O analyzed by Northwest Method NWTPH-Dx, with acid/silica-gel cleanup.
Lead analyzed by USEPA Method 6010B.

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TABLE 2
SOIL ANALYTICAL RESULTS - VOCs
76 PRODUCTS FACILITY NO. 351385
6 North 5th Street, Wenatchee, Washington
Concentrations reported in mg/kg

Sample ID /Depth (ft)	Date Sampled	Sample Depth (ft)	Ethanol	EDB	EDC	MTBE	n-Hexane
SB-1-5	08/13/13	5	<0.11	<0.001	<0.001	<0.0006	<0.001
SB-2-5	08/13/13	5	<0.11	<0.001	<0.001	<0.0005	<0.001
SB-3-5	08/14/13	5	<0.11	--	--	<0.0006	--
MW-18-21	08/14/13	21	<0.11	--	--	<0.0006	--
MW-18-22	08/14/13	22	<0.11	--	--	<0.0006	--
MW-19-21	08/14/13	21	<0.11	--	--	<0.0005	--
MW-19-26	08/14/13	26	<0.11	--	--	<0.0006	--
MTCA Method A Cleanup Level			**NL**	**0.005**	**NL**	**0.1**	**NL**

EXPLANATIONS
mg/kg = milligrams per kilogram
ft = feet
-- = not analyzed
< = Analyte is not detected at or above the laboratory reporting limit. The laboratory reporting limit
EDB = 1,2-Dibromoethane
EDC = 1,2-Dichloroethane
MTBE = Methyl tert-butyl ether
MTCA = Model Toxic Control Act
NL = No limit available
USEPA = United States Environmental Protection Agency
VOCs = Volatile Organic Compounds

VOCs analyzed by USEPA Method 8260B.

TABLE 3
SOIL ANALYTICAL RESULTS - PAHs
76 PRODUCTS FACILITY NO. 351385
6 North 5th Street, Wenatchee, Washington
Concentrations reported in mg/kg

Sample ID /Depth (ft)	Date Sampled	Sample Depth (ft)	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b) fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Indeo(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene
SB-1-5	08/13/13	5	0.0027	0.0029	0.0049	0.0022	0.0034	<0.00079	0.0029	0.00090	0.0019	0.0013
SB-2-5	08/13/13	5	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075	0.00076
MTCA Method A Cleanup Level			**NL**	**0.1**	**NL**	**NL**	**NL**	**NL**	**NL**	**NL**	**NL**	**5**

EXPLANATIONS
mg/kg = milligrams per kilogram
ft = feet
< = Analyte is not detected at or above the laboratory reporting limit. The laboratory reporting limit is listed.
MTCA = Model Toxic Control Act
NL = No limit available
USEPA = United States Environmental Protection Agency
PAHs = Polynuclear Aromatic Hydrocarbons

PAHs analyzed by USEPA Method 8270C SIM.

Appendix A:
Boring Log Details

Monitoring Well: MW-18

Project: 76 Products Facility No. 351385
Client: Chevron EMC
Location: 6 N 5th St, Wenatchee, WA
Logged By: S. Brown

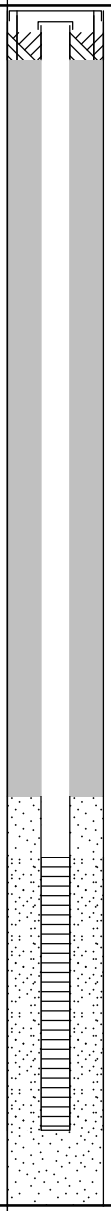
Date Started: 8/14/2013
Date Completed: 8/14/2013
Driller: Stratus Corp
Drill Method: Air Knife/Geoprobe

Total Boring Depth: 22 ft
Hole Diameter: 4 in
Well Depth: 20.62 ft
TOC Elevation: 649.78 ft

Well Diameter: 2 in
Well Screen: 15.62-20.62 ft
Filter Pack: Pre-pack
Well Casing: Sch. 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
Dry	0.0				SP-SM		1	(SP-SM) Brown, fine to medium SAND with 10% silt; no odor, no sheen.
							2	
							3	
Dry	0.0						4	Same as above; no odor, no sheen.
							5	
Dry	0.0						6	(SP-SM) Same as above; no odor, no sheen.
					SP-SM		7	
							8	Same as above; no odor, no sheen.
Dry	0.0						9	
Dry	0.0						10	Same as above; no odor, no sheen.
	0.0						11	(SP-SM) Same as above; no odor, no sheen.
Dry	0.0				SP-SM		12	Same as above; no odor, no sheen.
	0.0						13	Same as above; no odor, no sheen.
Dry	0.0						14	(SP-SM) Same as above; no odor, no sheen.
	0.0						15	Same as above; no odor, no sheen.
Dry	0.0						16	Same as above; no odor, no sheen.
	0.0						17	(SP-SM) Same as above; no odor, no sheen.
Dry	0.0				SP-SM		18	Same as above; no odor, no sheen.
	0.0						19	Same as above; no odor, no sheen.
Dry	0.0		MW-18-21	G <1.1 D <3.4 HO = 97 B = 0.0009			20	(SP-SM) Same as above; no odor, no sheen.
	0.0						21	Same as above; no odor, no sheen.
Dry	0.0						22	Bedrock at 22 feet. Bottom of borehole at 22.0 feet.
			MW-18-22	G <1.2 D <3.1 HO <10 B <0.0006			23	
							24	
							25	
							26	
							27	

WELL DIAGRAM



Monitoring Well: MW-19

Project: 76 Products Facility No. 351385
Client: Chevron EMC
Location: 6 N 5th St, Wenatchee, WA
Logged By: S. Brown

Date Started: 8/14/2013
Date Completed: 8/14/2013
Driller: Stratus Corp
Drill Method: Air Knife/Geoprobe

Total Boring Depth: 26 ft
Hole Diameter: 4 in
Well Depth: 20.94 ft
TOC Elevation: 648.92 ft

Well Diameter: 2 in
Well Screen: 15.94-20.94 ft
Filter Pack: Pre-pack
Well Casing: Sch. 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
Dry	0.0				SP-SM		1	(SP-SM) Brown, medium dense, fine SAND with 10% silt; no odor, no sheen.
							2	
							3	
Dry	0.0						4	Same as above; no odor, no sheen.
							5	
Dry	0.0						6	(SP-SM) Light brown, medium dense, fine SAND with 10% silt; no odor, no sheen.
					SP-SM		7	
							8	Brown, medium dense, fine SAND with 10% silt; no odor, no sheen.
							9	
Dry	0.0						10	Same as above; no odor, no sheen.
	0.0						11	(SP-SM) Same as above; no odor, no sheen.
Dry	0.0				SP-SM		12	Same as above; no odor, no sheen.
	0.0						13	Same as above; no odor, no sheen.
Dry	0.1						14	(SP-SM) Same as above; no odor, no sheen.
	0.0				SP-SM		15	Same as above; no odor, no sheen.
Dry	0.0						16	Same as above; no odor, no sheen.
	0.0						17	(SP-SM) Same as above; no odor, no sheen.
Dry	0.1				SP-SM		18	Same as above; no odor, no sheen.
	0.0						19	(SP) Brown, medium dense, coarse SAND with <5% silt; no odor, no sheen.
Dry	0.0				SP		20	Same as above; no odor, no sheen.
Moist	0.0		MW-19-21	G <1.2 D <3.4 HO <11 B = 0.001			21	Brown, medium dense, silty SAND with 25% silt; no odor, no sheen.
Dry	0.0						22	Same as above with cobbles; no odor, no sheen.
	0.0						23	(SM) Brown, medium dense, silty, medium SAND with 25% silt and <5% gravel; no odor, no sheen.
Dry	0.0				SM		24	Same as above; no odor, no sheen.
	0.0		MW-19-26	G = 1.9 D <3.3 HO <11 B = 0.004			25	Unconsolidated Bedrock.
Dry	0.0						26	Refusal at 26 feet. Bottom of borehole at 26.0 feet.
							27	

WELL DIAGRAM

- Well box
- Cement Seal
- Sch. 40 PVC riser
- Bentonite chip seal
- Filter Pack
- 0.010 Slotted PVC Screen
- Filter Pack

Soil Boring: SB-1

Project: 76 Products Facility No. 351385
Client: Chevron EMC
Location: 6 N 5th St, Wenatchee, WA

Logged By: S. Brown
Date Started: 8/13/2013
Date Completed: 8/13/2013

Driller: SAIC
Drill Method: Hand Auger
Total Boring Depth: 5.5 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
Dry	0.0				SP-SM		1	(SP-SM) Brown, medium dense, fine SAND with 10% silt; no odor, no sheen.
Dry	0.0						2	Same as above; no odor, no sheen.
Dry	0.0				SP-SM		3	(SP-SM) Same as above; no odor, no sheen.
Dry	0.0						4	Same as above; no odor, no sheen.
Dry	0.0		SB-1-5	G <1.4 D <3.5 HO <12 B = 0.0009	SP-SM		5	(SP-SM) Same as above; no odor, no sheen.
							6	Obstruction at 5.5 feet. Bottom of borehole at 5.5 feet.
							7	
							8	
							9	
							10	
							11	
							12	
							13	
							14	
							15	

leidos

Soil Boring: SB-2

Project: 76 Products Facility No. 351385
Client: Chevron EMC
Location: 6 N 5th St, Wenatchee, WA

Logged By: S. Brown
Date Started: 8/13/2013
Date Completed: 8/13/2013

Driller: SAIC
Drill Method: Hand Auger
Total Boring Depth: 5.5 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
Dry	0.0				SP-SM		1	(SP-SM) Brown, medium dense, fine SAND with 10% silt; no odor, no sheen.
Dry	0.0						2	Same as above; no odor, no sheen.
Dry							3	(SP-SM) Same as above; no odor, no sheen.
					SP-SM		4	
Dry			SB-2-5	G <1.2 D <3.4 HO <11 B <0.0005			5	Same as above; no odor, no sheen.
							6	Obstruction at 5.5 feet. Bottom of borehole at 5.5 feet.
							7	
							8	
							9	
							10	
							11	
							12	
							13	
							14	
							15	

leidos

Soil Boring: SB-3

Project: 76 Products Facility No. 351385
Client: Chevron EMC
Location: 6 N 5th St, Wenatchee, WA

Logged By: S. Brown
Date Started: 8/14/2013
Date Completed: 8/14/2013

Driller: SAIC
Drill Method: Hand Auger
Total Boring Depth: 5.5 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
Dry	0.0				SP-SM		0	(SP-SM) Brown, dense, fine to medium SAND with 10% silt; no odor, no sheen.
							1	
							2	
							3	
							4	
Dry			SB-3-5	G <1.3 D <3.3 HO <11 B = 0.0008			5	Same as above; no odor, no sheen.
								Conduit encountered at 5 feet.
							6	Bottom of borehole at 5.5 feet.
							7	
							8	
							9	
							10	
							11	
							12	
							13	
							14	
							15	

Appendix B:
Laboratory Analysis Reports

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

August 30, 2013

Project: 351385

Submittal Date: 08/17/2013
Group Number: 1412528
PO Number: 0015131747
Release Number: SHRILL HOPKINS
State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LL) #
SB-1-5 Grab Soil	7166565
SB-2-5 Grab Soil	7166566
MW-19-21 Grab Soil	7166567
MW-19-26 Grab Soil	7166568
MW-18-21 Grab Soil	7166569
MW-18-22 Grab Soil	7166570
SB-3-5 Grab Soil	7166571

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

ELECTRONIC COPY TO	SAIC	Attn: Ron Santos
ELECTRONIC COPY TO	SAIC	Attn: Kinga Kozlowska

Respectfully Submitted,

Jill M. Parker
Senior Specialist

(717) 556-7262

Sample Description: SB-1-5 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166565
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/13/2013 13:50 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

11385

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	0.0009	0.0006	0.95
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.95
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.95
10237	Ethanol	64-17-5	N.D.	0.11	0.95
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.95
10237	n-Hexane	110-54-3	N.D.	0.001	0.95
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0006	0.95
10237	Toluene	108-88-3	N.D.	0.001	0.95
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.95
GC/MS Semivolatiles	**SW-846 8270C SIM**		**mg/kg**	**mg/kg**	
10725	Benzo(a)anthracene	56-55-3	0.0027	0.00079	1
10725	Benzo(a)pyrene	50-32-8	0.0029	0.00079	1
10725	Benzo(b)fluoranthene	205-99-2	0.0049	0.00079	1
10725	Benzo(k)fluoranthene	207-08-9	0.0022	0.00079	1
10725	Chrysene	218-01-9	0.0034	0.00040	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00079	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	0.0029	0.00079	1
10725	1-Methylnaphthalene	90-12-0	0.00090	0.00079	1
10725	2-Methylnaphthalene	91-57-6	0.0019	0.00079	1
10725	Naphthalene	91-20-3	0.0013	0.00079	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	TPH by NWTPH-Gx soils	n.a.	N.D.	1.4	28.37
GC Petroleum Hydrocarbons	**ECY 97-602 WA EPH**		**mg/kg**	**mg/kg**	
05970	>C10-C12 Aliphatic	n.a.	N.D.	1.2	1
05970	>C10-C12 Aromatic	n.a.	N.D.	1.2	1
05970	>C12-C16 Aliphatic	n.a.	N.D.	1.2	1
05970	>C12-C16 Aromatic	n.a.	N.D.	1.2	1
05970	>C16-C21 Aliphatic	n.a.	N.D.	3.6	1
05970	>C16-C21 Aromatic	n.a.	N.D.	2.4	1
05970	>C21-C34 Aliphatic	n.a.	N.D.	7.1	1
05970	>C21-C34 Aromatic	n.a.	N.D.	2.4	1
GC Petroleum Hydrocarbons	**ECY 97-602 WA VPH**		**mg/kg**	**mg/kg**	
05666	Benzene	71-43-2	N.D.	0.0675	56.74
05666	C5-C6 Aliphatic Hydrocarbons	n.a.	N.D.	3.38	56.74
05666	C6-C8 Aliphatic Hydrocarbons	n.a.	N.D.	3.38	56.74
05666	C8-C10 Aliphatic Hydrocarbons	n.a.	N.D.	3.38	56.74
05666	C8-C10 Aromatic Hydrocarbons	n.a.	N.D.	3.38	56.74
05666	Ethylbenzene	100-41-4	N.D.	0.0675	56.74
05666	Methyl t-butyl ether	1634-04-4	N.D.	0.0675	56.74
05666	Toluene	108-88-3	N.D.	0.0675	56.74
05666	o-Xylene	95-47-6	N.D.	0.0675	56.74
05666	m,p-Xylenes	179601-23-1	N.D.	0.135	56.74

Sample Description: SB-1-5 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166565
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/13/2013 13:50 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

11385

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
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	6.90	0.584	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	16.0	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. C259
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.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	8260 Ext. Soil Master w/GRO	SW-846 8260B	1	A132351AA	08/23/2013 09:05	Christopher G Torres	0.95
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201323132093	08/13/2013 13:50	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201323132093	08/13/2013 13:50	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201323132093	08/13/2013 13:50	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13238SLA026	08/28/2013 06:53	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13238SLA026	08/26/2013 16:00	David S Schrum	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13227A31B	08/20/2013 20:19	Laura M Krieger	28.37
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201323132093	08/13/2013 13:50	Client Supplied	n.a.
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	132380023A	08/29/2013 08:58	Heather E Williams	1
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	132380023A	08/29/2013 09:38	Heather E Williams	1
05666	WA- VPH soils	ECY 97-602 WA VPH	1	13235A54A	08/23/2013 17:22	Nicholas R Rossi	56.74
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132320032A	08/28/2013 15:28	Glorines Suarez-Rivera	1

Sample Description: SB-1-5 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166565
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/13/2013 13:50 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

11385

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132320032A	08/21/2013 06:30	Roman Kuropatkin	1
11213	WA EPH Soils Extraction	ECY 97-602 WA EPH	1	132380023A	08/27/2013 08:00	Joseph S Feister	1
00388	GC - Field Preserved (MA-VPH)	MA DEP VPH modified	1	201323232096	08/13/2013 13:50	Client Supplied	1
00497	Silica Gel Fractionation	SW-846 3630C modified	1	132380014A	08/28/2013 06:00	Roman Kuropatkin	1
06955	Lead	SW-846 6010B	1	132325708002	08/26/2013 13:10	Eric L Eby	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132325708002	08/21/2013 08:45	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13233820002A	08/21/2013 21:03	Scott W Freisher	1

Sample Description: SB-2-5 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166566
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/13/2013 14:10 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

21385

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	0.94
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.94
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.94
10237	Ethanol	64-17-5	N.D.	0.11	0.94
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.94
10237	n-Hexane	110-54-3	N.D.	0.001	0.94
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.94
10237	Toluene	108-88-3	N.D.	0.001	0.94
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.94
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.	0.00038	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00075	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00075	1
10725	1-Methylnaphthalene	90-12-0	N.D.	0.00075	1
10725	2-Methylnaphthalene	91-57-6	N.D.	0.00075	1
10725	Naphthalene	91-20-3	0.00076	0.00075	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	TPH by NWTPH-Gx soils	n.a.	N.D.	1.2	27.28
GC Petroleum Hydrocarbons	**ECY 97-602 WA EPH**		**mg/kg**	**mg/kg**	
05970	>C10-C12 Aliphatic	n.a.	N.D.	1.1	1
05970	>C10-C12 Aromatic	n.a.	N.D.	1.1	1
05970	>C12-C16 Aliphatic	n.a.	N.D.	1.1	1
05970	>C12-C16 Aromatic	n.a.	N.D.	1.1	1
05970	>C16-C21 Aliphatic	n.a.	N.D.	3.4	1
05970	>C16-C21 Aromatic	n.a.	N.D.	2.3	1
05970	>C21-C34 Aliphatic	n.a.	N.D.	6.8	1
05970	>C21-C34 Aromatic	n.a.	N.D.	2.3	1
GC Petroleum Hydrocarbons	**ECY 97-602 WA VPH**		**mg/kg**	**mg/kg**	
05666	Benzene	71-43-2	N.D.	0.0615	54.56
05666	C5-C6 Aliphatic Hydrocarbons	n.a.	N.D.	3.08	54.56
05666	C6-C8 Aliphatic Hydrocarbons	n.a.	N.D.	3.08	54.56
05666	C8-C10 Aliphatic Hydrocarbons	n.a.	N.D.	3.08	54.56
05666	C8-C10 Aromatic Hydrocarbons	n.a.	N.D.	3.08	54.56
05666	Ethylbenzene	100-41-4	N.D.	0.0615	54.56
05666	Methyl t-butyl ether	1634-04-4	N.D.	0.0615	54.56
05666	Toluene	108-88-3	N.D.	0.0615	54.56
05666	o-Xylene	95-47-6	N.D.	0.0615	54.56
05666	m,p-Xylenes	179601-23-1	N.D.	0.123	54.56

Sample Description: SB-2-5 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166566
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/13/2013 14:10 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

21385

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**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	5.85	0.553	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	11.3	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. C259
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.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	8260 Ext. Soil Master w/GRO	SW-846 8260B	1	A132351AA	08/23/2013 09:28	Christopher G Torres	0.94
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201323132093	08/13/2013 14:10	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201323132093	08/13/2013 14:10	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201323132093	08/13/2013 14:10	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13238SLA026	08/28/2013 08:33	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13238SLA026	08/26/2013 16:00	David S Schrum	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13227A31B	08/20/2013 20:55	Laura M Krieger	27.28
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201323132093	08/13/2013 14:10	Client Supplied	n.a.
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	132380023A	08/29/2013 14:17	Heather E Williams	1
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	132380023A	08/29/2013 14:57	Heather E Williams	1
05666	WA- VPH soils	ECY 97-602 WA VPH	1	13235A54A	08/23/2013 18:02	Nicholas R Rossi	54.56
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132320032A	08/28/2013 16:11	Glorines Suarez-Rivera	1

Sample Description: SB-2-5 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166566
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/13/2013 14:10 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

21385

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132320032A	08/21/2013 06:30	Roman Kuropatkin	1
11213	WA EPH Soils Extraction	ECY 97-602 WA EPH	1	132380023A	08/27/2013 08:00	Joseph S Feister	1
00388	GC - Field Preserved (MA-VPH)	MA DEP VPH modified	1	201323232096	08/13/2013 14:10	Client Supplied	1
00497	Silica Gel Fractionation	SW-846 3630C modified	1	132380014A	08/28/2013 06:00	Roman Kuropatkin	1
06955	Lead	SW-846 6010B	1	132325708002	08/26/2013 13:22	Eric L Eby	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132325708002	08/21/2013 08:45	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13233820002A	08/21/2013 21:03	Scott W Freisher	1

Sample Description: MW-19-21 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166567
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/14/2013 10:45 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

19185

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	0.001	0.0005	0.95
10237	Ethanol	64-17-5	N.D.	0.11	0.95
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.95
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.95
10237	Toluene	108-88-3	N.D.	0.001	0.95
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.95
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	TPH by NWTPH-Gx soils	n.a.	N.D.	1.2	26.21
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**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	4.62	0.564	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	12.3	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. C259

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	8260 Ext. Soil Master w/GRO	SW-846 8260B	1	A132351AA	08/23/2013 10:13	Christopher G Torres	0.95
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201323132093	08/14/2013 10:45	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201323132093	08/14/2013 10:45	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201323132093	08/14/2013 10:45	Client Supplied	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13227A31B	08/20/2013 21:31	Laura M Krieger	26.21

Sample Description: MW-19-21 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166567
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/14/2013 10:45 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

19185

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201323132093	08/14/2013 10:45	Client Supplied	n.a.
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132320032A	08/28/2013 16:32	Glorines Suarez-Rivera	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132320032A	08/21/2013 06:30	Roman Kuropatkin	1
06955	Lead	SW-846 6010B	1	132325708002	08/26/2013 13:26	Eric L Eby	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132325708002	08/21/2013 08:45	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13233820002A	08/21/2013 21:03	Scott W Freisher	1

Sample Description: MW-19-26 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166568
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/14/2013 10:50 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

19265

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	0.004	0.0006	1.01
10237	Ethanol	64-17-5	N.D.	0.11	1.01
10237	Ethylbenzene	100-41-4	N.D.	0.001	1.01
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0006	1.01
10237	Toluene	108-88-3	N.D.	0.001	1.01
10237	Xylene (Total)	1330-20-7	N.D.	0.001	1.01
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	TPH by NWTPH-Gx soils	n.a.	1.9	1.3	29.77
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**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	4.58	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. C259

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	8260 Ext. Soil Master w/GRO	SW-846 8260B	1	A132351AA	08/23/2013 10:35	Christopher G Torres	1.01
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201323132093	08/14/2013 10:50	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201323132093	08/14/2013 10:50	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201323132093	08/14/2013 10:50	Client Supplied	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13227A31B	08/20/2013 22:08	Laura M Krieger	29.77

Sample Description: MW-19-26 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166568
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/14/2013 10:50 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

19265

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201323132093	08/14/2013 10:50	Client Supplied	n.a.
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132320032A	08/28/2013 16:53	Glorines Suarez-Rivera	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132320032A	08/21/2013 06:30	Roman Kuropatkin	1
06955	Lead	SW-846 6010B	1	132325708002	08/26/2013 13:30	Eric L Eby	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132325708002	08/21/2013 08:45	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13233820002A	08/21/2013 21:03	Scott W Freisher	1

Sample Description: MW-18-21 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166569
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/14/2013 13:20 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

18215

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	0.0009	0.0006	0.97
10237	Ethanol	64-17-5	N.D.	0.11	0.97
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.97
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0006	0.97
10237	Toluene	108-88-3	N.D.	0.001	0.97
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.97
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	TPH by NWTPH-Gx soils	n.a.	N.D.	1.1	23.37
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**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.	97	11	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	4.96	0.554	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. C259

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	8260 Ext. Soil Master w/GRO	SW-846 8260B	1	A132351AA	08/23/2013 10:58	Christopher G Torres	0.97
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201323132093	08/14/2013 13:20	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201323132093	08/14/2013 13:20	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201323132093	08/14/2013 13:20	Client Supplied	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13227A31B	08/20/2013 22:44	Laura M Krieger	23.37

Sample Description: MW-18-21 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166569
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/14/2013 13:20 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

18215

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201323132093	08/14/2013 13:20	Client Supplied	n.a.
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132320032A	08/28/2013 17:15	Glorines Suarez-Rivera	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132320032A	08/21/2013 06:30	Roman Kuropatkin	1
06955	Lead	SW-846 6010B	1	132325708002	08/26/2013 13:34	Eric L Eby	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132325708002	08/21/2013 08:45	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13233820002A	08/21/2013 21:03	Scott W Freisher	1

Sample Description: MW-18-22 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166570
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/14/2013 13:30 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

18225

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0006	1.1
10237	Ethanol	64-17-5	N.D.	0.11	1.1
10237	Ethylbenzene	100-41-4	N.D.	0.001	1.1
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0006	1.1
10237	Toluene	108-88-3	N.D.	0.001	1.1
10237	Xylene (Total)	1330-20-7	N.D.	0.001	1.1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	TPH by NWTPH-Gx soils	n.a.	N.D.	1.2	29.72
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.1	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	10	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	3.11	0.506	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	3.1	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. C259

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	8260 Ext. Soil Master w/GRO	SW-846 8260B	1	A132351AA	08/23/2013 11:20	Christopher G Torres	1.1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201323132093	08/14/2013 13:30	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201323132093	08/14/2013 13:30	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201323132093	08/14/2013 13:30	Client Supplied	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13227A31B	08/20/2013 23:20	Laura M Krieger	29.72

Sample Description: MW-18-22 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166570
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/14/2013 13:30 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

18225

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201323132093	08/14/2013 13:30	Client Supplied	n.a.
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132320032A	08/28/2013 17:36	Glorines Suarez-Rivera	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132320032A	08/21/2013 06:30	Roman Kuropatkin	1
06955	Lead	SW-846 6010B	1	132325708002	08/26/2013 13:38	Eric L Eby	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132325708002	08/21/2013 08:45	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	1	13233820002A	08/21/2013 21:03	Scott W Freisher	1

Sample Description: SB-3-5 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166571
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/14/2013 14:40 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

35385

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	0.0008	0.0006	1.03
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	1.03
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	1.03
10237	Ethanol	64-17-5	N.D.	0.11	1.03
10237	Ethylbenzene	100-41-4	N.D.	0.001	1.03
10237	n-Hexane	110-54-3	N.D.	0.001	1.03
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0006	1.03
10237	Toluene	108-88-3	N.D.	0.001	1.03
10237	Xylene (Total)	1330-20-7	N.D.	0.001	1.03
GC/MS Semivolatiles	**SW-846 8270C SIM**		**mg/kg**	**mg/kg**	
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
10725	1-Methylnaphthalene	90-12-0	N.D.	0.00073	1
10725	2-Methylnaphthalene	91-57-6	N.D.	0.00073	1
10725	Naphthalene	91-20-3	N.D.	0.00073	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	TPH by NWTPH-Gx soils	n.a.	N.D.	1.3	30.2
GC Petroleum Hydrocarbons	**ECY 97-602 WA EPH**		**mg/kg**	**mg/kg**	
05970	>C10-C12 Aliphatic	n.a.	N.D.	1.1	1
05970	>C10-C12 Aromatic	n.a.	N.D.	1.1	1
05970	>C12-C16 Aliphatic	n.a.	N.D.	1.1	1
05970	>C12-C16 Aromatic	n.a.	N.D.	1.1	1
05970	>C16-C21 Aliphatic	n.a.	N.D.	3.2	1
05970	>C16-C21 Aromatic	n.a.	N.D.	2.2	1
05970	>C21-C34 Aliphatic	n.a.	N.D.	6.5	1
05970	>C21-C34 Aromatic	n.a.	N.D.	2.2	1
GC Petroleum Hydrocarbons	**ECY 97-602 WA VPH**		**mg/kg**	**mg/kg**	
05666	Benzene	71-43-2	N.D.	0.0658	60.4
05666	C5-C6 Aliphatic Hydrocarbons	n.a.	N.D.	3.29	60.4
05666	C6-C8 Aliphatic Hydrocarbons	n.a.	N.D.	3.29	60.4
05666	C8-C10 Aliphatic Hydrocarbons	n.a.	N.D.	3.29	60.4
05666	C8-C10 Aromatic Hydrocarbons	n.a.	N.D.	3.29	60.4
05666	Ethylbenzene	100-41-4	N.D.	0.0658	60.4
05666	Methyl t-butyl ether	1634-04-4	N.D.	0.0658	60.4
05666	Toluene	108-88-3	N.D.	0.0658	60.4
05666	o-Xylene	95-47-6	N.D.	0.0658	60.4
05666	m,p-Xylenes	179601-23-1	N.D.	0.132	60.4

Sample Description: SB-3-5 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166571
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/14/2013 14:40 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

35385

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**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	3.68	0.545	1
Wet Chemistry	**SM 5310 B modified-2000**		**% by wt.**	**% by wt.**	
02079	TOC Solids/Sludges Combustion	n.a.	0.0440	0.0109	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	8.2	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. C259
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.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	8260 Ext. Soil Master w/GRO	SW-846 8260B	1	A132351AA	08/23/2013 09:50	Christopher G Torres	1.03
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201323132093	08/14/2013 14:40	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201323132093	08/14/2013 14:40	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201323132093	08/14/2013 14:40	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13238SLA026	08/28/2013 09:07	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13238SLA026	08/26/2013 16:00	David S Schrum	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13227A31B	08/20/2013 23:56	Laura M Krieger	30.2
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201323132093	08/14/2013 14:40	Client Supplied	n.a.
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	132380023A	08/29/2013 15:37	Heather E Williams	1

Sample Description: SB-3-5 Grab Soil
Facility# 351385
6 North 5th St - Wenatchee, WA

LL Sample # SW 7166571
LL Group # 1412528
Account # 11255

Project Name: 351385

Collected: 08/14/2013 14:40 by SB

Submitted: 08/17/2013 09:00
Reported: 08/30/2013 09:58

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

35385

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	132380023A	08/29/2013 16:17	Heather E Williams	1
05666	WA- VPH soils	ECY 97-602 WA VPH	1	13235A54A	08/23/2013 18:42	Nicholas R Rossi	60.4
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132320032A	08/28/2013 17:57	Glorines Suarez-Rivera	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132320032A	08/21/2013 06:30	Roman Kuropatkin	1
11213	WA EPH Soils Extraction	ECY 97-602 WA EPH	1	132380023A	08/27/2013 08:00	Joseph S Feister	1
00388	GC - Field Preserved (MA-VPH)	MA DEP VPH modified	1	201323232096	08/14/2013 14:40	Client Supplied	1
00497	Silica Gel Fractionation	SW-846 3630C modified	1	132380014A	08/28/2013 06:00	Roman Kuropatkin	1
06955	Lead	SW-846 6010B	1	132325708002	08/26/2013 13:42	Eric L Eby	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132325708002	08/21/2013 08:45	Denise K Conners	1
02079	TOC Solids/Sludges Combustion	SM 5310 B modified-2000	1	13234049531A	08/22/2013 23:51	James S Mathiot	1
00111	Moisture	SM 2540 G-1997	1	13233820002A	08/21/2013 21:03	Scott W Freisher	1

Quality Control Summary

Client Name: Chevron Group Number: 1412528
Reported: 08/30/13 at 09:58 AM

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

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: A132351AA	Sample number(s): 7166565-7166571							
Benzene	N.D.	0.0005	mg/kg	91		80-120		
1,2-Dibromoethane	N.D.	0.001	mg/kg	93		80-120		
1,2-Dichloroethane	N.D.	0.001	mg/kg	103		72-126		
Ethanol	N.D.	0.10	mg/kg	100		45-168		
Ethylbenzene	N.D.	0.001	mg/kg	90		80-120		
n-Hexane	N.D.	0.001	mg/kg	90		56-127		
Methyl Tertiary Butyl Ether	N.D.	0.0005	mg/kg	94		69-126		
Toluene	N.D.	0.001	mg/kg	88		80-120		
Xylene (Total)	N.D.	0.001	mg/kg	90		80-120		
Batch number: 13238SLA026	Sample number(s): 7166565-7166566,7166571							
Benzo(a)anthracene	N.D.	0.00067	mg/kg	97		83-119		
Benzo(a)pyrene	N.D.	0.00067	mg/kg	102		80-122		
Benzo(b)fluoranthene	N.D.	0.00067	mg/kg	104		82-135		
Benzo(k)fluoranthene	N.D.	0.00067	mg/kg	111		79-123		
Chrysene	N.D.	0.00033	mg/kg	100		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	107		77-124		
1-Methylnaphthalene	N.D.	0.00067	mg/kg	104		78-119		
2-Methylnaphthalene	N.D.	0.00067	mg/kg	101		78-121		
Naphthalene	N.D.	0.00067	mg/kg	102		79-113		
Batch number: 13227A31B	Sample number(s): 7166565-7166571							
TPH by NWTPH-Gx soils	N.D.	1.0	mg/kg	91	93	67-119	2	30
Batch number: 13235A54A	Sample number(s): 7166565-7166566,7166571							
Benzene	N.D.	0.0500	mg/kg	84	86	70-130	2	50
C5-C6 Aliphatic Hydrocarbons	N.D.	2.50	mg/kg	81	76	70-130	6	50
C6-C8 Aliphatic Hydrocarbons	N.D.	2.50	mg/kg	80	74	70-130	8	50
C8-C10 Aliphatic Hydrocarbons	N.D.	2.50	mg/kg	77	74	70-130	3	50
C8-C10 Aromatic Hydrocarbons	N.D.	2.50	mg/kg	86	88	70-130	2	50
Ethylbenzene	N.D.	0.0500	mg/kg	84	86	70-130	2	50
Methyl t-butyl ether	N.D.	0.0500	mg/kg	89	88	70-130	1	50
Toluene	N.D.	0.0500	mg/kg	84	86	70-130	2	50
o-Xylene	N.D.	0.0500	mg/kg	88	90	70-130	2	50
m,p-Xylenes	N.D.	0.100	mg/kg	89	91	70-130	3	50
Batch number: 132380023A	Sample number(s): 7166565-7166566,7166571							
>C10-C12 Aliphatic	N.D.	1.0	mg/kg	90		31-137		
>C10-C12 Aromatic	N.D.	1.0	mg/kg	90		22-119		
>C12-C16 Aliphatic	N.D.	1.0	mg/kg	92		42-146		
>C12-C16 Aromatic	N.D.	1.0	mg/kg	93		24-136		
>C16-C21 Aliphatic	N.D.	3.0	mg/kg	92		57-111		

*- 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: 1412528
Reported: 08/30/13 at 09:58 AM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
>C16-C21 Aromatic	N.D.	2.0	mg/kg	100		34-143		
>C21-C34 Aliphatic	N.D.	6.0	mg/kg	87		50-124		
>C21-C34 Aromatic	N.D.	2.0	mg/kg	93		44-134		
Batch number: 132320032A	Sample number(s): 7166565-7166571							
DRO C12-C24 w/Si Gel	N.D.	3.0	mg/kg	53		50-133		
HRO C24-C40 w/Si Gel	N.D.	10.	mg/kg					
Batch number: 132325708002	Sample number(s): 7166565-7166571							
Lead	N.D.	0.500	mg/kg	102		80-120		
Batch number: 13234049531A	Sample number(s): 7166571							
TOC Solids/Sludges Combustion	N.D.	0.0100	% by wt.	68		47-143		
Batch number: 13233820002A	Sample number(s): 7166565-7166571							
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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: A132351AA	Sample number(s): 7166565-7166571 UNSPK: P171742								
Benzene	97	142	55-143	36*	30				
1,2-Dibromoethane	115	152*	54-129	25	30				
1,2-Dichloroethane	120	175*	54-143	35*	30				
Ethanol	83	119	35-189	34*	30				
Ethylbenzene	101	130	44-141	23	30				
n-Hexane	100	149	33-169	37*	30				
Methyl Tertiary Butyl Ether	107	156*	55-129	35*	30				
Toluene	101	131	50-146	24	30				
Xylene (Total)	100	132	44-136	25	30				
Batch number: 13238SLA026	Sample number(s): 7166565-7166566,7166571 UNSPK: 7166565								
Benzo(a)anthracene	84	84	44-143	0	30				
Benzo(a)pyrene	88	88	44-140	1	30				
Benzo(b)fluoranthene	98	100	26-142	2	30				
Benzo(k)fluoranthene	82	86	54-142	4	30				
Chrysene	87	86	29-148	1	30				
Dibenz(a,h)anthracene	100	105	20-137	5	30				
Indeno(1,2,3-cd)pyrene	94	98	17-136	4	30				
1-Methylnaphthalene	96	97	50-131	1	30				
2-Methylnaphthalene	91	92	35-152	1	30				
Naphthalene	95	102	31-148	7	30				
Batch number: 132380023A	Sample number(s): 7166565-7166566,7166571 UNSPK: 7166565 BKG: 7166565								
>C10-C12 Aliphatic	79		31-137			N.D.	N.D.	0 (1)	25
>C10-C12 Aromatic	88		22-119			N.D.	N.D.	0 (1)	25
>C12-C16 Aliphatic	82		42-146			N.D.	N.D.	0 (1)	25
>C12-C16 Aromatic	89		42-122			N.D.	N.D.	0 (1)	25

*- 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: 1412528
Reported: 08/30/13 at 09:58 AM

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
>C16-C21 Aliphatic	82		57-111			N.D.	N.D.	0 (1)	25
>C16-C21 Aromatic	96		53-132			N.D.	N.D.	0 (1)	25
>C21-C34 Aliphatic	78		38-120			N.D.	N.D.	0 (1)	25
>C21-C34 Aromatic	90		55-126			N.D.	N.D.	0 (1)	25
Batch number: 132320032A	Sample number(s): 7166565-7166571 BKG: 7166565								
DRO C12-C24 w/Si Gel						N.D.	N.D.	0 (1)	20
HRO C24-C40 w/Si Gel						N.D.	N.D.	0 (1)	20
Batch number: 132325708002	Sample number(s): 7166565-7166571 UNSPK: P162749 BKG: P162749								
Lead	94	99	75-125	4	20	3.09	3.00	3 (1)	20
Batch number: 13234049531A	Sample number(s): 7166571 UNSPK: P168172 BKG: P168172								
TOC Solids/Sludges Combustion	52		22-155			33.8	35.8	6	13
Batch number: 13233820002A	Sample number(s): 7166565-7166571 BKG: P167966								
Moisture						23.2	21.8	6*	5

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: 8260 Ext. Soil Master w/GRO
Batch number: A132351AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7166565	104	98	89	94
7166566	104	100	88	93
7166567	106	98	90	97
7166568	106	100	90	98
7166569	106	98	91	93
7166570	108	103	88	93
7166571	107	103	90	95
Blank	103	98	92	95
LCS	102	99	93	98
MS	101	98	93	94
MSD	105	105	91	99
Limits:	50-141	54-135	52-141	50-131

Analysis Name: SIM SVOA (microwave)
Batch number: 13238SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7166565	89	93	99
7166566	90	93	97
7166571	87	91	99

*- 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: 1412528
Reported: 08/30/13 at 09:58 AM

Surrogate Quality Control

Blank	86	94	95
LCS	88	97	102
MS	81	87	91
MSD	86	89	94
Limits:	54-129	59-125	61-125

Analysis Name: NWTPH-Gx soil C7-C12
Batch number: 13227A31B

	Trifluorotoluene-F
7166565	84
7166566	98
7166567	74
7166568	83
7166569	74
7166570	83
7166571	92
Blank	100
LCS	93
LCSD	96
Limits:	50-142

Analysis Name: NWTPH-Dx soil w/ 10g Si Gel
Batch number: 132320032A

	Orthoterphenyl
7166565	86
7166566	94
7166567	94
7166568	95
7166569	100
7166570	96
7166571	95
Blank	99
DUP	89
LCS	94
Limits:	50-150

Analysis Name: WA- VPH soils
Batch number: 13235A54A

	Trifluorotoluene-P	Trifluorotoluene-F
7166565	138	159*
7166566	128	148*
7166571	141*	161*
Blank	85	96
LCS	82	93
LCSD	85	94
Limits:	60-140	60-140

Analysis Name: WA EPH in Soil
Batch number: 132380023A

*- 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: 1412528
Reported: 08/30/13 at 09:58 AM

Surrogate Quality Control

	Orthoterphenyl	1-chlorooctadecane
7166565	94	65
7166566	91	64
7166571	89	72
Blank	95	64
DUP	92	62
LCS	94	68
MS	92	58
Limits:	50-142	33-122

*- 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

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Acct. # 11255 Group # 1412528 Sample # 7160656-71
Instructions on reverse side correspond with circled numbers.

WBS: NWENV-351385-0-08.04

SCR #:

1 Client Information

Facility # 35-1385
WBS NWENV-351385-0-08.04
Site Address 6 North 5th Street, Wenatchee, WA
Chevron PM M. Inglis
Lead Consultant SAIC
Consultant/Office SAIC/Boise
Consultant Project Mgr. R. Santos
Consultant Phone # 208-429-3772
Sampler S. Brown, D. Halpert

2 Sample Identification

Sample Identification	Collected Date	Collected Time	3 Grab	3 Composite	4 Matrix: Soil	Water	Oil	Total Number of Containers	5 BTEX + MTBE 8021	8260	Naphth. ethanol	8260 full scan	Oxygenates	NWTPH GX	NWTPH DX	Silica Gel Cleanup	extend	Lead	Total	Diss.	Method 600/6020	WAEPH	WAVPH	Moisture	cPAHs & Naphthalenes 8270SIM	EDB & EDC 82603	n-Hexane	Fractional Organic Carbon
SB-1-5	8-13-13	1350			Soil			10																			
SB-2-5	↓	1410			Soil			10																			
~~MW-20-21~~ MW-19-21	8-14-13	1045			Soil			7																			
~~MW-20-26~~ MW-19-26		1050			Soil			7																			
MW-18-21		1320			Soil			7																			
MW-18-22		1330			Soil			7																			
SB-3-5	↓	1440			Soil			10																			
								113																			
								SMB																			

6 Remarks

- ☐ Results in Dry Weight
- ☐ J value reporting needed
- ☐ Must meet lowest detection limits possible for 8260 compounds
- ☐ 8021 MTBE Confirmation
- ☐ Confirm MTBE + Naphthalene
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run _____ oxy's on highest hit
- ☐ Run _____ oxy's on all hits

7 Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour

8 Data Package Options (please circle if required)

Type I - Full | Type VI (Raw Data)

Relinquished by	Date	Time	Received by	Date	Time
	8-16-13	0900			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by Commerical Carrier: UPS X FedEx ____ Other ____			Received by	Date 8/17/13	Time 900
Temperature Upon Receipt 1.3 °C			Custody Seals Intact?	Yes	No

9

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The white copy should accompany samples to Lancaster Laboratories. The yellow copy should be retained by the client.

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7051.01

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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 ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	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.